# RESPONSIBILITY ACCOUNTING IN CHINA -TOWARDS AN EXPLORATORY FRAMEWORK

By

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# A Thesis Submitted in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

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# TO MY WIFE AMY, MY SON JOSEPH JR. & MY DAUGHTER JOSEPHINE



#### **ABSTRACT**

One of the economic reforms started in the People's Republic of China since 1979 is to enhance the productivity and profitability of the State-Owned Enterprises (SOEs) which still accounted for over 40% of the National Industrial Output and over 60% of the working population in 1996. However, over one-third of all the SOEs in China have incurred financial losses since the early 1990s and how to revive their efficiency and profitability has become one of the most important work plans for the Chinese government in recent years.

In July 1992, the State Council of China implemented the "Regulations for State-Owned Industrial Enterprises Operation Mechanisms Transformation" whose major aim is to delegate more autonomy to the SOEs to ensure that they are self-financed, self-managed, self-regulated and self-developed. In addition, the promulgation of the "Socialist Market Economy" by the 14th People's Congress held in October 1992 would make the SOEs more market driven in planning, operation and control. Furthermore, in the same year more SOEs on a selective basis were allowed by the central government to be transformed into "Shareholding Enterprises" where boards of directors have been empowered by the authorities to manage their own businesses.

The focus of this doctoral research is to study the actual impact of the above legislation, economic and ownership changes on "Responsibility Accounting" which is the most widely used management accounting technique employed by the large- and medium-sized SOEs in China since 1987. The non-existence of systematic empirical research on this management accounting aspect in China justifies the use of an "Exploratory Case Study" approach to investigate a sample of 20 SOEs through repeated interviews over a period from 1991 to 1995. This type of longitudinal field study has verified that there have been significant changes in the responsibility accounting styles and the associated planning and control systems in these 20 SOEs before and after 1992. Further minor variables or factors have also been identified to explain these changes.

This research provides observations, findings and comparisons with the literature which can generate ideas and hypotheses on many aspects related to the responsibility (management) accounting development in China which can be subject to rigorous empirical testing by the researcher and other academics or practitioners in the future.

#### **ACKNOWLEDGEMENTS**

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Special thanks to my colleagues and friends in the People's University in Beijing, the Shanghai University of Finance and Economics, the Xiamen University, and the Jinan University in Guangzhou, for helping me to visit over 20 enterprises in China repeatedly over a period of 4 years.

Last but not least, I deeply indebted to my wife, Amy, for her compassion and for her patience to look after our two children during my absence from home when this research took precedence over important family duties.

#### **DECLARATION**

I declare that this thesis has been composed by me and all work reported in it is my own. The works of other researchers and authors are cited and referenced throughout the thesis.

Yau Shiu Wing Joseph Hong Kong April 1998

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(Chapters 1-8 of this thesis contain 99,622 words.)

# **ABBREVIATIONS & DEFINITIONS OF TERMS**

Abbreviations	Terms	Definitions/Descriptions
AAA	American Accounting Association	See Section 2.2.1
ABC	Activity-Based Costing	See Section 2.2.3
AGM	Annual General Meeting	Held by the shareholding enterprises
AIS	Accounting Information System	Usually refers to responsibility accounting system in China
AMT	Automated Manufacturing Technology	See Section 2.10.2
ASC	Accounting Society of China	The largest professional accounting institution in China
BOD	Board Of Directors	Required by Company Law (1994) for shareholding SOEs
CEO	Chief Executive Officer	General/Factory manager of a SOE
CICPA Chinese Institute of Certified Public Accountants		The only CPA body in China regulated by the MOF
CIMA Chartered Institute of Management Accountants Headquarters in London with liaison offices in China		Headquarters in London with two liaison offices in China
accountin		Refers to the management accounting professional bodies in Canada & US
ERC Economic Responsibility Contract See Section 2.15.1		See Section 2.15.1
FMS	Flexible Manufacturing System	See Section 2.10.2
НКРИ	Hong Kong Polytechnic University	The researcher is an assistant professor of HKPU
GAAP	GAAP General Acceptable Accounting Practice Refers to the 30 PRC Accounting Standards to be used in 2000	
GDP	Gross Domestic Products	An important economic measure in China especially in national planning
GM	General Manager	Usually the CEO in the shareholding SOEs
IRC	Internal Responsibility Contract	See Section 2.14

Abbreviations	Terms	Definitions/Descriptions
ЛТ	Just-In-Time	See Section 2.10.2
LANS	Local Area Network System	See Section 2.15.5
MA	Management Accounting	See Section 2.2.1
MAS	Management Accounting System	Emerging accounting control system in China
MOF	Ministry Of Finance	The ultimate governing authority of the accountancy profession in China
MRP	Material Requirement Planning	See Section 2.10.2
NIO	National Industrial Output	Measurement of the manufacturing output in China
PBT	Profit Before Tax	Profit after sales or value-added tax but before income tax
PRC	People's Republic of China	Founded on 1 October 1949
RA	Responsibility Accounting	See Section 2.3
RMB	Ren Min Bi	China monetary currency unit
SOE	State-Owned Enterprises	Enterprise's assets are owned by the central government or all the people
SSAP	Statements of Standard Accounting Practices	Equivalent to the GAAP
SUFE	Shanghai University of Finance and Economics  One of the top accounting and finance institutions in the PRC	
UOG	University of Glasgow	The owner of this thesis

### LIST OF SOES INVESTIGATED

#### Enterprise Numbers/Codes/Names

EN*	EC#	Enterprise Names	Employees@
01	SSW5	Shanghai No.5 Iron & Steel Works 23,000	
02	XFLT	Xiamen Fork Lift Truck Plant	1,100
03	GFDS	Guangzhou Friendship Department Store	2,300
04	GDDS	Guangzhou Dongshan Department Store	950
05	BEEF	Beijing Electrostatic Equipment Factory	600
06	SMCW	Shanghai Measuring & Cutting Tool Instruments Factory	1,550
07	GNFF	Guangzhou Nan Fang Flour Mill	940
08	GNFB	Guangzhou Nan Fang Building Group Ltd.	4,000
09	BCRF	Beijing Chushu Rectifier Factory	970
10	BIMT	Beijing Instrument Machine Tool Works	1,250
11	SDS1	Shanghai No.1 Department Store	4,500
12	SCCW	Shanghai Crane & Conveyor Works	2,470
13	SMEF	Shanghai Metallurgical Equipment Factory	5,000
14	SCM2	Shanghai No.2 Cotton Mill	4,860
15	SXSW	Shanghai Xinhua Iron & Steel Works	5,600
16	GLIL	Guangzhou Lonkey Industrial Co. Ltd.	1,450
17	XLIG	Xiamen Luquan Industries General Company	540
18	BCM3	Beijing No.3 Cotton Mill	8,000
19	BFSH	Beijing Friendship Hotel	3,800
20	ВРМН	Beiren Printing Machinery Holdings Ltd.	2,800

<sup>\*</sup> EN = Enterprise numbers in sequence of writing the 20 Case Analyses and 20 Data Analyses as shown in Volume 2 and Volume 3 respectively of the research documentation.

<sup>#</sup> EC = Enterprise Codes (i.e. enterprise names in short form).

<sup>@</sup> Numbers of Employees at the end of 1994.

#### **CHAPTER 1: INTRODUCTION**

#### 1.1 BACKGROUND TO THE RESEARCH

#### 1.1.1 Economic Reform

After the ten years of "Cultural Revolution" (1966-1976), the year of 1978 was a critical turning point in China's history. The top leaders of China firmly decided to re-open the doors to the outside world and started an unprecedented and ambitious reform. In December 1978, at the Third Plenary Session of the Eleventh Central Committee of the Chinese Communist Party, a series of economic campaigns were announced mainly to enhance the productivity and profitability in the "State-Owned Enterprises (SOEs)".

Public ownership is one of the major characteristics of a socialist system. Public ownership is represented by SOEs whose assets are owned by the central government or all the people in China (Chow, Cooper & Tang 1993). SOEs consist of both commercial and industrial entities which produce goods or provide services in accordance with the central economic planning system started in the 1950s. The Industrial SOEs and Commercial SOEs accounted for 68.7% of the National Industrial Output and 39.4% of the Total Retail Sales Value respectively in 1986 (Cheng 1989: 252). The national economic plan mainly focused on the productivity in the SOEs without due regard to market demand, product quality and diversification, labour efficiency and, most important of all, the profitability of the businesses. Furthermore, remuneration to both managements and workers were not in line with the group or individual performances, therefore, self-motivation and initiative did not exist at all.

#### 1.1.2 Accounting Reform

Since the founding of the People's Republic of China (PRC) in 1949, the Chinese accounting systems mainly adopted the Soviet Union's models such as the industrial, agricultural and metallurgical accounting systems. The traditional accounting practices were influenced by the information needs of a planned economy and rest heavily on stewardship objectives. Some

notable features are a standardised system with a uniform chart of accounts, a fund-oriented source, and application-type balance sheet, a somewhat conventional income statement and numerous analytical supplementary schedules (Winkle et al 1994). In parallel with the open-door policies, the accounting theories and practices of the western world have been gradually employed by the SOEs. However, the indiscriminate introduction of the western accounting practices caused many Chinese accountants to feel more confused than enlightened. They realised that blindly copying the accounting systems used in other countries could hardly solve the problems in China. The Chinese accounting practitioners and academics began to evaluate the situation in order to develop an accounting structure and methodology geared to Chinese socio-economic objectives (Chow, Cooper & Tang 1994).

There are a growing number of articles addressing the differences in accounting practices between China and other western countries and most of them forecast a narrowing of differences in coming years (Zhou 1988; Lefebvre & Lin 1990; Fang & Tang 1991; Lin & Deng 1992). Much of the literature was concentrated on financial accounting and was of limited value for the managerial accounting purposes. The proclamation of the open-door policy in 1978 let the Chinese accounting academics study, translate and publish western management accounting methods which were immediately implemented by the managers and accountants in the SOEs. Concepts like contribution margin, cost-volume-profit analysis, flexible budgets, variable costing, and cost allocation were applied in varying degrees depending upon the expertise of accounting personnel and the industry (Bromwich & Wang 1991).

Seeking to link closely accounting with enterprise management has been the major theme of this reconstruction and a theory of "Accounting Management" has been evolved since the beginning of the 1990s. This concept states that accounting is one of the most important management activities rather than merely being a management tool or information system that provides users with a way of understanding the financial situation and assessing the performance of SOEs. Accounting should play an active and positive function in forecasting, budgeting, evaluating, analysing as well as controlling so as to strengthen management control and increase the contribution to socialist modernization (Zhu 1991; Yang & Xu 1995).

Many authors and practitioners hold that the establishment of a new "Responsibility Accounting" is the key of any desired accounting reform, because only when a new enterprise accounting system which directly serves management is set up can the nature and functions of accounting be actually achieved.

#### 1.1.3 Responsibility Accounting

"Responsibility Accounting" is a very important and effective tool to realize the objectives of the "Economic Responsibility Contract (ERC)" adopted by the SOEs in China. An ERC is an agreement between the state or government and a certain SOE defining the responsibilities, authorities and benefits of both parties. The remuneration of the workers and employees are commensurate with their individual effort. A SOE undertakes certain economic responsibilities as designated by the government and in turn assigns various targets to its responsibility centres such as divisions, production lines, work teams, support functions and even individual employees according to their levels of autonomy. Based on the extent of accomplishment of the targets (both financial and non-financial) and the overall economic effectiveness in each responsibility centre, the monetary or other material rewards are given to the centre's managers and employees in order to stimulate their motivation and also to raise the economic benefits (Maschmeyer & Yang 1990).

Responsibility Accounting in China is the most important and widely used managerial accounting system which concerns the identification of responsibility centres, the assignment of cost and profit targets and the subsequent measurement, analysis, evaluation and remuneration of the participants.

#### 1.1.4 Environmental Problems

During the period from September 1991 to December 1992, the senior managements (mainly the accounting personnel) of the following 13 Chinese enterprises located in 4 different cities had been interviewed as pilot tests before the proposal and instrument of this research were determined in March 1993.

	Location/Enterprise Name	Business Nature	Size@
1	Shanghai Baoshan Iron & Steel Factory*	Iron & Steel Manu.	V. Large
2	Shanghai No.5 Iron & Steel Works*	Iron & Steel Manu.	Large
3	Shanghai No.2 Cotton Mill#	Textiles Manu.	Large
4	Shanghai No.2 Textile Machines Factory#	Machine Manu.	Large
5	Shanghai & Bell Telecommunication#	Equipment Manu.	Large
6	Shanghai Foxborrow Electronic Instruments*	Equipment Manu.	Large
7	Shanghai Measurement & Cutting Tool Instruments Factory*	Instrument Manu.	Medium
8	Shanghai Eastern Airlines#	Transportation Services	Large
9	Hangzhou No.1 Department Store#	Retailing Services	Medium
10	Xiamen Forklift Truck Plant*	Vehicle Manu.	Medium
11	Xiamen Rubber Manufacturing Factory*	Consumables Manu.	Medium
12	Xiamen Chinese Medicine Factory*	Consumables Manu.	Medium
13	Shenzhen Guangming Metal Frame Factory#	Metalwork Manu.	Small
14	Shenzhen Blue Diamond Watch Factory#	Watch Manu.	Small

<sup>\*</sup> Wholly SOEs before and after 1992.

During the above enterprise visits, the following problems were observed which reflected the responsibility accounting system employed as being important planning and control means and tools for the managements in the SOEs.

(1) After the wide and general implementation of the ERC system since 1987, over half of all the SOEs in China were still suffering losses in 1992 and 1993. The reasons were mainly two-fold that firstly the short-term nature of the contract did not encourage enterprises to take a long-term perspective; and secondly the ultimate ownership of the enterprise

<sup>#</sup> Converted into Shareholding Enterprises since 1992 or 1993.

 <sup>@</sup> Small-Sized Enterprise = 900 or less employees
 Medium-Sized Enterprise = 901 - 2,500 employees
 Large-Sized Enterprise = 2,501 or over employees

resided in the state and therefore the system did not necessarily ensure goal congruence between the state, enterprise management and employees.

- (2) The "Three Iron Bowls" (i.e. iron employment, iron work position, iron wages) had not really been abolished because the "Big Rice Pot" concept was still deeply-rooted and exerted an adverse influence in the ERC and enterprise internal responsibility accounting systems.
- (3) The "Enterprise Law" enacted in May 1988 had not been adequately enforced in separating the government's role in SOEs from the enterprise's own management autonomies and responsibilities. Many SOEs were still under strict supervision by government agencies. The majority of the economic resources were provided by the State, and production, in terms of quantity and variety, followed rigidly the plan set by the State. Under this economic structure, the initiative of enterprise management was seriously constrained (Chow, Cooper & Tang 1993). This situation had made it difficult to design and implement the responsibility accounting system effectively in the past.
- (4) The "Communist Party Secretary" holding high position in a SOE, was the representative from the state to ensure that the government policies and regulations had been observed. The stringent administrative and management controls that were imposed on the SOE's managers inhibited their dynamism and achievement (Child & Lu 1990). As a result, the development of the responsibility accounting system was slowed down as well.
- (5) The over-production and inappropriate product mix to cater for market needs had created problems of over-stocking, and low stock-turnover especially since the third quarter of 1991 and reached a level of RMB133 billion at the end of April 1992. These problems resulted in difficulties in implementing working capital control.

<sup>&</sup>lt;sup>1</sup> The "Big Rice Pot" idealism means that everybody in a SOE eats the same pot of rice or is remunerated equally disregarding the effort contributed by each individual.

There were loop-holes in the "Two-Tier Pricing" system characterized by a government price and a market price since the 1980s. This could be seen by the fact that by summer 1988, only 27 raw materials, including steel, coal and grain were centrally controlled (Beijing Review 1989). The SOEs which produced these materials were required to sell the planned quantity to the state at the state-set price, but were allowed to sell the product beyond the quota in the market, where the price was determined by supply and demand. In the same way, other enterprises which used these materials could purchase the planned quantity at the state-set price. Any extra purchases must be made at the market price, which was usually substantially higher than the state price.

This "two-tier pricing" system encouraged the material-producing enterprise to expand production. At the same time however, it created new problems. Firstly, China had a commodity shortage economy and the relaxing of price controls soon pushed the price so high that it was far beyond many users' means. Secondly, this system allowed those in control of the commodity allocation to obtain illegal profits, either by selling the product which was purchased at government price, at a much higher market price or by transferring such products to related parties in exchange for other benefits, thus creating a so-called "grey market". Such anomalies had adversely affected the pricing policy of the SOEs (Fan & Schaffer 1991: 7-10; Chow, Cooper & Tang 1994: 10).

- (7) The inadequate capital investment, to be generated either by retained earnings or injected by the state to maintain or improve productivity, had significantly affected the ultimate profitability and return on capital employed.
- (8) The use of computers had not been widely applied in SOEs in particular the small- and medium-sized enterprises due to the lack of funds for this kind of investment. Therefore, this situation imposed a constraint on the further development of responsibility accounting which could be used as a good planning and control system.

- (9) The high inflation rates notably in the 5 Special Economic Zones and the 14 coastal cities have rendered the performance measurement of profit centres difficult. Following the rapid upsurge in 1984, prices in China rose at an annual rate of 7.3% from 1985 through 1987 and jumped to 13% in 1987 (Liu 1989). Due to the fast expansion of capital projects and property development since 1992, the overall inflation went over 13% again in 1993<sup>2</sup>.
- (10) The absence of competitive markets and the control established by government and implemented by state and regional bureau, made detailed and decision-aiding management accounting techniques of limited use. The accounting data were rarely used for control purposes. This was quite clearly in the use made of standard costs; although standard cost systems were common they were typically not used for control and performance measurement purposes (Firth 1996).
- (11) Due to the lack of decision-making responsibilities, much of the managerial accounting data produced in the SOEs were oriented toward calculating inventory costs and there was little emphasis on the potential use of cost data for future oriented or decision-making purposes (Skousen & Yang 1988; Bromwich & Wang 1991).
- (12) Most important of all, the lack of the concepts of effective management, and the inadequate knowledge of management accounting techniques among SOE's senior managers, who were usually old-aged people, had been obstacles to the development of management accounting theories and practices.

<sup>&</sup>lt;sup>2</sup> See *Wen Wei Po* (Hong Kong Newspaper) 1996 Annual Review p.18 published on 3 January 1997.

#### 1.2 FACTORS OF THE RESEARCH PROBLEM

Why does this research regard the responsibility accounting in China as its unique or primary focus? The following are the three major categories of "factors" or "variables" affecting the development and operation of the "responsibility accounting system" and the associated "planning and control aspects" adopted by many SOEs in China.

#### 1.2.1 General Factors/Variables

- 1.2.1.1 Legislation Changes
- 1.2.1.2 Market Economy Changes
- 1.2.2 Specific Factors/Variables
  - 1.2.2.1 Ownership Changes
  - 1.2.2.2 Local Government Policies & Regulations
  - 1.2.2.3 Macro-Economic Control Measures
- 1.2.3 Long-Term Factors/Variables
  - 1.2.3.1 Education & Training
  - 1.2.3.2 Management Knowledge
  - 1.2.3.3 Professionalization

#### 1.2.1 General Factors/Variables

The "Legislation Changes" and "Market Economy Changes" are the two general factors or variables which allow all the 20 SOEs investigated in this research since 1992 enjoy greater discretion over development and operation of their responsibility accounting systems (and their associated planning and control systems) at the responsibility centre level. This enlarged autonomy applies whether the SOEs are wholly or partly owned by the government or have a listing on a stock exchange (represented by the Primary Hypothesis in Section 1.5.1 of this Chapter).

#### 1.2.1.1 <u>Legislation Changes</u>

Government's economic and commercial legislation is one of the most direct and effective methods to regulate the business activities of all types of enterprises and organisations in China. Since the early 1990s, more and more business and commercial related laws have been enacted by the People's Congress every year. The following 4 laws have significant impact on the planning and control influences in the SOEs since 1992.

	Legislation Titles	Notes
1	SOE Operation Mechanisms Transformation Regulations (1992)	Specify 14 major regulations to delegate the planning and control autonomies to the SOEs (see Notes 1).
2	Company Law (1993)	Formulate the legal framework and regulate the management and operation of the limited liabilities and joint stock companies (see Notes 2).
3	Labour Law (1995)	Govern the relationships between the employees and employers in all forms of enterprises (see Notes 3).
4	Bankruptcy Law (1986, 1996)	Stipulate the legal requirements, rules, regulations, procedures and liabilities concerning the insolvency (see Notes 4).

#### Notes:

- (1) It was after long and substantial consultation with the provincial authorities since 1990 that the central government enacted the above legislation on 24 July 1992 with the major purpose to reform the management and operational systems and mechanisms of the SOEs. The major objectives of this law of transformation, which has 7 chapters and 54 articles, are to motivate the SOEs to be market-oriented in every aspect of operation and to raise the economic productivity and efficiency of the SOEs. The 14 specific regulations of autonomy delegation to the SOEs include:
  - 1.1 production and operation decisions (Article 8);
  - 1.2 products and labour pricing decisions (Article 9);

- 1.3 selling of products (Article 10);
- 1.4 purchasing of materials and supplies (Article 11);
- 1.5 import and export rights (Article 12);
- 1.6 investment decisions (Article 13);
- 1.7 capital and profit retention (Article 14);
- 1.8 appropriation of assets (Article 15);
- 1.9 joint-venture and merger decisions (Article 16);
- 1.10 labour recruitment and assignment (Article 17);
- 1.11 personnel management (Article 18);
- 1.12 appropriation and distribution of wages and bonus (Article 19);
- 1.13 internal organisation structure design (Article 20); and
- 1.14 prevent misappropriation of human, material and financial resources by the government authorities (Article 21).

These delegated decision making authorities given to the SOEs are protected by law and no government departments, agents and individuals can interfere or interrupt their introduction (Article 22). According to a survey released by the State Commission for Economics and Trade, most of the respondents (large- and medium-sized SOEs) agreed that items 1.1, 1.4, 1.7, 1.12 and 1.13 of the above autonomies have been really honoured by the government<sup>3</sup>. Having delegated greater discretion as given by this legislation, it is supposed that the SOEs can adopt and operate a more western-oriented responsibility accounting system in terms of planning and control aspects.

- (2) The following chapters/sections of the Company Law (1993) are related to the planning and control aspects of the limited liabilities and joint stock (or shareholding) companies in China:
  - 2.1 Chapter 2: Establishment and Organisational Setup of a Limited Liability
    Company

Section 2: Organisational Setup

<sup>&</sup>lt;sup>3</sup> See Wen Wei Po (Hong Kong Newspaper) on 28 January 1996.

Ch.1: Introduction

Section 3: Solely State-Owned Companies (e.g. limited liability companies established solely by State authorized investment institution or department)

2.2 Chapter 3: Establishment and Organisational Setup of Joint Stock Company
Limited

Section 2: Shareholders' Meeting

Section 3: Board of Directors, Manager

Section 4: Supervisory Committee

2.3 Chapter 6: Financial Affairs & Accounting of a Company

2.4 Chapter 7: Merger and Division of a Company

2.5 Chapter 8: Bankruptcy, Dissolution & Liquidation

(3) The following chapters of the Labour Law (1995) are related to the planning and control aspects of all legal forms of enterprises in China:

3.1 Chapter 3: Employment Contracts and Corporate Contracts

3.2 Chapter 5: Wages

3.3 Chapter 6: Labour Safety & Working Environment

3.4 Chapter 8: Vocational Training

3.5 Chapter 9: Social Insurance & Benefits

- (4) Since the Bankruptcy Law implemented in 1986, less than 1,500 ailing and loss-making SOEs have been bankrupted up to the end of 1996<sup>4</sup> mainly because of two reasons:
  - 4.1 the biggest creditors (i.e. state-owned banks) will incur huge amounts of bad debts (Arthur Andersen 1993: 71); and
  - 4.2 laying off millions of redundant employees would cause social instability in view of insufficient social and employment welfare and benefits available.

In parallel with refining the Bankruptcy Law in 1996, the government has been implementing various social welfare policies, such as centralized pension, medical,

<sup>&</sup>lt;sup>4</sup> See Wen Wei Po (Hong Kong Newspaper) on 15 October 1996.

unemployment, reemployment, life insurance and work compensation funds in recent years so that the winding up of ten thousands of bankrupt SOEs can settle the redundant employees properly. In fact, 518 SOEs were declared insolvent in 1996 which was the highest annual record since 1987<sup>5</sup>. Furthermore, 5,000 bankruptcy cases were under stringent considerations by the government<sup>6</sup> but these declining enterprises are encouraged to be taken over by promising enterprises instead of going into bankrupt<sup>7</sup>. The Bankruptcy Law was revised in 1996 and settlement of creditors has been determined in the following order<sup>8</sup>: (1) liquidation expenses; (2) wages and salaries payable; (3) social security contributions; (4) taxes payable; and (5) other creditors.

#### 1.2.1.2 Market Economy Changes

One major breakthrough in economic reform has been the recognition and practice of the "Planned Commodity Economy" (China's nearest equivalent to the western term of the market economy), that is, the integration of the planning economy with market regulation. It is different from both China's former highly centralised and rigidly controlled planned economy and the market economy of capitalist countries. It is argued that it is possible to combine the merits of the planned economy and market regulation, and establish an economic operational mode adaptable to China's socialist environment.

State plans, which can help maintain a comprehensive balance in the national economy, can also place the economy under extremely rigid control and hamper its vitality, as has been experienced by China in the past. Market mechanisms can flexibly regulate the relationship between supply and demand and embody the law of value, but such mechanisms can also cause problems such as inflation as experienced by capitalist countries from time to time (Dong 1993). Both planned and

<sup>&</sup>lt;sup>5</sup> See Wen Wei Po (Hong Kong Newspaper) on 7 December 1996.

<sup>&</sup>lt;sup>6</sup> See Wen Wei Po (Hong Kong Newspaper) on 15 October 1996.

<sup>&</sup>lt;sup>7</sup> See Wen Wei Po (Hong Kong Newspaper) on 10 January 1997.

<sup>&</sup>lt;sup>8</sup> See Wen Wei Po (Hong Kong Newspaper) on 26 October 1996.

market economies have their strengths and weaknesses. Integration of a planned economy with market regulation is aimed at attempting to obtain the best compromise suited to China. Specifically, such a planned economy consists of a mandatory plan, guidance plan, and market regulation.

The mandatory plan constitutes one of the important means for the integration of the planned economy with market regulation. In the 1990s and beyond, mandatory plans will be executed on a measured scale for certain economic sectors. Such plans, of course, should take into consideration the relationship between supply and demand and conform to the law of value. The guidance plan covers the enforcement of economic policies and measures, such as policies on interest rates and foreign exchange rates which chart the direction of economic activities. Market regulation is achieved through changes in the relationship between supply and demand in the market-place, under the guidance of the overall plans and laws of the state.

The planned commodity economy is based on public ownership and regulated economic plans with assistance from market forces. Various reforms were designed according to this objective, under which the proportion of a planned economy has been gradually reduced, and the market has played an increasingly important role. The Chinese economy has recently experienced a period of rapid development. At the same time many problems emerged for two main reasons.

Firstly, a sound theory underlying the planned commodity economy was not established. The arguments among researchers and government officials on the ways to combine the planned economy and the market economy has not yet been solved. Secondly, people who were used to the planned economy were not familiar with market mechanisms. Some simply interpreted the changes as permitting them to do whatever they wished to do. Suddenly, the old economic order had broken down while the new one was not yet established. Competition without any regulatory framework inevitably caused chaos. The government realised such a situation had to be remedied. Clearer objectives needed to be established on which sound theory could be formulated. This evolved into a "Socialist Market Economy", a concept put forward by the Chinese government in 1992 and its principles are now written into the Constitution of the PRC from the Third Plenary Meeting of the 14th Communist Party Central Committee held in October 1994 (Chow, Cooper

& Tang 1994: 9-11).

The major concept of "Socialist Market Economy" is to let almost all sorts of economic and business activities be more market driven instead of centrally directed by the government authorities. The following are thought to be the major implications in implementing the Socialist Market Economy which affect the planning and control influences in the SOEs directly and indirectly.

#### (1) Planned Production

Among the 190,000 medium- and large-sized industrial SOEs in China, the varieties and quantities of industrial and agricultural products as controlled by the government have been reduced from 120 categories in 1980 to 50 categories in 1992<sup>9</sup> and then further decreased to the following 6 major categories in 1996.

- 1.1 iron and steel products;
- 1.2 petroleum and chemical products;
- 1.3 coal and mine products;
- 1.4 textile and clothing products;
- 1.5 food and oil products; and
- 1.6 defence and related products.

The above 6 major categories of products accounted for about 10% of the "National Industrial Outputs (NIO) Value" at the end of 1996. Furthermore, the NIO value of the other industrial products monitored or guided by the government authorities accounted for about 20% of the total in the same year. Therefore, most of the SOEs investigated in this research have got higher autonomies in terms of production planning and control.

#### (2) Market Orientation

As a result of promoting the Socialist Market Economy coupled with the favourable terms and

<sup>&</sup>lt;sup>9</sup> See State Statistics Bureau. 1992. *Economic reform after 14 years*. China Statistics Press (Beijing): 32.

conditions provided by the Government's Legislation (as described in 1.2.1.1 above), most of the SOEs are able to chart their planning and control functions in accordance with the needs and changes in both the domestic and overseas markets. Some of these planning and control activities are listed as follows:

- 2.1 determine production quantities and varieties (or mixes) according to sales forecasts (or market demands);
- 2.2 purchase input resources (e.g. materials, labour, expenses, capital items, etc.) according to feasible sales/production requirements;
- 2.3 manage the production functions to meet the sales demands;
- 2.4 sell the products to the customers in need;
- 2.5 develop and explore the domestic and overseas markets by selling to them the right products, of the right quantity and at the right time; and
- 2.6 conduct appropriate market or marketing research for the present and future products.

#### (3) Input/Output Pricing

In line with the development of "Socialist Market Economy", the pricing control of both input resources and output products (including services) have been released gradually since the early 1990s. Before the economic reform started in 1978, over 95% of the product/service prices had been fixed by the government through the State Price Control Bureau. Turning into the 9th National 5-Year Planning Period (i.e. 1996-2000), except for the prices of the 6 major categories of industrial and agricultural products (as listed in (1) above) plus properties, transportation and communication services which are still closely monitored by the Bureau, all the other product/service prices are now determined by the market supply and demand.

The almost-free market prices affect significantly the SOEs in terms of measuring the actual profit performance since both input costs and output revenues have become variables that have to be planned and controlled in order to achieve both the Economic Responsibility Contract (ERC) and Internal Responsibility Contract (IRC) (both described in Part B of Chapter 2) targets for the SOEs which have been treated as either investment or profit centres. In other words, more emphasis and tighter concerns should be placed on the planning and control aspects by the

enterprise management to survive and compete in different rapidly changing domestic and overseas markets.

#### (4) Inflation

The most obvious adverse effect resulting from the "Socialist Market Economy" promotion is the high inflation experienced in the last few years. The inflation rates of commodity products climbed to 22.7% (yearly average) in 1993 and 21.7% (yearly average) in 1994. Then the macroeconomic control policies (described in Section 1.2.2.3 below) adopted since July 1993 have taken effect to curb the inflation rate to 14.7% and 6.5% (yearly average) in 1995 and 1996 respectively. It was expected that this figure would be maintained at below 6% (yearly average) in 1997<sup>10</sup>. Inflation control has been put as the first agenda item of the State Economic Development Committee during the 9th National 5-Year Plan (i.e. 1996-2000).

Similar to "Input/Output Pricing" described in (3) above, the vagaries of inflation can affect the planning and control management in the SOEs such as formulating strategic plans, setting budgets, measuring performances and determining incentives which are the major elements of "Responsibility Accounting" in China.

#### 1.2.2 Specific Factors/Variables

The "Ownership Changes", "Local Government Policies & Regulations" and "Macro-Economic Control Measures" are the three specific factors or variables which affect the pace of change as measured by the degree of discretion over planning and control in these 20 SOEs varied with form of ownership, geographical location and industry sector respectively (represented by the 4 Secondary Hypotheses in Section 1.5.2 of this Chapter).

#### 1.2.2.1 Ownership Changes

Nearly all the enterprises in China have been converted into wholly state-owned since 1953 until the economic reform formally started in 1979. Since then, other forms of ownership have been

<sup>&</sup>lt;sup>10</sup> See Wen Wei Po (Hong Kong Newspaper) on 31 December 1996.

allowed for the industrial and commercial enterprises to operate their businesses in China. The following table summarizes the various forms of enterprise ownership existed at present.

	Forms of Ownership	Examples
1	Listed Shareholding Enterprises <sup>11</sup>	A-shares <sup>12</sup> , B-shares <sup>13</sup> , H-shares <sup>14</sup> , N-shares <sup>15</sup>
2	Private Shareholding Enterprises <sup>16</sup>	shares owned by the government, employees and other enterprises
3	Equity Joint-Ventures	shares held by the foreign investors and the government and other enterprises in China
4	Cooperative Joint-Ventures	similar to (3) but investments are mainly in the form of tangible assets such as land, building, materials, etc. and intangible assets like patent, copyright, technology, management, etc.
5	Foreign-Owned Enterprises	fully-owned by the foreign investors
6	Leased/Underwritten Enterprises	mainly managed and operated by foreign investors for a number of years but the ultimate ownership remains state-owned

<sup>&</sup>lt;sup>11</sup> Only 4 SOEs with A-shares listed in the Shanghai and Shenzhen Stock Exchanges (1 SOE has H-shares listed in Hong Kong Stock Exchange as well) have been investigated in this research.

<sup>&</sup>lt;sup>12</sup> A-shares can only be purchased and held by the citizens in China excluding Taiwan, Hong Kong and Macau residents (689 A-shares have been listed in the Shanghai and Shenzhen Stock Exchanges at the end of January 1998).

<sup>&</sup>lt;sup>13</sup> B-shares can only be purchased and held by the foreign investors including Taiwan, Hong Kong and Macau residents (99 B-shares have been listed in the Shanghai and Shenzhen Stock Exchanges at the end of January 1998).

<sup>&</sup>lt;sup>14</sup> H-shares are shares of SOEs in China listed in Hong Kong Stock Exchange (39 H-shares have been listed in Hong Kong at the end of January 1998).

<sup>&</sup>lt;sup>15</sup> N-shares are shares of SOEs in China listed in New York Stock Exchange (6 N-shares have been listed in New York at the end of January 1998).

<sup>&</sup>lt;sup>16</sup> Only 4 private shareholding enterprises with shares held by the government, employees and other enterprises have been investigated in this research.

	Forms of Ownership	Examples
7	Partnerships	invested by the government, enterprises, employees, individuals, etc.
8	Private-Owned Enterprises	invested by enterprise employees and other individuals
9	Sole Proprietors	enterprises owned by entrepreneurs

China desired to establish "Westernized" stock exchanges for quite a long time, but the official opening of stock exchanges was delayed again and again for political reasons. Because of the important economic role of Shanghai and the advantageous position of Shenzhen (neighbour to Hong Kong) in China's opening to the outside world, China officially opened the Shanghai Stock Exchange on 19 December, 1990 and the Shenzhen Stock Exchange on 3 July 1991 (Chen 1996).

The Shanghai and Shenzhen Stock Exchanges offer two types of shares, A share and B share. A shares are purchased by Chinese citizens and denominated in RMB, while B shares, which started in 1992, are only available for purchase by foreign investors including Hong Kong and Taiwan residents, and other overseas Chinese. Shanghai B shares are priced and traded in US dollar, while Shenzhen B shares are denominated in Hong Kong dollar. It is possible for one enterprise to issue A shares as well as B shares, or to issue A or B shares only. There were 689 A shares and 99 B shares<sup>17</sup> issued in the two stock exchanges at the end of January 1998.

Furthermore, 39 SOEs with listed A shares, have listed their shares in the Hong Kong Stock Exchange (H shares) at the end of January 1998. Similarly, 6 SOEs have listed their shares in the New York Stock Exchange (N shares) as well<sup>18</sup>. Among the 20 SOEs investigated in this

Over US\$3.5 billion capital has been raised from issuing 99 B-shares. It has been planned that 33 new B-shares would be issued (mainly SOEs located in the inner provinces) in 1997 and 1998 to attracted further foreign investment funds (see Hong Kong Wen Wei Po Newspaper on 8 January 1997).

<sup>&</sup>lt;sup>18</sup> At the end of 1996, US\$4.9 billion of capital has been raised through listing SOEs' in the overseas stock markets and another 50 SOEs have been approved by the State Securities Supervisory Commission for listing abroad in the next two or three years (see Hong Kong Wen Wei Po Newspaper on 30 December 1996).

research, 4 of them (i.e. SDS1(11), SCM2(14), GLIL(16), BPMH(20)) have A shares listed in the two exchanges. In addition, BPMH(20) listed its H shares in the Hong Kong Stock Exchange in 1993. In fact the number of Chinese enterprises listed in China and overseas accounts for only a very small proportion of the total 400,000 large- and medium-sized SOEs.

Other than these 830 listed enterprises, the Beijing government has approved the transformation of about 9,200 large- and medium-sized SOEs into shareholding enterprises by issuing shares to their government authorities, employees and other enterprises without listing in the two stock exchanges in China. There are 4 such private shareholding enterprises (i.e. GFDS(03), GDDS(04), GNFF(07), GNFB(08)) investigated in this research.

As a result of such a massive scale of rapid shareholding conversion or privatization, which seems to be a fashionable trend to be pursued by thousands of other Wholly SOEs, the directors and chief executives of these shareholding enterprises are now accountable more to local and overseas stakeholders who demand a true and fair financial disclosure on the one hand and consistent improvement in profitability on the other hand to justify their investments. In the long run, the transformation of enterprises may influence enterprises to endeavour to improve their financial performance and thus, shareholders' wealth. Therefore, an effective management accounting system (including responsibility accounting) may change in line with the ownership changes, in order to achieve such a goal.

#### 1.2.2.2 <u>Local Government Policies & Regulations</u>

Government's policies and regulations have always played a very important role in China's economic environment. For the past 18 years, China's economic policies have swung wildly (e.g. boom-bust cycle), with inflation rates rising and falling as the central government opened and closed money supply<sup>19</sup>.

<sup>&</sup>lt;sup>19</sup> See South China Morning Post (Hong Kong English Newspaper) on 2 December 1996.

As mentioned in Section 1.2.1.1 above, since the early 1990s, more and more business and commercial related laws have been enacted in China and some of them have direct and indirect impacts on the planning and control systems in the SOEs. In addition to the nationwide legislation, the local governments in different provinces and cities may have their own policies and regulations which are claimed to suit the specific economic situations prevailing in their territories.

For example, as an extension to the new Tax Law implemented in January 1994, the 5 Special Economic Zones in southern China (i.e. Xiamen, Shantou, Shenzhen, Zhuhai, Hainan) have enacted some compromised tax policies and regulations for the joint-venture enterprises in order to maintain and further attract foreign investments. Another example is the Labour Law implemented in January 1995. To cater for the faster economic development status in Tianjin, Shanghai, Xiamen, Guangzhou, Shenzhen etc, the local governments of these coastal cities have been approved by the Beijing Government to implement more favourable policies and regulations in relation to wages, benefits, social welfare, employment, personnel, etc. These different local government policies and regulations are thought to affect the management aspects of the SOEs including the planning, control and operation systems.

#### 1.2.2.3 Macro-Economic Control Measures

Transforming from the "Planned Economy" to the "Socialist Market Economy" environment since the early 1990s, the China government has employed some "Macroeconomic Control" measures in order to maintain a steady and healthy economic growth and enhance the living standard of over 1.2 billion people in the country<sup>20</sup>.

Inflation is one of the most typical examples described in Section 1.2.1.2(4) above. The 3 major macroeconomic control measures installed by the State Council during 1994 to 1996 were (1) to control the pace and portfolio of capital asset investments; (2) to increase agricultural outputs; and (3) to balance the nationwide supply and demand of major products and commodities<sup>21</sup>.

Under the prevailing socialist market economy transformation, the market should play the most vital role in the development of the pillar industries (e.g. machinery and electronics, petrochemical, automobile, iron and steel, transportation, telecommunication, building industries). But State guidance and support (i.e. macroeconomic control) are indispensable when the market is immature and the industries suffer from lack of funds<sup>22</sup>.

During the many interviews with the senior managements of the 20 SOEs in this research, every interviewee did mention the ripple effects of macroeconomic control measures on his or her enterprise. A common example is the direct effect on demand for the products or services provided by each SOE. As a result, the planning, control, evaluation, performance measurement and remuneration systems of that SOE will be influenced in both directions -- favourable and adverse.

The following five sections briefly describe some of these specific macro-economic control measures adopted by the central and local governments during the last few years.

<sup>&</sup>lt;sup>20</sup> See Wen Wei Po (Hong Kong Newspaper) on 16 September 1996.

<sup>&</sup>lt;sup>21</sup> See *Wen Wei Po* (Hong Kong Newspaper) 1996 Annual Review p.18 published on 3 January 1997.

<sup>&</sup>lt;sup>22</sup> See China Daily on 4 August 1994.

# (1) Public Sector Restructuring & Changing Role

During the last decade, there has been some restructuring of government departments. The last significant one took place in 1993 in order to streamline many ministries, departments and organisations under the management scope of the State Council. The number of government departments was reduced from 86 to 59. As a result, about 20% of the civil servants have either been laid off or reallocated to other SOEs out of the government authorities. Also the government role needs to change more quickly according to the principles of separating government ownership and enterprise management. The government needs to focus on macrocontrol through planning, coordination, supervision, and other principles of economics and law<sup>23</sup>.

Furthermore, the roles played by these governmental departments and their local agencies in different provinces and cities have changed mainly by delegating the various autonomies to the SOEs according to the "SOE Operation Mechanisms Transformation Regulations" implemented since July 1992. The government authorities keep some macroeconomic control measures (i.e. capital investment, acquisition and merger, etc.) on and provide guidance and assistance (i.e. market information, import and export right, etc.) to the SOEs.

According to a survey performed by the State Commission for Economic System Restructuring in early 1996, over 71% of the respondents (large- and medium-sized SOEs) indicated that their supervisory (government) authorities have exerted less direct planning and control influences on them since 1992<sup>24</sup>.

In all the nationwide economic conferences held in the last few years, further public sector restructuring and the changing role have been emphasized in order to motivate the managers and employees in the SOEs to actualize the concepts of self-financing, self-managing, self-controlling and self-developing<sup>25</sup>. This initiative taken by the central government is reducing the planning and

<sup>&</sup>lt;sup>23</sup> See Wen Wei Po (Hong Kong Newspaper) on 8 May 1995.

<sup>&</sup>lt;sup>24</sup> See Wen Wei Po (Hong Kong Newspaper) on 7 February 1996.

<sup>&</sup>lt;sup>25</sup> See Wen Wei Po (Hong Kong Newspaper) on 16 December 1996.

control influences on the SOEs by their respective supervisory government authorities.

### (2) Taxation, Foreign Exchange & Financial Market Changes

Taxation is one of the most common means to distribute the economic wealth among the government, enterprises and individuals in China. The new Tax Law adopted in January 1994 redefined nearly all kinds of tax sources including income tax, sales tax, value-added tax, service tax, consumption tax, capital gained tax, etc. which affect the "profit after tax" of the SOEs. In turn, the Profit After Tax (PAT) has direct impact on the dividend policy (for shareholding enterprises), capital investment, research and development, business expansion, employees' welfare and bonus, etc. of the SOEs. Some interviewees in this research have complained that the higher enterprise income tax of 33% (as from 1995) applied to the Wholly SOEs compared with the 15% applied to the Shareholding or Foreign-Invested Enterprises was unfair because different types (ownerships) of enterprises were not competing at the same starting point. It is observed that the taxation system has some planning and control influences on the SOEs in one way or another.

To implement the centralised control and management of foreign exchange, the State Administration of Foreign Exchange Control (SAFEC) was established and it reports directly to the State Council. The SAFEC, in association with the State Planning Committee (SPC), allocates limited foreign currency resources to the SOEs through a quota system based on a number of criteria, including their record of foreign exchange generation. In addition to the quota allocated by the SPC, the SOEs are allowed to retain a proportion of the foreign exchange they generate and to trade it in the foreign exchange swap centres. These centres were established alongside the quota system, with the aim of adjusting the demand and supply of foreign exchange (Chow, Cooper & Tang 1994).

For those SOEs who do not have the "import and export right" granted by the Ministry of Foreign Trade & Economic Cooperation, they can only export their products through some agents or enterprises having this right and export quotas. For example, before the Beijing No.3 Cotton Mill (BCM3) obtained the import and export right in 1994, this mill sold the yarns and cloths to an import and export enterprise at the SAFEC's official rate of

US\$1=Renminbi(RBM)5.7. After exporting the products and receiving the foreign currency, the import and export enterprise could exchange the foreign currency in swap centre at the market rate which might be US\$1=RMB8.7.

But on the other hand, when BCM3 needed to buy US dollar to pay for the purchases of raw materials (e.g. cotton), machines and equipment, they had to buy the foreign currency from the swap centre at the same market rate of US\$1=RMB8.7. Therefore the significant exchange differences create heavy transaction costs as BCM3 found in this case. Furthermore, the fluctuation and devaluation of RMB to the US dollar in the last few years have influenced the planning, control and performance measures of many SOEs.

In order to balance the foreign currency receipts and payments or to meet the foreign currency income as agreed in the ERC, some SOEs investigated in this research have to increase the export of their products (e.g. SSW5(01), GLIL(16), BCM3(18)) or the domestic sales of their commodities and services in foreign currency (e.g. GFDS(03), GDDS(04), GNFB(08), SDS1(11), BFSH(19)). As a result, these enterprises have to consider the foreign currency issues in their planning and control work.

Apart from the "shareholding transformation" (described in Section 1.2.2.1 above) as a major source of raising capital funds, some SOEs including banks, utility entities owned by central government and some local enterprises<sup>26</sup> have been allowed to issue "bonds" to their employees, other enterprises and individuals in order to gather a certain portion of free money from the private sector without going through the complicated rules and regulations for public or private listing (Fang & Tang 1991). Both the shares and bonds issued by the SOEs can make funds available for them to implement their long-term plans and maintain their short-term operations. Therefore, both the planning and control aspects of the SOEs are indirectly affected by the changes of capital market in China.

<sup>&</sup>lt;sup>26</sup> A total of RMB30 billion of bonds have been raised by these SOEs. The Ministry of Finance and Bank of China have decided to approve more SOEs to issue "private bonds" to absorb the increased corporate and individual free capital in the market (see Hong Kong *Wen Wei Po* Newspaper on 7 January 1997).

### (3) Bad Debts & Bank Credits

In January 1995, the State Statistics Bureau reported that more than 40% of the 400,000 largeand medium-sized SOEs incurred losses at the end of 1994. To put them on the road of recovery
is the first agenda item of the Chinese government work plan of 1995<sup>27</sup>. The continuous
unprofitable performance of these loss-making enterprises has created a very serious problem of
"Chain Debts" or "Triangle Debts". This means when one enterprise is unable to pay its
creditors, in turn they cannot settle their own debts and so on. According to the State Statistics
Bureau's press release on 25 January 1995, the total outstanding accounts receivable of all SOEs
exceeded RMB600 billion at the end of November 1994 which doubled the figure at the end of
1993<sup>28</sup>. About 60% of these accounts receivable could be considered to be doubtful debts.

A survey of 10,000 SOEs was done by the State Statistics Bureau in the same month and 55% of the respondents indicated that "Chain Debts" would be the most critical problem in 1995 (Liang, Tang, Tsang & Yau 1995). The "Chain Debts" was getting worse in 1996 with an estimation of over RMB800 billion at the end of the year. As a result, many SOEs are running out of "working capital" to finance their operational activities and even unable to pay the wages and bonus in some extreme cases. Under this adverse situation, both the planning and control activities in these SOEs are affected.

In connection with the bad debts situation in China, the banks suffer most since they are the major working fund providers to the SOEs. Since the early 1980s, the central and local governments have ceased the direct capital injection into the SOEs, instead bank loans have become the major source of fund other than the retained earnings created by the SOEs. Therefore, a significant proportion of these chain debts is financed by bank loans. If these high gearing enterprises go into bankruptcy, the banks will suffer most in terms of the loan repayment ability from the liquidated assets. Consequently, many of the Chinese banks bear with huge amounts of loans for these SOEs as long as they are able to pay for the interest.

<sup>&</sup>lt;sup>27</sup> See Wen Wei Po (Hong Kong Newspaper) on 23 January 1995.

<sup>&</sup>lt;sup>28</sup> See Wen Wei Po (Hong Kong Newspaper) on 26 January 1995.

Most of the Wholly SOEs investigated in this research do not provide for bad or doubtful debts since this is not required by law. Some interviewees in this research have disclosed the fact that they really have significant amounts of bad and doubtful debts but they just left these uncollectible debts in the accounts receivable waiting for the government to inject funds into their enterprises to relieve most of their chain debts. In fact, the central government has used this option since the early 1990s and the People's Bank of China (Central Bank) transferred RMB50 billion and RMB20 billion of funds into the other state-owned and commercial banks to write-off and settle part of these heavy bad and doubtful debts in 1991 and 1996 respectively<sup>29</sup>. The budget of this government subsidy for 1997 was RMB30 billion<sup>30</sup>.

The "Commercial Banking Law" enacted in 1996 allows some of the previous state-owned banks to become commercial banks which will be more market and profit oriented. This implies that these commercial banks will not finance and support the loss-making SOEs endlessly. The commercial banks will scrutinize the financial performance and liquidity of their clients, including the SOEs, closely before they grant credits to existing and new customers<sup>31</sup>. In view of this privatization of banks in China, the insolvent SOEs will be very difficult to obtain bank credits to finance their operations and ultimately they may go into bankruptcy or be taken over by other legal entities.

According to the State Statistics Bureau, in 1996 over 80% of the working capital of all the SOEs in China were financed by bank loans<sup>32</sup>. Although the prime rate was as high as 11% in the same year, the SOEs still have to rely on bank loans to maintain their operations. Therefore, the availability of bank credits has always been an influential factor in the planning, operation and control of a SOE in China. Of course, the most important solution to this problem is to enhance the profitability of the SOEs by selling all products or services that can be produced and collecting

<sup>&</sup>lt;sup>29</sup> See *Wen Wei Po* (Hong Kong Newspaper) on 20 January 1996 and Hong Kong *Oriental* Newspaper on 15 December 1996.

<sup>&</sup>lt;sup>30</sup> See Wen Wei Po (Hong Kong Newspaper) on 10 January 1997.

<sup>&</sup>lt;sup>31</sup> See Wen Wei Po (Hong Kong Newspaper) on 19 January 1996.

<sup>32</sup> See *Hong Kong Oriental Newspaper* on 15 December 1996.

all the accounts receivable within a reasonable period of time.

# (4) Manpower & Wages Systems

The rate of unemployment has increased in recent years because of SOE activity relating to merger, acquisition, takeover, contracted-out, leased-out, management-buyout, auctioned-off, liquidation and bankruptcy. In addition, the promulgation of "SOE Operation Mechanisms Transformation" has encouraged the SOEs to restructure their organisations and lay off part of the redundant employees. Putting aside the unemployment effects on the social stability in China, the reduction of excess employees and workers could certainly enhance the productivity and profitability of the SOEs, and in many cases, save them from bankruptcy. Wages system reform was firstly started in Shenzhen (across the boarder of Hong Kong) during 1984. The traditional 8-bracket wages scale adopted in the SOEs was abolished (see Section 6.4 of Data Analysis 5 in Volume 3 [pp.128-131]). Wages were then determined according to job nature, post, time-rate and piece-rate. In most cases, wages and bonus were directly related to individual performance and ability<sup>33</sup>. This successful pilot scheme was employed by many cities in the last decade.

In the recent wages and salaries reform, the real issue is whether the SOEs should bring together all types of cash payments into one high monthly payment, or separate them as previously done. But this new method may not result in the greatest economic benefits to the SOE or the employee, given the current Chinese taxation, accounting and insurance systems. So it may be wiser for the SOEs to structure a wage package that features a base salary, and subsidies not subject to taxation should be accounted for separately. All others can be lumped together into a "cost of livelihood" subsidy to be added to the basic wage (Arthur Andersen 1993: 124).

In such a huge developing country, monetary rewards are very important to the well being of the 0.7 billion working population in China especially more crucial to the SOE employees located in the inner provinces. Worst of all, there are 65 million of people in China who are struggling below the so called "line of poverty" according to some worldwide standards<sup>34</sup>. In other words,

<sup>&</sup>lt;sup>33</sup> See Wen Wei Po (Hong Kong Newspaper) on 9 December 1996.

<sup>&</sup>lt;sup>34</sup> See Wen Wei Po (Hong Kong Newspaper) on 6 January 1997.

many people in China can only fulfil the lower two or three levels in "Maslow's Hierarchy of Needs". As verified in many interviews during the data collection period of this research, "extrinsic rewards" are the most important "motivation factor" or "key factor" for both managers and workers to actualize the economic effectiveness and efficiency of the "responsibility accounting system" particularly in terms of setting targets and subsequent performance measurement.

# (5) Social Security Systems

For significant improvements to be possible, SOEs must be able to adjust the size and nature of their operations in response to market signals, adding or shedding workers as necessary. However, given the housing, pensions, and healthcare, among a myriad of social welfare services, which are tied to the enterprise, labour mobility is highly constrained. This makes it difficult to reallocate redundant labour across occupations, enterprises, and locations. Clearly, for more efficiently-operating labour markets to emerge, worker access to housing and other welfare benefits must be de-coupled from employment in the enterprise and managed by the government (Lee 1993).

According to a survey on 1,200 citizens in 7 big cities in 1996, 'medical benefits', 'housing provisions', 'inflation rates' and 'retirement schemes' were ranked the top four concerns by the respondents<sup>35</sup>. Although the government is taking up gradually the responsibility to coordinate and maintain the major social security systems relating to retirement, medical, unemployment, reemployment, work compensation, nevertheless, the SOEs still have to contribute about 42%-46% of the gross wages payment to those government-managed social security funds (Liu & Zhang 1996). On top of that, the SOEs still have to alleviate the housing problems (more critical in the big cities like Shanghai and Guangzhou) of the majority of their employees such as to build quarters and purchase apartments for them. These substantial capital expenditures require money from the "employee welfare fund" which is one of the reserve accounts appropriated from the profit after tax (Arthur Andersen 1993: 124-125).

<sup>&</sup>lt;sup>35</sup> See Wen Wei Po (Hong Kong Newspaper) on 14 October 1996.

From the positive perspective, the financial burden of various employees' welfare on the SOE compels the top management to be more aggressive in planning for the incomes and conscious in controlling the expenses. However, looking from the negative side, these almost unavoidable fixed costs demotivate the enterprise management to perform their planning and control functions properly.

### 1.2.3 Long-Term Factors/Variables

The "Education & Training", "Management Knowledge" and "Professionalization" are the three long-term factors or variables which may not have immediate impacts on the responsibility accounting, planning and control systems operated by the SOEs at the present moment, nevertheless, they should be regarded as the "diffusion factors" of responsibility (management) accounting in the SOEs of China (Firth 1996).

# 1.2.3.1 Education & Training

The present management accounting development in China is similar to the Hong Kong situation prevailing in the 1970s. In 1974, the Department of Accountancy of the Hong Kong Polytechnic launched a 3-year full-time Higher Diploma in Management Accountancy course whose syllabus was closely geared to the examinations of the Chartered Institute of Management Accountants (CIMA) in the UK. Soon, another 6-year part-time Certificate in Management Accountancy course was offered to the working students as well. Apart from assisting the full-time and part-time students to sit for the 18 papers of CIMA examinations, these courses helped to promote management accounting theories and practices to employers and accounting practitioners in Hong Kong.

As from 1977, the graduates of these CIMA courses started to apply their management accounting knowledge in their working environments. They also grouped together to organise, promote and participate in the activities of the CIMA Hong Kong Division. After 20 years of hard work, there were about 880 qualified CIMA members and over 1,280 students in Hong

Kong at the end of 1996<sup>36</sup>. Evidently, the management accounting theories and practices have been well recognised by the industrial, commercial and public sectors and have contributed to the Hong Kong economic prosperity in one way or another.

The root solution to facilitate and speed up the development of management accounting and the refinement of responsibility accounting in China lies on the efforts in education and training which should be initiated from the central government to the local authorities and universities. The following sections briefly describe the present situation and suggest strategies for the future.

# (1) Accounting Education

During the Cultural Revolution from 1966 to 1977, the accountancy degree system was ceased. Students received no formal accountancy education and were not awarded degrees. Since 1978, the extremes of the Cultural Revolution have been abandoned and accounting has become an important part of the management system and was being studied by both the Chinese academics and practitioners (Yu 1983; Ruan 1992). Effective from 1979, the degree system was formally re-established followed by curriculum reforms in accountancy education. Colleges and universities in China are offering multi-level accountancy courses leading to different kinds of awards from first degree to doctoral degree.

Accountancy curriculum reforms have been more extensive at the undergraduate level. For example, the Shanghai University of Finance and Economics has adopted the American model by generically categorising subject contents into accounting principles, financial accounting, cost accounting, management accounting, financial management, international accounting and auditing. To ensure a close link between theories and practices, academic staff have been encouraged to carry out research activities.

<sup>&</sup>lt;sup>36</sup> According to CIMA membership database at the end of December 1996.

At present, almost all the accountancy undergraduate and postgraduate programmes have included "management accounting" as an individual subject (Feng, Leung & Yau 1992). Furthermore, a few universities have suggested to separate "responsibility accounting" out from management accounting as an independent subject which is the case adopted by the People's University in Beijing (He & Lin 1991). Attempts are now being made to conceptualize management accounting in Chinese terms, and western ideas, concepts and techniques are being explored to identify elements which may be of use in China (Ding 1992; Li 1992). During the past ten years, the accounting graduates have made use of their management accounting knowledge and applied them in their jobs. Through training courses, seminars, articles and teaching programmes, they have shared their experience, whether good or bad, with other accounting practitioners and academics.

The accounting education has developed rapidly since 1979. At present, there are more than 103 universities and tertiary institutions offering full-time accountancy undergraduate programmes<sup>37</sup>. In addition, there are hundreds of technical colleges running full-time and part-time accountancy sub-degree courses of which the certificate and diploma holders can upgrade their qualifications into higher diplomas or degrees by further study on a part-time basis for two to three years in some universities. Moreover, there are many open learning and distance learning institutions providing various accounting education programmes which lead to different levels of awards, ranging from bachelor degree to certificate. Management accounting is one of the core subjects of most of these accountancy programmes. Although the avenues to study accounting have increased, the demand however is much greater than the supply particularly in the inner provinces and smaller cities of China.

# (2) Professional Examinations & Training

Since the economic reforms started in 1979, the accountancy profession has not been well recognised by the public and private sectors. In order to standardize the professional accounting qualifications and formalize the social status of the accounting practitioners, the Ministry of

<sup>&</sup>lt;sup>37</sup> See List of Accounting Academics in China (1996). *China Accounting Professors Association [CAPA]*. Shanghai (June).

Finance and the Ministry of Personnel jointly published the "Accounting Professional Qualification Examination Regulations" and its "Implementation Procedures" on 21 March 1992.

As from 1 August 1992, a "Three-tier Examination System" has become the only qualifying examinations for all the accounting practitioners who want to be qualified as professional "Accountants", "Assistant Accountants" and "Accounting Technicians". Management accounting is one of the papers in the "Accountants" examination, which signifies the importance of management accounting knowledge to the qualified professional accountants in China<sup>38</sup>.

Currently, there are over 10 million accounting practitioners working at different organisational levels<sup>39</sup>. Over 95% of this huge accounting workforce are working for the industrial, commercial and public sectors. Before the implementation of the above mentioned "*Three-tier Examination System*", there were about 27,000 accountants, 750,000 assistant accountants and 1.1 million accounting technicians qualified by education levels and working experience. Judging from these figures, it can be seen that at least 8 million of accounting personnel are waiting for some sort of basic accounting education to prepare themselves to sit for the qualifying examinations.

In addition, there are over 1 million semi-qualified accounting practitioners who are looking for further education and training for the examinations on the one hand, and uplifting their professional expertise for new job requirements on the other hand. It is no doubt that accounting education and training in China, including management accounting, is a huge market in this part of the world (Yan 1991).

# (3) Management Accounting Education Strategies

Concerning the promotion of management accounting theories, methods, techniques and practices, the following four types of educational arrangements have been envisaged.

<sup>&</sup>lt;sup>38</sup> See Shanghai Accounting Journal. June 1992.

<sup>&</sup>lt;sup>39</sup> See Wen Wei Po (Hong Kong Newspaper) on 5 May 1993.

### 3.1 Postgraduate Programme

On 3 November 1981, the Education Commission of China approved the first list of universities to confer master and doctoral degrees to their accountancy postgraduates. Since then, the postgraduates programmes have developed rapidly and so far about 90 accounting doctoral degrees have been conferred and a few hundred of postgraduates have obtained their master degrees in accountancy.

The following 9 universities and institutions have been allowed to confer PhD in Accounting since 1981<sup>40</sup>:

- (a) Beijing Institute of Financial Sciences (under the Ministry of Finance);
- (b) People's University of China (Beijing);
- (c) Northeast University of Finance & Economics (Dalin);
- (d) Tianjin Finance & Economics Institute;
- (e) Shaanxi Finance & Economics Institute (Xian);
- (f) Shanghai University of Finance & Economics;
- (g) Xinan University of Finance & Economics (Sichuan);
- (h) Zhongnan University of Finance & Economics (Wuhan); and
- (i) Xiamen University.

Management accounting has become a compulsory subject in these postgraduate programmes and also a research area for many students to investigate and write their theses. For example, one-third of the accountancy postgraduate students in the Shanghai University of Finance and Economics are researching management accounting topics in their final year projects. The provision of management accounting education programmes in the universities can help to produce trainers for the future and will definitely accelerate the building up of the strengths of management accounting research and application.

<sup>&</sup>lt;sup>40</sup> See List of Accounting Academics in China (1996). *China Accounting Professors Association [CAPA]*. Shanghai (June).

### 3.2 Undergraduate Programmes

The full-time and part-time accountancy courses offered by thousands of universities, technical colleges, vocational schools and distance learning institutes should strengthen the contents of management accounting at various levels. These courses aim at equipping the accounting personnel with different levels of management accounting knowledge to cope with their jobs. Furthermore, the universities should invite more foreign management accounting experts to teach and give seminars. The Chinese academics can learn from their experience on how to improve the management accounting research and the applications in actual practice.

#### 3.3 Technical Seminars

During the last few years, numerous Chinese accounting societies, universities, federations of industry and commerce, and the foreign management accounting associations (i.e. CIMA in the UK) have co-organised some management accounting seminars in China. Undoubtedly, these seminars would open up venues for the Chinese participants who are enterprise managers and accounting practitioners, to learn more about management accounting techniques and to transplant the foreign counterparts' successful experience into their own enterprises for long-term economic improvement.

#### 3.4 In-house Training

As far as the internal education and training are concerned, the major motivating force comes from the management of state-owned enterprises. In-house training courses of different time spans and attendance modes have been found to be effective means to enhance the quality of the enterprises' accounting staff and also the awareness of the accounting functions by the other non-accounting staff. One example is the Shanghai No.2 Textile Machines Factory (visited in September 1991) which is one of the largest textile machines manufacturers in China with over 6,000 employees. This enterprise has been conducting various accounting short courses for most of the employees to attend for an hour before work.

# 1.2.3.2 <u>Management Knowledge</u>

In parallel with the economic reform and open-door policy, the management systems and techniques currently adopted by Chinese SOEs need to be enhanced via learning from the western countries<sup>41</sup>. Since the early 1990s, the promotion of the shareholding system, enterprise mechanisms transformation and market economy have created a favourable environment for the SOEs to manage their own operations, to improve the financial performance and to increase the benefits to the government, the enterprises and the employees.

However, it will take a long time to change the mind set and management practice of millions of managers in China. In Chinese enterprises management control seems to be based largely on loyalty, seniority and trust. Chief executives are usually very authoritarian and manage their enterprises through direct involvement and personal relationships, rather than through accounting numbers (Wang 1986; Zhang 1989). Chinese accountants frequently complain that management accounting is not used for management control and chief executives attach little importance to it (Yang 1982; Yu 1983; Wang 1986).

The general manager of China Pacific Insurance has said that over 60% of the loss-making SOEs in China was due to their top management malpractice and the reluctance to employ the modern management techniques<sup>42</sup>. For example, in a study by Meng (1991), accountants at the Beijing Oil Machinery Factory complained that they could not use management accounting methods because their senior executives know little about management accounting and they preferred to rely on their own business experience.

The lack of concepts of effective management and the inadequate knowledge of management accounting techniques among the enterprise's senior management, who are usually old-aged people, have been the blocking factors against the further development of management accounting

<sup>&</sup>lt;sup>41</sup> This was one of the major SOE's reform focuses promulgated in the 9th State Economic Plan (1996-2000). (See Hong Kong *Wen Wei Po* Newspaper on 24 September 1995.)

<sup>&</sup>lt;sup>42</sup> See Wen Wei Po (Hong Kong Newspaper) on 25 November 1996.

theories and practices<sup>43</sup>. Education and training as described in Section 1.2.3.1 above should be one of the best ways and the long-term solution to promote this management intelligence transformation process.

During the National Economics and Trading Conference held from 6-8 December 1996, the China Vice-Premier, Mr Wu Bong Quo, pointed out that the present low economic performance in many SOEs was mainly due to the mis-management of the enterprise top leaders who either did not have the concepts to strengthen the management control or did not follow the "corporate compliance/governance" strictly. He suggested that a system of "management audit" should be installed in 1997 to evaluate the performance of most of the top managements in the SOEs. For those unqualified chief executives in the SOEs revealed after the management audit, they should either be replaced or subject to stringent management training. Subsequently, this management audit policy was being implemented in 1997<sup>44</sup>.

#### 1.2.3.3 Professionalization

The "Accounting Administration Department" under the Ministry of Finance (MOF) is responsible for all the accounting affairs in China including the supervision of the accountancy profession via the "Chinese Institute of Certified Public Accountants (CICPA)". Since October 1993, CICPA has implemented its annual "Unified Professional Examination" (or qualifying examination) on the following 5 subjects:

- (a) auditing;
- (b) taxation;
- (c) economic law;
- (d) financial accounting; and

<sup>&</sup>lt;sup>43</sup> This weakness was pointed out in the "Report on how to reform SOEs in 1996" compiled by the State Commission for Economics and Trade (see Shenzhen Economics Daily on 9 April 1996).

<sup>&</sup>lt;sup>44</sup> See Wen Wei Po (Hong Kong Newspaper) on 10 January 1997.

# (e) financial management<sup>45</sup>.

To be qualified as a CPA in China, passing the above 5 subjects is the first prerequisite. Other than the above-mentioned CPA examination, a "three-tier professional accounting examination" has been described in Section 1.2.3.1(2). This second examination has been conducted since November 1992 and designed for the accounting personnel to be qualified as "accountants", "assistant accountants" and "accounting technicians". The "Accounting Society of China (ASC)" is the largest professional accounting institution to coordinate the professional accountants in China. In recent years, the Accounting Administration Department of MOF has been very busy in drafting 30 accounting standards to be implemented before the year 2000.

Meanwhile, another team in the same department has been working hard for the auditing standards of which some of the planned statements and guidelines were announced and implemented in January 1996. Both the CICPA and ASC (and also their numerous branches in various cities) have been actively participating and promoting the setting of the "accounting standards" and "auditing standards" for the MOF.

During a China accounting and auditing seminar held in The Hong Kong Polytechnic University in November 1996, the honourable speaker, Professor Yang Ji Wan<sup>46</sup>, was asked why the development of management accounting was not so significant in China. Professor Yang replied that the major reason was that the Accounting Administration Department of the MOF has been too busy in drafting the accounting and auditing standards, and therefore they had no resources and time to develop the management accounting practices. He also added that the education and training provided by the universities and colleges in China has not been enough to promote the theories and techniques of management accounting.

<sup>&</sup>lt;sup>45</sup> Management accounting is included in this subject. It has been proposed to set management accounting as an individual subject.

Prof. Yang is the (1) Ex-Secretary General of the Accounting Administration Department of the MOF; (2) Member, Standing Committee, Chinese People's Political Consultative Conference; (3) Chairman, Chinese Institute of Certified Public Accountants; and (4) Executive Vice Chairman, Accounting Society of China.

Professor Yang said that without sound economic performance and profitability achieved by the SOEs, the accounting and auditing standards would not add values to the country's wealth no matter how good the accounting standards, auditing standards, taxation systems and capital markets are. He also agreed that the MOF should take the initiative to propound the theories and practices of management accounting especially the responsibility accounting which has been the crux of management accounting in most of the SOE in China. Finally, Professor Yang remarked that in the long-term, a professional body such as "Institute of Management Accounting in China" should be established to promote the management accounting knowledge on the one hand, and to accredit the management accountant qualification on the other hand.

#### 1.3 DEFINITION OF THE RESEARCH PROBLEM

The above mentioned general, specific and long-term factors/variables which have been changing in China since 1992 have triggered the following research problem.

"Has the Chinese Responsibility Accounting and the associated Planning and Control Systems in the Wholly SOEs and Shareholding SOEs been changed before and after 1992?"

This precise definition of the problem is the core of this study that the researcher will examine more explicitly in the hypotheses, as shown under Section 1.5, and place a boundary around the research, as shown under Section 1.4 (Emory & Cooper 1991).

### 1.4 RESEARCH MODEL

The basic concept of this research can be summarised and depicted in the model as shown in Figure 1 (see Appendix 3) which will be the most significant implication of this research as discussed in Section 8.4.1 in Chapter 8.

#### 1.5 RESEARCH HYPOTHESES

Derived from the research problem definition and domain, the following "*Primary*" and "*Secondary*" hypotheses are investigated.

# 1.5.1 Primary Hypothesis

Mainly because of the legislation and economic changes (i.e. general factors/variables), a pre- and post-reform study was carried out by developing case histories of 20 SOEs over a period of time from 1991 to 1995 in order to identify whether any changes have been made or not in the "Responsibility Accounting Systems" and the associated "Planning and Control Influences". This can be represented in the following null "Primary Hypothesis".

H0 -- The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs investigated in this research have not changed before and after 1992.

# 1.5.2 Secondary Hypotheses

Since the 20 SOEs investigated in this research are classified into 2 types of ownership (i.e. wholly state-owned and shareholding enterprises), located in 4 different cities and belonging to 6 various industries, the following four null "Secondary Hypotheses" have been identified. They are believed to be affected by the three specific factors/variables, inter alia, ownership changes (for H1 and H2), local government policies and regulations (for H3) and macro-economic control measures (for H4) respectively.

H1 The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 12 wholly SOEs, which have remained as wholly SOEs after 1992, have not changed before and after 1992.

H2 The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 8 wholly SOEs, which have converted to Shareholding SOEs after 1992, have not changed before and after 1992.

H3 The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs, which are located in 4 different cities,

have not changed before and after 1992.

H4

The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs, which belong to 6 different industries, have not changed before and after 1992.

The following table summarizes the relationships between the above identified factors/variables and the primary/secondary hypotheses.

Factors/Variables		Hypotheses
General	Legislation Changes	Primary H0
	Market Economy Changes	Primary H0
Specific	Ownership Changes	Secondary H1& H2
	Local Government Policies & Regulations	Secondary H3
	Macro-Economic Control Measures	Secondary H4
Long-Term	Education & Training	Possibly affect all
	Management Knowledge	Primary and Secondary
	Professionalization	Hypotheses

### 1.5.3 Purposes of the Hypotheses

The major purposes behind testing the one primary and four secondary hypotheses are as follow:

- (1) to ascertain the changes of the systems of responsibility accounting adopted by the top managements in the 20 SOEs investigated in this research before and after the related legislation, economic, ownership and government policy transformations (both general and specific factors/variables) started in 1992.
- (2) to investigate how far the planning and control systems, which are pertinent to the styles of responsibility accounting, have changed under the emergence of these legislation, economic, ownership and government policy transformations;
- (3) to identify the underlying reasons for these changes; and
- (4) to understand how these changes are made and are there any external and internal constraints limiting the ways and extents of the changes.

#### 1.6 RESEARCH FRAMEWORK

The framework used to test the above primary and secondary hypotheses is based on the "Management Style Grid" propounded by Goold and Campbell (1991: 36) to identify how the "styles of responsibility accounting" in the Chinese SOEs, in terms of "planning and control systems", have changed under the rapid legislation, ownership and economic reforms since 1992.

The concepts and ideas of this research framework are depicted in the following matrix which is simpler than the Goold and Campbell's Management Style Grid because the other four management styles (i.e. Holding Company, Centralized, Strategic Planning and Strategic Venturing) are not applicable to the SOE's current development in China as perceived from the literature review and enterprise visits performed during this study (Goold & Campbell: 42-43).

STYLES OF RESPONSIBILITY ACCOUNTING				
Planning System	Control System			
	Strategic Control Influence	Financial Control Influence		
High Corporate Influence	Strategic Programming Style	Financial Programming Style		
Low Corporate influence	Strategic Control Style	Financial Control Style		

# 1.6.1 Planning System/Influence

"Planning System" concerns the enterprise's efforts to design the responsibility accounting system. "Planning Influence" concerns the head office's efforts to shape strategies as they emerge and before decisions are taken. It is a measure of the top-down involvement of the head office in major decisions such as establishing responsibility centres or the setting of targets, and of the contribution that the head office makes to the strategy proposals developed in the business units. It is through planning influence that the head office seeks to improve the quality of thinking that surrounds major decisions.

The head office's influence on the proposals made by business unit managers is a function not only of the objectives that are set and the instructions given, but also of the atmosphere and systems within which the unit managers operate. The organisation structure, the review process, the type of guidance from the head office, the way overlaps are managed and the way scarce resources are allocated all have an effect on the head office planning influence.

To study and assess the "Planning Influence" on the 20 SOEs and their responsibility centres (both external and internal dimensions) in this research, the following 7 variables are employed:

- (1) Organisation Structure\*;
- (2) Review Process\*;
- (3) Strategic Themes, Thrusts and Suggestions\*;
- (4) Long-Term Planning (Resource Allocation)\*;
- (5) Short-Term Planning/Budgeting\*;
- (6) Internal Responsibility Contracts#; and
- (7) Management of Interdependencies (Transfer Pricing)\*.
- \* All the 6 planning influence variables used by Goold and Campbell are employed in this study.

  # This is the additional variable which is the core of the responsibility accounting system adopted in the SOEs in China.

The following are brief descriptions of the above 7 planning variables<sup>47</sup> as applied in the Chinese context.

# (1) Organisation Structure

The way the organisation is structured will affect the degree of planning influence. If a manager has full responsibility for a business unit or a responsibility centre, without any constraining overlaps or functional links with other units, he will feel less pressure to seek top-down advice and guidance, and he will be more prepared to fight for his bottom-up point of view. If, on the

<sup>&</sup>lt;sup>47</sup> Refer to Goold, M. & Campbell, A. 1991. *Strategies and Styles: The Role of the Centre in Managing Diversified Corporations*. Blackwell Business: 36-39.

other hand, there are extensive overlaps, coordinating committees, and dual responsibilities, the unit manager will feel more external influences on his planning decisions.

### (2) Review Process

Most of the business units of these 20 SOEs review their plans with the head office or CEOs. In some enterprises this review is carried out only on the setting of targets or budgets. In others, the head office reviews strategic plans as well as budgets. These formal reviews provide an opportunity for the head office to 'give a steer' to the managers in the unit if they think the targets being proposed are weak. At the extreme, the head office can reject the proposal or issue instructions, but normally the head office limits its involvement to asking probing questions.

Alongside these formal reviews there is continual informal contact between the head office and in the business units. In these discussions the head office is trying to find out more about the business. And the unit manager will be testing the ground on initiatives or projects he wants to pursue. These informal reviews are an important part of the influence process.

# (3) Strategic Themes, Thrusts & Suggestions

The themes or distinctive competences, such as the "abolishment of the three iron bowls" (iron employment, iron position and iron wages) in the Chinese SOEs, are often stated in the broadest terms. They can have important top-down impact on setting targets. But by no means the 20 SOEs have explicit themes of this sort.

A related, but separate, type of influence stems from specification by the head office of broad guidelines or thrusts for particular business units. Examples are broad product range goals, market development objectives and competitive position. Although the business units are free to devise plans to achieve these targets and to propose objectives consistent with them, the guidelines provided a framework for their strategic thinking. The importance of these strategic thrusts varies between enterprises.

Another way for the head office to influence plans is by making specific suggestions. The degree to which the head office refrained from intervening with specific suggestions reflects their commitment to decentralization. But even in enterprises that profess a high degree of decentralization, head office's managers still from time to time make suggestions (e.g. the pricing of a major contract, pack size and design for a particular brand, factory layout, etc.). These may arise from regular budget or plan discussions, from normal reviews by head office 'experts', or from much less formal conversations. The suggestions may be based on wider central perspectives, external contacts, personal beliefs, detailed knowledge -- even pure prejudice. Whatever the basis they are unlikely to be ignored, and they form part of the top-down influence process.

# (4) Long-Term Planning (Resource Allocation)

The ultimate and most powerful way in which the head office can influence strategy is through the allocation of resources. By supporting one investment project rather than another, the head office can affect the whole shape of the business portfolio. Some link resource allocation closely to long-term business plans; others adopt a more project-by-project approach. Some give considerable freedom to division managers; others wish to sanction even the smallest expenditures. Some largely react to divisional proposals; others take the lead in sponsoring changes in the portfolio, including acquisitions and divestments. The way the head office allocates resources is, therefore, a critical part of the planning influence process.

# (5) Short-Term Planning/Budgeting

The head office's attitude and practice toward letting the division or unit managers have more actual participation in setting plans and targets will affect the quality of the planning process and lead to a more meaningful performance measurement which may be linked with the remuneration and bonus system. There seems to be very little research in China focusing on the form and extent of this kind of participation which is an important component in the responsibility accounting.

# (6) Internal Responsibility Contracts (IRCs)

The IRC is the major vehicle of responsibility accounting system for many SOEs in China. An IRC is an agreement between the CEO and a certain responsibility centre manager stipulating the exact financial and non-financial targets to be achieved by the latter in a certain period of time which is normally of one year duration. The fulfilment of these targets will determine the levels of remuneration and incentive to be awarded to the responsibility centre. An IRC also defines the authorities and responsibilities of the both parities (i.e. contractor and contractee). Further details are described in Section 2.14 of Chapter 2.

# (7) Management of Interdependencies (Transfer Pricing)

The head office's influence in the form of broad thrusts or specific suggestions is exercised particularly where overlaps, links or relationships between business units need to be managed. The coordination of functional strategies; cross-supply and transfer pricing between divisions or units in a vertically integrated chain; sharing or transfer of expertise; exploitation of a shared resource, lead to opportunities for intervention. The extent of overlaps is determined largely by decisions on the divisional and business structure of the enterprise. The degree of influence which the head office exerts, however, is a function of how active the head office wants to be in resolving the overlap issues.

#### 1.6.2 Control System/Influence

Control is the final stage of the management process. It includes the steps managers take to ensure that organisational strategies are implemented, or, if conditions warrant, that strategies are modified. Management control is thus fundamentally concerned with ensuring that appropriate actions are taken to implement overall organisational plans, and with monitoring the effectiveness of such action and plans (Emmanuel, Otley & Merchant 1990: 109-110).

"Accounting Control System" mainly involves monitoring the operation, collecting of financial and non-financial data, reporting of performance, measuring and evaluating the performance and rewarding or penalizing according to results.

"Control Influence" concerns the way in which the head office reacts to results achieved. Whereas planning influence is about the 'inputs' to decision, control influence is about the results of decisions -- the 'outputs' such as profit or market share. Control influence arises from the targets that the head office agrees with its business units, the way the head office reacts to poor performance, and the frequency with which the head office monitors results. Control influence has its most immediate impact on day-to-day actions -- how strategy is implemented. But it can also indirectly influence thinking and choices about future strategies.

For example, a manager who follows a risky strategy that fails is likely to interpret his experience very differently depending on whether he receives a bonus that year or not. And his interpretation will affect the choices he makes about strategy in the future. The budget process, the capital appropriation system, and the strategic planning system provide the formal framework for control, which is essentially a linked process of agreeing objectives, monitoring results and applying pressure and incentives.

To study and assess the "Control Influence" on the 20 SOEs and their responsibility centres (both external and internal dimensions) in this research, the following 4 variables are employed:

- (1) Decentralisation & Control#;
- (2) Agreeing Objectives\*;
- (3) Monitoring Results\*; and
- (4) Rewards & Incentives\*.
- \* All the 3 control influence variables used by Goold and Campbell are employed in this research.
- # This is the additional variable which is a typical element of control in the responsibility accounting system adopted in the SOEs in China.

The followings are brief descriptions of the above 4 planning variables<sup>48</sup>.

<sup>&</sup>lt;sup>48</sup> Refer to Goold, M. & Campbell, A. 1991. Strategies and Styles: The Role of the Centre in Managing Diversified Corporations. Blackwell Business: 40-41.

# (1) Decentralisation & Control

In large enterprises, centralised decision making can lead to inefficiencies in both the timeliness and quality of decisions and control actions. Decentralisation refers to the extent to which decisions are taken by unit managers rather than head office or CEOs. Any form of decentralisation creates considerable problems of integration and coordination. The head office's prime tasks are overall planning, control and the integration of divisional activities into a coherent whole. Thus in a very large enterprise, decentralisation can represent an important form of control, requiring its own specific type of management information system such as responsibility accounting for its effective operation.

# (2) Agreeing Objectives

The setting of objectives is the first step of the control process. Enterprises differ widely in how they establish objectives. Some may emphasize the product or service quality, others may rely on annual profit numbers when setting objectives. There are differences in the precision and detail of targets; the balance between objective and subjective measures; the time frame for achievement; the influence of the centre in proposing and agreeing objectives; the degree of 'stretch' built into objectives; and the emphasis on financial versus non-financial targets. These differences are important to the type of control influence adopted by the head office.

#### (3) Monitoring Results

All the enterprises investigated in this research ask their business units or responsibility centres to report results monthly, and for some there are weekly reports (i.e. production results), ad hoc questions and many informal ways for the head office to check on how well the business unit or responsibility centre is performing. The way in which the head office seeks out performance information, the type of information it asks for, and the arrangements it has for discussing the results with managers are all part of the control process.

#### (4) Rewards & Incentives

The follow through on performance achieved is also important. Where bonuses are linked to performance targets, or where careers are at risk, the pressure of the control process is enhanced.

The reaction of the head office to poor performers varies among enterprises and is an important influence both on the sorts of strategies that unit or centre managers are likely to propose and on the actions they take during the year.

One of the major aims of a responsibility accounting system is to induce individuals to behave in ways which contribute to overall enterprise performance, such as fulfilling the profit target agreed between an SOE and the government in China. An important element of the control process is therefore concerned with how and why individuals are motivated to act. Central to effective motivation is the link between incentives (i.e. rewards and/or penalties) and those aspects of behaviour (i.e. content and process motivational theories) that it is wished to encourage.

There seems to be little difficulty in providing incentives that will encourage behaviours designed to gain them particularly in the SOEs; the major problem lies in ensuring that achievement of the required measures of performance is done in the desired manner. That is, it is devising adequate systems of performance measurement that is crucial to linking performance with rewards.

# 1.6.3 Responsibility Accounting Styles

Referring to the research framework depicted at the beginning of this Section 1.6, the four specified "Responsibility Accounting Styles" are summarised and defined as follows<sup>49</sup>:

Planning Influence	Control Influence	Responsibility Accounting Style
High Corporate	Tight Strategic	Strategic Programming (1)
High Corporate	Tight Financial	Financial Programming (2)
Low Corporate	Tight Strategic	Strategic Control (3)
Low Corporate	Tight Financial	Financial Control (4)

<sup>&</sup>lt;sup>49</sup> Refer to Goold, M. & Campbell, A. 1991. Strategies and Styles: The Role of the Centre in Managing Diversified Corporations. Blackwell Business: 42-43.

# (1) Strategic Programming

The head office or CEOs are involved in developing targets at the business unit level, but in addition it attempts to set clear performance targets and to insist that they are met. The style embraces detailed planning, central sponsorship of strategy and tight control against financial objectives and strategic milestones.

# (2) Financial Programming

Although broad strategic directions are left to the business units, the head office will suggest, even dictate, which financial results and ratios can be improved. This is in addition to sanctioning targets and capital expenditures.

# (3) Strategic Control

The head office prefers to leave the initiative in the development of plans to business unit managers. The head office does review and criticize the system, but they use reviews as a check on the quality of thinking of business unit managers, rather than as an opportunity to give direction. The control process is an important influence mechanism for the head office. Targets are set for strategic objectives (such as market share) as well as financial performance, and managers are expected to meet the targets. Targets can only be missed when important strategic objectives are at stake.

#### (4) Financial Control

The head office's influence is exercised mainly through the target setting process. The head office's role in developing strategies is limited, and long-term plans are not formally reviewed by the head office. Instead, the head office focuses on a close review of the annual target setting exercise. Profit targets are set when the whole system is approved, and careers are at stake if targets are missed.

#### 1.7 RESEARCH SIGNIFICANCE

Since the early 1980s, the "economic reform" in China has attracted substantial foreign investments or capital year after year<sup>50</sup> and at the same time this "open-door policy" has compelled the "accounting reform" which had to be undertaken by doing away with the Soviet Accounting Model and moving towards the "International Accounting Standards" and as a result about 30 standards will be implemented in China before the end of the year 2000 (Yang 1994, 1996). In parallel with the formulation of financial accounting standards, many government officials (especially in the Ministry of Finance), accounting practitioners and academics have realised the importance of "management accounting" which could be employed as a very useful management tool to improve the productivity and efficiency of the Chinese enterprises on the one hand and to revive the loss-making SOEs on the other hand.

The most widely used management accounting technique by the SOEs in China is "responsibility accounting" which has been refined and systemized since 1987. Besides the immense promotion of responsibility accounting theories by the accounting academics through the teaching programmes and materials, many accounting practitioners in various industries have been sharing their experiences in applying responsibility accounting through business meetings, training sessions, educational seminars and accounting journals. However, systematic, academic and empirical research on this specific topic can hardly be found in the accounting and management literature.

Through this research project and writing up the thesis, the following contributions to the knowledge of responsibility accounting (or management accounting) in China are identified:

(1) to ascertain the diversity of practices in the Responsibility Accounting Systems adopted by the Chinese SOEs due to the legislation, ownership, economic and government policy changes (the general and specific factors/variables as shown in the Research Domain (i.e. Section 1.4)) in the 1990s;

The State Statistics Bureau reported that the accumulated total amount of foreign-invested capital from 1980-1996 in China was over US\$160 billion according to Wen Wei Po (Hong Kong Newspaper) on 12 December 1996.

- (2) to compare the pace of changes in the Responsibility Accounting Styles and the associated Planning and Control Systems in terms of the following "matching-pairs":
  - 2.1 Wholly SOEs before and after 1992;
  - 2.2 Wholly SOEs before 1992 and Shareholding SOEs after 1992;
  - 2.3 SOEs located in different cities before and after 1992; and
  - 2.4 SOEs belonging to various industries before and after 1992;
- (3) to identify and understand the reasons, ways, extents and limitations of the changes discovered in (1) and (2) above;
- (4) to recommend some means to improve the effectiveness of the Responsibility Accounting System practised in China in terms of the Planning and Control aspects; and
- (5) to recommend future potential research for future management accounting research especially in the Planning and Control areas.

#### 1.8 RESEARCH DESIGN & METHODOLOGY

# 1.8.1 Tripartite Link

Since 1989, a tripartite link was established by the Accountancy Departments of the University of Glasgow (UOG), Shanghai University of Finance and Economics (SUFE) and The Hong Kong Polytechnic University (HKPU) with financial sponsorship from the British Council. The major purpose of this tripartite link was for academic exchanges and collaborations among the three parties in terms of research, teaching and studying. Supported by this link, the researcher, as a lecturer of the HKPU, was seconded to SUFE in August/September 1991 for one month for learning the accounting system in China, giving lectures to SUFE's undergraduates, exploring joint-research with SUFE's academic staff and visiting some State-Owned Enterprises (SOEs) in Shanghai. Specific focus was put on the management accounting aspect in all of these activities.

With the great assistance from SUFE's faculty members, especially Professor Feng Zheng Quan, and some postgraduates, the researcher visited 8 large-sized manufacturing SOEs in Shanghai as listed in Section 1.1.4 above. From the interviews with the senior managements of these SOEs and observations in the plant tours, the researcher learnt a lot about the political, social, economical, organisational and behavioural factors affecting the management accounting development in China since the 1950s. This was an early identification of a preliminary research problem for the subsequent research activity and literature search, and so was an important early part of the PhD research project (Zuber-Skerritt & Knight 1986). Before returning to Hong Kong at the end of September 1991, the researcher had decided to focus his future research interest in "Management Accounting in China".

# 1.8.2 PhD Programme

After talking to Professor John Dickinson, who was the Head of Department in Accounting and Finance in the University of Glasgow, during his visit to the HKPU in October 1991, the researcher had great interest to apply for the Part-time Overseas PhD Programme in Accounting and Finance of UOG. Having had only two months' preparation for an initial research proposal entitled "Management Accounting in China", the researcher presented to a departmental doctoral seminar in the Department of Accounting and Finance in UOG before the Christmas in 1991. Many constructive and thoughtful comments were given by the faculty members although the acceptability of this research proposal could not be determined by the Director of Postgraduate Studies, Professor John Holland. Fortunately, Professor Clive Emmanuel indicated his intention to provide the researcher further guidance to redefine the whole research proposal. Under the extremely helpful and insightful guidance from Professor Emmanuel in the next few days after the presentation, the researcher got a clearer picture in formulating a second and better research plan.

### 1.8.3 Research Design

Upon returning to Hong Kong in early January 1992, the researcher immediately expanded his literature research concerning the management accounting practices in China. Furthermore, the researcher went to Shanghai in the same month to revisit some SOEs again in order to gain a more in-depth understanding of their "Responsibility Accounting Systems" which was the niche of research for the PhD programme. With the continuous academic support from Professor Emmanuel through correspondence between Glasgow and Hong Kong, the researcher prepared the second research proposal entitled "Responsibility Accounting Development in China" and presented it to another departmental doctoral seminar in UOG during April 1992. Again, more constructive suggestions were raised by the faculty members for brushing up the research proposal in some areas. At the end of this study trip to Glasgow, Professor Emmanuel was informally appointed as the Supervisor for this PhD research. After some revisions on the research proposal and clearing some administrative procedures in UOG and HKPU, the researcher was registered as a PhD student in the University of Glasgow in September 1992.

During the second half of 1992, with the assistance of some faculty members in a few Chinese universities, the researcher visited and revisited many SOEs (as listed in Section 1.1.4 above) in Shanghai, Hangzhou, Xiamen and Shenzhen in order to understand the contemporary issues related to the responsibility accounting systems operated in those SOEs. Meanwhile, continuous literature review was performed in China and Hong Kong to enrich the design of the research plan.

The researcher stayed in University of Glasgow for his first 3-month "residential period" from January to March 1993 in order to (1) undertake course work; (2) carry out literature research; (3) meet with the Supervisor regularly; (4) determine the research plan and timetable with the Supervisor; and (5) set the research instrument and agree with the Supervisor. The skeleton of the research design was described in Sections 1.3, 1.4, 1.5 and 1.6 above.

# 1.8.4 Research Methodology

"Case Study Approach" as agreed with Professor Emmanuel in 1992 has been the research methodology adopted by this study because of the following reasons.

- (1) This research is classified as an "Exploratory Case Study" which is used to explore the practices for responsibility accounting in China. It enables the researcher to generate hypotheses to test the changes of these accounting practices. Further propositions and hypotheses can be tested subsequently in larger scale studies. As such, the case study represents a preliminary investigation which is intended to generate ideas and hypotheses for rigorous empirical testing at a later stage (Scapens 1990: 265; Ryan, Scapens & Theobald 1992: 115). Furthermore, management accounting research case studies (e.g. the present study) have an explanatory role and are central to the processes of theory construction and development (Scapens 1992; Otley & Berry 1994).
- (2) External validity is a major concern in this study although multiple-cases (i.e. 20 cases) have been investigated by replicating the same semi-structured questionnaire (i.e. research instrument). Critics typically state that single cases offer a poor basis for generalization. However such critics are implicitly contrasting the situation to research, where a "sample" (if selected correctly) readily generalizes to a large universe. This analogy to samples and universes is incorrect when dealing with case studies. This is because survey research relies on *statistical* generalization, whereas case studies rely on *analytical* generalization (Yin 1984: 43).
- (3) Case study approach is more suitable for such a longitudinal study (i.e. from 1991 to 1995) in which the same enterprises, the same personnel (in most of the cases) and the same type of questions can be examined under the guidance of the same researcher.
- (4) Through interviews (a combination of open-ended and focused questions, see Yin 1984: 89), more qualitative information can be acquired to explain the observed phenomenon and more accurate data can be obtained from multiple sources of evidence (Yin 1984: 95-98) which can maintain the 'construct validity' of the study (Yin 1984: 41).

- (5) By using questionnaire survey either through mailing or by-hand to complete such an extensive coverage of research is very difficult because the respondents may lose enthusiasm easily.
- (6) The SOEs in China are very reluctant to disclose their information, in particular the accounting data, in black and white due to the strict confidentiality rules imposed by the government and the communist party. Therefore, conducting empirical research by circulating questionnaires in China, the response rate may be almost zero.
- (7) The extremely low response rate by using questionnaire survey as experienced by many researchers including this researcher, makes it very difficult, if not impossible, to come up with some sorts of "generalization" which is not required by this research study.
- (8) Performing this kind of case study research is an interactive process and requires the development of social, as well as academic, skills. The researcher had to spend years of time to interview repeatedly many managers in the Chinese enterprises and also work with many academics in some Chinese universities. It is not an 'ivory tower' activity which was far removed from reality and from social contact with others (Phillips & Pugh 1987: 11).

#### 1.9 RESEARCH LIMITATIONS

There is no perfect research design in the world. There are always some drawbacks or loopholes in every empirical research and this research study is no exception. Research limitations in a few areas of this project are explained below.

# (1) Literature Review

The purpose of literature review is to identify what has been written on the subject and to synthesize in a critical review which demonstrates some awareness of the current state of knowledge on the subject, its limitations, and how the proposed research aims to add to what is known (Gill & Johnson 1991: 21). In this research, the literature concerning the responsibility

accounting was limited to publications in the Chinese accounting textbooks and journals and they largely referred to the basic concepts and principles of responsibility accounting without describing the real-life practices, problems and solutions of its operation in the Chinese enterprises. Furthermore, responsibility accounting articles published in the international accounting journals were limited as well. The lack of prior research might have confined the scope of this research project and the design of research instrument, but compelled the researcher to employ exploratory case study method in this research.

# (2) Research Methodology

"Exploratory Case Study" approach<sup>51</sup> has been considered to be the appropriate methodology to be adopted in this research, but the obvious outcome was hardly any "generalisation" could be made due to only 20 Chinese enterprises being visited. To interpret, consolidate and report such a huge volume of data and information collected through interviews was not easy although a semi-structured questionnaire and tape recorder had been used. This experience has verified the fact that case study research is remarkably hard, even though case studies have traditionally been considered to be 'soft' research. Paradoxically, the 'softer' a research technique, the harder it is to do (Yin 1984: 26). Interpretation poses burden on researcher to be as unbiased as possible and hence using Goold and Campbell's model as a framework.

## (3) Questionnaire Design

The lack of prior research has constrained the scope of the research instrument (i.e. semi-structured questionnaire) designed for this case study research. The many observations and understandings obtained in the pilot visits (over 13 SOEs) have enriched the breadth and depth of many areas in the semi-structured questionnaire which could only be completed after a few visits to each enterprise. The holistic ideal of studying all aspects of the responsibility accounting system in China is clearly unattainable and some limits on the subject matter should be placed (Scapens 1990: 276).

<sup>&</sup>lt;sup>51</sup> Exploratory research is qualitative and asks 'what are the variables involved?' (see Easterby-Smith et al 1991).

## (4) Sample Size

As suggested by Parkhe (1993: 255), the research method (i.e. case study) and instrument (i.e. extensive semi-structured questionnaire) employed in this study could not avoid the problem that the number of SOEs (i.e. sample size) investigated was limited to 20 within the timespan available.

## (5) Selection of Sample

The case study approach has proved to be feasible in this research but how did the researcher select the targeted SOEs? The researcher had to rely on some academic staff contacts of the universities in China who could introduce the researcher to some enterprise managers to start off the research dialogue. Therefore, the freedom to choose a portfolio of enterprises to be investigated was somehow controlled by these academic counterparts although the researcher could suggest which types of enterprise to be included. But in 'exploratory case' research, the selection of the particular case for study is relatively unimportant. What is needed is a case within the relevant area which will enable the researcher to begin the process of theory (or hypothesis) development (Scapens 1990: 273).

### (6) Extraneous Variables

The unanticipated or extraneous variables are possible threats to the 'internal validity' of research especially to the causal or explanatory studies. But this logic is inapplicable to descriptive or exploratory studies (whether the studies are case studies, surveys, or experiments), which are not concerned with making causal statements (Yin 1984: 43).

The possible existence and influence of extraneous variables have been assessed carefully during the pilot tests (visits), literature review and instrument design. However, the rapid political, social and economical changes in China may introduce a few unanticipated variables related to the core of this study. New commercial legislations, upsurge of inflation and high interest rate are typical examples which are proved to be influences affecting the responsibility accounting system design in this research.

## (7) Quantitative Analysis

Kaplan (1986c: 103-115) recognises the many roles for quantitative models and statistical analysis not only in testing hypotheses but rather in model building, structuring data banks and in data analysis. He also argues that much more concern should be given to how managements interact creatively with their environments. This agrees with Coates (1983) who states that researchers should observe organizations in order to see whether their activities can be modelled in any general way. However, in some PhD research, there may be a mix of qualitative research questions and quantitative hypotheses, and a case study methodology can combine both in either exploratory and explanatory research (Yin 1984). Therefore, although the original design of this research was qualitatively (or fieldwork) oriented without the requirement of using very sophisticated quantitative methods to analyse the data, yet some parametric and non-parametric statistical methods have been employed to test the defined hypotheses and their implications quantitatively as far as the data merits.

### (8) Cultural Difference

The lack of working and learning experience in China of the researcher before undertaking this project has come up with a certain extent of cultural difference in a sense that sometimes the researcher might find difficulties in understanding the underlying meanings behind the information and data provided by the interviewees. This situation has become less significant as the learning and research process was accomplished.

### (9) Language Barrier

Although the researcher's proficiency in Putonghua (official language in China) has improved substantially during the years of working in China, it might yet have been a barrier in communicating with the interviewees in these 20 SOEs.

### (10) Time Constraint

As a part-time PhD student having a full-time teaching job, the researcher has found insufficient time travelling in China to visit the targeted 20 SOEs more frequently in order to collect more information and data to substantiate the findings although great assistance and patience have been granted by the Hong Kong Polytechnic University to the researcher. Furthermore, the time constraint did not allow the researcher to send the transcripts of interview to the participants (or interviewees) for verification, to increase the number of visits per case study and to interview more managers in each case study.

#### 1.10 RESEARCH THESIS OUTLINE

Chapter 1 explains the general background and specific factors leading to the research problem and the design of this research including the domain, hypotheses, framework, significance, methodology and limitations.

Chapter 2 describes the in-depth literature search on topics relevant to the theories and practices of Responsibility Accounting adopted in the western countries on one hand, and the development, applications and problems of responsibility accounting in China on the other hand.

Chapter 3 reviews the classical research paradigms in social science and justifies the specific research methodology employed for this study, and then narrates the whole research procedures.

Chapter 4 is the first part of data analysis providing the key background information of the subjects (20 SOEs) under the research.

Chapter 5 is the second part of data analysis describing the 7 variables which determine the planning system or influence in these 20 SOEs.

Chapter 6 is the third part of data analysis narrating the 4 variables which ascertain the control system or influence in these 20 SOEs.

Chapter 7 discloses the research findings after tentatively inspecting the hypotheses and identifies the reasons, ways, extents and limitations of the planning and control changes.

Chapter 8 summarizes the major findings and implications of the research, and also suggests some related areas for further research.

Attached to this Thesis (Volume 1), there are two separate volumes of case and data analyses. Volume 2 contains the 20 Case Analyses dedicated to assess the changes of planning and control influences, and the resultant responsibility accounting styles of the 20 SOEs investigated. Volume 3 includes the 20 Data Analyses (or data transcriptions) providing the detail information obtained during the repeated interviews of these 20 SOEs over the period from September 1991 to February 1995. The latter two volumes of documentation are not only supporting the facts and findings described in the Thesis (Volume 1), but also providing rich information for further studies of this topic and other related ones.

#### 1.11 CONCLUSION

The first chapter of this thesis explains the general background and specific factors leading to the research problem and the design of this research includes the domain, hypotheses, framework, significance, methodology and limitations. In fact, this chapter outlines the whole research process beginning from the literature review to writing the thesis. The most important purpose of this research is to make a contribution to the development of responsibility accounting or management accounting in China (i.e. current state of knowledge) and to identify factors, propositions and hypotheses for future research in the same chosen field or related disciplines. After all, the work of this PhD project is essentially a "research training process" (Phillips and Pugh 1987: 31). It does not mean an enormous breakthrough which has the subject rocking on its foundations, but instead it is a stepping-stone for the researcher to explore further academic and empirical research in his career.

# **CHAPTER 2: LITERATURE REVIEW**

### 2.1 INTRODUCTION

This chapter of literature review is divided into two parts. Part A describes the literature search on topics and materials relevant to the theories and practices of *Responsibility Accounting* adopted in the western countries. Firstly, the definitions, historical development and some contemporary issues of management accounting are sketched out as background leading to the framework of responsibility accounting employed in the west (Section 2.2).

Secondly, the theoretical propositions and research findings of the major components of responsibility accounting are discussed (Sections 2.3-2.7). They include *organizational theories*, *control systems*, *performance measurement*, *performance appraisal and rewards* which are identified as reference factors to investigate and evaluate the responsibility accounting system practised in China. Thirdly, the *contingency theory* in terms of some contingent variables and cultural aspects relevant to the management accounting system are highlighted in order to explain and qualify some of the findings in this research (Sections 2.8 & 2.9). Furthermore, this part of the literature search can foster some hints for future research related to responsibility accounting or management accounting in China (see Chapter 9). Finally, the challenge of how to put management accounting research into practice to serve the needs of new businesses and industrial environments is mentioned in the overview (Section 2.10).

Part B focuses on the evolution of responsibility accounting in China which is a very unique planning and control system in such a large developing and socialist country. First of all, the general impact of China's recent economic reform on the State-Owned Enterprises (SOEs) has urged the needs of setting up of a responsibility accounting system which is an important milestone in the management accounting development in China (Sections 2.11-2.13). Then the infrastructure of the responsibility accounting system practised in the SOEs is narrated (Section 2.14). Finally, the discussions on the major problems encountered by the SOEs in implementing the responsibility accounting system provide some insights into the field work in this research (Section 2.15). Lastly, Section 2.16 is a concluding comment on the whole chapter.

#### PART A: WESTERN COUNTRIES

#### 2.2 MANAGEMENT ACCOUNTING DEVELOPMENT IN THE WEST

## 2.2.1 <u>Definitions of Management Accounting</u>

The American Accounting Association (AAA) views accounting as "the process of identifying, measuring and communicating economic information to permit informed judgements and decisions by users of the information  $(p,l)^{1}$ ".

Management accounting is concerned with the provision of information to managers who make decisions about the ways in which an organisation's resources should be allocated (Arnold & Hope 1990: 5). In an informational context, management accounting is the process of producing financial and operating information for organizational employees and managers. The process should be driven by the informational needs of individuals internal to the organization and should guide their operating and investment decisions (Atkinson, Banker, Kaplan & Young 1995: 4). The Chartered Institute of Management Accountants (CIMA) expands the definition of management accounting in the following manner.

'An integral part of management concerned with identifying, presenting and interpreting information used for formulating strategy; planning and controlling activities; decision making; optimising the use of resources; disclosure to shareholders and others external to the entity; disclosure to employees; and safeguarding assets. The above involves participation in management to ensure that there is effective formulation of plans to meet objectives (strategic planning); formulation of short-term operation plans (budgeting/profit planning); acquisition and use of finance (financial management) and recording of transactions (financial accounting and cost accounting); communication of financial and operating information; corrective action to bring plans and results into line (financial control); and reviewing and reporting on systems and operations (internal audit, management audit).<sup>21</sup>

<sup>&</sup>lt;sup>1</sup> American Accounting Association. 1966. A Statement of Basic Accounting Theory.

<sup>&</sup>lt;sup>2</sup> CIMA. 1991. Management Accounting Official Terminology: 13.

## 2.2.2 Historical Development of Management Accounting

A case written by Jones (1985) revealed that some basic cost and management accounting concepts existed even in the eighteenth century though not necessarily expressed in the language of modern accounting. Studies in the United Kingdom suggest that some of the ideas of early and mid-twentieth-century management accounting were understood and used by a number of firms in the nineteenth century (Wells 1977). Before the Second World War, management accounting was essentially concerned with such cost accounting issues as the determination of product costs. The production technology was relatively simple and it was fairly easy to identify labour and material costs. During the 1930s the focus on product costs was supplemented by work on budgets and responsibility accounting (see Section 2.3 below), and extended to divisional performance measurement and transfer pricing in the 1950 (Ashton, Hopper & Scapens 1991: 4). After the Second World War there was an increasing awareness of the view that cost information, in particular, and accounting information, in general should be appropriate to the needs of users, especially decision-makers (Scapens & Arnold 1986: 79).

Horngren (1995) reinforces that the management accounting system has two simultaneous missions: (1) transmission of information to help reach wise economic decisions; and (2) motivation of users toward organizational goals.

## 2.2.3 Contemporary Issues of Management Accounting

Bromwich (1988) points out two major problems of management accounting. One major problem is management accounting does not seem to have a sound theoretical basis. Management accounting is represented in journals and textbooks as a set of weakly-related subjects which have not been integrated at a theoretical level. In China, management accounting theories have recently been mentioned in academic textbooks (Li 1994). The recent history of finance indicates the revolution that could be accomplished if a mobilising theory could be provided for management accounting.

A second major problem is that much of management accounting theory, although in existence for many years, has had little impact on, routine management accounting. For example, many authoritative academic criticisms of overhead allocation seem to have had little impact on practice, even though such criticisms figure in most education courses and professional examinations. The evidence is that practical management in the West is still using the management accounting of the early 1950s, though theory would seem to play a part in ad hoc or one-off decision making. A link must exist between the particular processes considered to be required for organisational success and the technicalities of the management accounting task (Bromwich & Bhimani 1994: 232).

In effect, Kaplan (1983, 1984b, 1985, 1986a, 1986b, 1988a, 1988b) sees management accounting as lagging behind the times especially in view of technological developments and as presently facing the important challenge to devise new internal accounting systems supportive of companies' changed manufacturing strategies. His view is that in many instances, by the late 1980s, companies had recognized the limitations of traditional cost accounting systems for measuring, motivating, and evaluating manufacturing performance (Kaplan 1990: 10).

In the early 1990s, a major survey was carried out aimed at examining cost management techniques and practices in use and those being planned for introduction at UK manufacturing enterprises (Davies & Sweeting 1991a, 1991b). The sample comprised 677 manufacturing companies in a cross-section of industries. This survey reveals that cost management information is most widely used for control, product pricing, investment justification and management performance. Respondents indicated that by introducing advanced costing techniques and practices into their organisations, they expected to obtain significant benefits, particularly to improve product profitability and cost reduction and obtain more timely and relevant management information. In terms of specific cost management techniques being used and planned, activity based costing (ABC) was the most commonly cited and life cycle costing the least. The survey also revealed that manufacturing resources planning was the most highly used (or planned) manufacturing technique and flexible manufacturing systems the least cited. The emergence of novel management accounting practices, according to Davies & Sweeting (1991a: 44) are far

from revolutionising practices in the manufacturing sector<sup>3</sup>.

#### 2.3 RESPONSIBILITY ACCOUNTING IN THE WEST

As a key integral part of management accounting, Responsibility Accounting has been developed in the Western countries since the 1930s. Higgins (1952) defines responsibility accounting system as "a new approach to accounting and reporting which is the development of an accounting system designed to control expenditures by directly relating the reporting of expenditures to the individuals in the company organization who are responsible for their control. This system results in the preparation of accounting statements for all levels of management, designed primarily so that they can be effectively used by the operating people as a tool in controlling their operations and costs<sup>4</sup>".

Decentralization becomes necessary when organizations increase in size. Top management typically creates areas of responsibility, which are known as responsibility centres, and assigns subordinate managers to those areas. Melumad, Mookherjee and Reichelstein (1992) consider a principal-agent model to examine the effectiveness of responsibility centres, in particular cost or profit centres. They show that rather than contracting with each agent directly, the principal can create equally powerful incentives by setting up a responsibility centre structure. The principal contracts with only the 'manager' of the centre and delegates contracting with other agents and coordinating their activities to the manager. The principal then must monitor some measures of financial performance such as the centre's cost or profit<sup>5</sup>.

<sup>&</sup>lt;sup>3</sup> As observed in the 20 Chinese SOEs investigated in this research, the present technological and manufacturing environments are not yet justified to employ the advanced and contemporary management accounting techniques and practices.

<sup>&</sup>lt;sup>4</sup> A similar description can be found in many Chinese management accounting textbooks such as He and Lin (1991).

<sup>&</sup>lt;sup>5</sup> As evidenced in many of the 20 SOEs studied in this research, the government authority (principal) enters into an Economic Responsibility Contract with the general manager (agent) of an enterprise and delegates contracting (e.g. via Internal Responsibility Contracts) with other agents (e.g. production managers) and coordinating their activities to the general manager.

Effective planning and control systems are structured around the implicit or explicit areas of responsibility within the organization (DeCoster, Schafer & Ziebell 1988: 549). Planning identifies where the whole organization or individual responsibility centres is/are going. The strategies developed during planning identify the steps that the organization will follow to reach its goals. The short-term objectives (e.g. budgeting system) identify where the organization or centres plan to allocate their resources in various operations. The performance measurement and evaluation systems are the controls that the organization uses to ensure that individual responsibility centres are on track toward achieving their plans and the overall goal in aggregate.

Therefore, *planning* and *control* work together. Without control, planning is meaningless because there is no follow up to identify whether plans are being achieved and, if not, why they are not being achieved. Without planning, control is meaningless because there is no target, or plan, against which results are compared (Atkinson et al 1995: 443)

If planning is a process of continually establishing ends and courses of action, control is the process of ensuring that these courses of action are maintained and that the desired ends are achieved. It is the process of continually ensuring conformance to expectation (Dermer 1977). Control is concerned with the successful implementation of a course of action as predetermined by a decision model and with feedback that might (a) change the future plans given the model, and (b) possibly change the decision model itself (Horngren 1982). Management control can be defined as a systematic effort by business management to compare performance to predetermined standards, plans, or objectives in order to determine whether performance is in line with these standards and presumably, in order to take any remedial action required to see that human and other resources are being used in the most effective and efficient way possible in achieving corporate objectives (Amey & Egginton 1973; Mockler 1973: 14).

The approach described above reflects that traditional responsibility accounting system includes five aspects. First, a responsibility centre is identified with the responsibility defined in accounting terms (e.g. costs or profits). Second, an accounting standard or benchmark is set, usually through budgeting. Third, a reward system is established to encourage managers to

provide good performance. Fourth, a manager's *performance is measured* by comparing actual performance with budgeted performance. Fifth, managers are *rewarded or penalized* according to the policies and discretion of higher management (Hansen & Mowen 1994: 612)<sup>6</sup>.

This literature on responsibility accounting embodies a variety of theories of behaviour and organization. Examples include expectancy theory (Hackman & Lawler 1971: 259-286; Lawler 1973; Ronen & Livingstone 1975; Brownell & McInnes 1986), contingency theory (Bruns & Waterhouse 1975; Merchant 1984), neoclassical economics (Gordon 1964: 1-26), and principal-agent modeling (Baiman 1982). Principal-agent modeling emphasizes information asymmetries in understanding responsibility accounting. In particular, the link between controllability and informativeness (Holmstrom 1979, 1982, Baiman & Demski 1980; Antle & Demski 1988) has been well explicated, and the use of relative performance evaluation (Demski & Sappington 1984; Antle & Smith 1986; Ma, Moore & Turnbull 1988) has received significant attention.

### 2.4 ORGANIZATIONAL THEORIES

### 2.4.1 Decentralization and Coordination

The participative model of management is more than human relations. The participative approach also incorporates an alternative to bureaucracy as a means of coordination. Developing a technology of 'loose coupling' may be one mechanism for creating order without destroying individual responsibility (Glassman 1973; Weick 1976; Ouchi 1979; Weick & Orton 1990). The creation of decentralised organizational structures is a mechanism for de-coupling large organization into smaller units. Sub-units may be somehow attached but each unit retains some separateness and the attachment may be infrequent, weak, unimportant and/or lack mutual response<sup>7</sup>. Likert (1967a) suggests an alternative means of coordination. He suggests the use of

<sup>&</sup>lt;sup>6</sup> These 5 components of responsibility accounting were observed during the pilot enterprise visits carried out during the period from September 1991 to December 1992 (see Section 1.1.4 in Chapter 1) before the proposal and instrument of this research were determined in March 1993.

<sup>&</sup>lt;sup>7</sup> Divisions or profit centres of the 4 department stores investigated in this research are using this loose-coupling concept since they have minimal interdependencies with each other.

'group structures' in organizations which would provide support to each member of the group.

These groups would be coordinated through a series of 'linking pins' or integrators.

In general, within the participative approach, there has been a tendency to suggest organizational structures that are intended to widen individual group autonomy and discretion. These structures have, on the one hand, involved apparent decentralization of decision-making (typically viewed as merely involving participation in discussing means to achieve given goals) and, on the other hand, coordination to achieve consistency through project teams, integrating units and committees as well as the mechanisms which are part of the repertoire of scientific management (e.g. rules, plans, etc.) (Lawrence & Lorsch 1967)<sup>8</sup>.

But whilst management could have a role in aiding and sustaining new forms of work organization, the role has not been well explicated. *Informal information systems* (Galbraith 1973; Clancy & Collins 1979) would seem to play an important role in organizations emphasizing lateral communication. Formal management accounting systems that embrace the participative model of management are not well-developed. Management accounting systems such as responsibility accounting, standard costing and product cost accumulation systems tend to be hierarchical in nature. Management accounting systems that seem to be a part of decentralized structures appear, on close inspection, to revert to the scientific management model (Watson & Baumler 1975). Even decentralized accounting systems based on decomposition programming methods which are intended to encourage divisional autonomy and independence, ultimately require centralized information flows and rigid rules that enforce central authority (Baumol & Farbian 1964; Govindarajan & Gupta 1985)<sup>9</sup>.

<sup>&</sup>lt;sup>8</sup> Some SOEs studied in this research adopt this group-structures approach especially where the interdependencies among the responsibility centres are high (e.g. BCM3, SCM2, SSW5, SXSW).

<sup>&</sup>lt;sup>9</sup> As observed in many of these 20 SOEs, the strategic themes and thrusts, budgeting guidelines and performance reporting systems are the major centralized information flows and rigid rules that enforce government and/or headoffice authority.

## 2.4.2 Participation in Management

Initially, participation was believed to generate positive attitudes toward the job and greater acceptance of the standards by the subordinates which may result in better performance. However, the empirical evidence by both accountants and non-accountants is mixed. Many studies do support the arguments that participation produces (1) higher job related satisfaction and self actualization (Swieringa & Moncur 1972; Swieringa 1975; Locke & Schweiger 1979; Schweiger et al 1997); (2) positive attitudes toward the job and company (Milani 1975); and (3) motivation to achieve the budget (Hofstede 1968; Searfoss & Monczka 1973). However, Foran & Decoster (1974) found no difference in attitudes toward the standards when comparing open and lateral and hierarchical participative models of communication.

Milani (1975) noted that participation did not relate consistently to performance, thereby supporting Stedry's (1964) argument that there are weak lines (if any) between participation and productivity. Moreover, Schiff & Lewin (1970) documented some potentially dysfunctional effects, noting that participation often leads to gaming and slack. The empirical results of numerous other studies report similar conflicting results (Becker & Green 1962; Searfoss & Monczka 1973; Hopwood 1974).

Researchers also argue that participation may increase employees' personal feelings of "ownership" of the goal or standard and the level of their trust in the intentions of management (Vroom 1964; Lowin 1968; Patchen 1970; Lawler & Hackman 1979; Raval 1982). Others have argued that participation is a mechanism for information exchange by which individual employees obtain more information about their job (Hopwood 1974).

Such additional information facilitates a clearer understanding of their job, thereby improving motivation and performance (Mitchell 1973; Schuler & Kim 1976; Schuler 1980). Mia (1989) conducted the study which found that managerial performance was high where perceived participation was commensurate with perceived level of job difficulty. On the other hand, performance was low where participation was not commensurate with the perceived level of job difficulty.

Although participation has long been a popular idea and is currently finding renewed interest in the context of Ouchi's Theory Z (Ouchi & Jaeger 1978; Ouchi & Price 1993), its specific effects on performance and productivity are not clear. Manager's time in a position or the company and organizational structure (Bruns & Waterhouse 1975) can all play a role in determining the effectiveness of participation. Nevertheless, there is still a tendency to view the potential functional consequences of participation as being greater than any dysfunctional effects which might occur (Otley 1980)<sup>10</sup>.

## 2.4.3 Participation in Budgeting

The relationship between budgetary participation and managerial performance has been equivocal. Results have ranged from participation strongly and positively influencing performance (Argyris 1952; Becker & Green 1962; Bass & Leavitt 1963; Kenis 1979; Brownell 1982b; Brownell & McInnes 1986), to insignificantly influencing performance (French et al 1960; Fleishman 1965; Cherrington & Cherrington 1973; Milani 1975; Ivancevich 1976; Steers 1976; Brownell & Hirst 1986), to negatively influencing performance (Stedry 1960; Bryan & Locke 1967). These mixed results have led researchers to conclude that there is no simple direct relationship between budgetary participation and performance and that there could be other variables (e.g. job-relevant information, role ambiguity, job difficulty, pressure, etc.) that could act as moderating or intervening factors in this relationship (Hopwood 1974; Brownell 1982c; Locke et al 1986; Chenhall & Brownell 1988; Lyne 1988; Murray 1990; Brownell & Dunk 1991; Kren 1992; Dunk 1993; Shields & Young 1993; Dunk & Lysons 1997). Gul et al (1995) conducted a questionnaire survey in Hong Kong and their findings supported the interaction hypothesis and found that at high levels of decentralisation there is a positive relationship between budgetary participation and managerial performance but at low levels of decentralisation this relationship is negative.

<sup>&</sup>lt;sup>10</sup> In this research, participation in the planning review process, long-term plans, short-term plans, internal responsibility contracts, management of interdependencies and rewards and incentives are measured. However, the relationships between participation and the other dependent/intervening variables mentioned in Section 2.4.2 are not tested in this study.

In terms of agency theory, participation can enable budgets to be improved if superior managers (principals) could be made aware of local information held by subordinate managers (agents) prior to the setting of the budget (Magee 1980). Since subordinates are typically better informed than their superiors about their operating environments, the value of participative budgeting emanates from the transmission of information that takes place (Magee 1980; Baiman 1982; Penno 1984; Chow, Cooper & Waller 1988; Waller 1988). The incorporation of that private information (owned by the subordinate managers) into their budgets is likely to lead to more accurate budgets (Baiman & Evans 1983). The achievement of those budgets is likely to result in higher levels of performance from the corporate viewpoint (Pope 1984; Waller 1988).

But agents may not provide principals with all their locally based (or private) information, which could result in slack budgets (Christensen 1982; Young 1985; Waller 1988), and thus lower subordinates' self-evaluation of performance. Such a possibility has been a primary concern of the literature on the grounds that participation raises the potential for positive slack creation (Schiff & Lewin 1970; Christensen 1982; Antle & Eppen 1985; Lukka 1988). Whether budgetary slack is a likely outcome in all participatively set budgets is a matter of conjecture.

Lukka (1988) argued that a high degree of participation gives subordinate managers the opportunity to contribute directly to the creation of slack, and vice versa. However, the link between participation and slack is equivocal, since Onsi (1973), Cammann (1976), Merchant (1985b), Dunk (1993), and Nouri (1994) provide evidence that participation may lead to a reduction in slack, which can be attributed to the positive communication between managers so that subordinates feel less pressure to create slack.

Becker & Green (1962) argued that participatively set budgets provide "information to associate reward or punishment with performance (p.401)". Additionally, Brownell & McInnes (1986) found evidence that participation in the budget setting process strengthened the expectation of receiving rewards linked to budget achievement, providing subordinate managers with an inducement to negotiate easy budgets. Indeed, Lowe & Shaw (1968) found in their study that managers were prepared to bias their forecasts "to suit their own interests as rational economic individuals (p.314)". As such, participative budgeting is likely to sensitize subordinates to the

performance criteria superiors regard to be critical to their evaluation. From empirical findings, Dunk (1990) suggests and explains the apparent contradiction of participation leading to lower managerial performance through the setting of slack budgets, yet being positively related to performance, by illustrating that budgetary participation and agreement between superiors and subordinates on evaluation criteria interact to affect manager's performance (Merchant & Manzoni 1989)<sup>11</sup>.

# 2.4.4 Participation and Job Satisfaction

In an extensive review of the literature on participative decision making, Locke & Schweiger (1979) found little consistent support for the perspective that participation and job satisfaction are significantly and positively related. Evidence revealed that the association between budgetary participation and job satisfaction may be dependent upon factors such as locus of control (Brownell 1982a), consideration and initiating structure (Brownell 1983), the configuration of authoritarianism between superiors and subordinates (Chenhall 1986), role ambiguity (Chenhall & Brownell 1988) and managerial roles (Dunk & Leung 1992).

Dunk (1992) finds that the degree of authority inherent in jobs at different managerial levels may influence the relationship between participation in the budget setting process and the job satisfaction of managers. The primary objective of his study is to evaluate the extent to which the relationship between participation and job satisfaction is dependent upon managerial level. The results of his research suggest that the association between budgetary participation and job satisfaction is significantly influenced by differences in managerial level in the hierarchy<sup>12</sup>.

<sup>&</sup>lt;sup>11</sup> The many variables and moderating or intervening factors described in Section 2.4.3 are potential research topics for the participation in budgeting practised in the Chinese enterprises.

<sup>&</sup>lt;sup>12</sup> The relationship between budget participation and job satisfaction is another potential research topic to be tested in the Chinese enterprises.

#### 2.5 CONTROL SYSTEMS

### 2.5.1 Control Systems in Organisations

Theoretical approaches to the design of formal control systems have developed through various stages. Early prescriptions were introverted (Anthony 1965); they were premised on the primacy of stability and efficiency in the accomplishment of given organizational tasks (Dunbar 1982)<sup>13</sup>. Later theorists were influenced by organization-environment dependencies (Lowe & McInnes 1971; Ansari 1977, 1979). Their prescriptions sought to introduce a more extroverted orientation, pivoting control-systems design around the task of adapting organizational activities to environmental changes<sup>14</sup>. Later, contingency theories have been advanced (Waterhouse & Tissen 1978; Ginzberg 1980), with the implication that optimal design characteristics depend on an organization's particular circumstances: for example, the degree of change in the organization's environment, the organization's size, and the complexity and interdependence of organizational activities<sup>15</sup>. The mainstream theory is still remarkably conventional which relies on neoclassical bureaucratic principles of "rational and efficient organization". Order and coherence is seen as "good", disorder and chaos as "bad" (Weber 1947; Burns & Stalker 1961; Miles & Snow 1978).

Over the last decade or so, an "alternative" theory has emerged to challenge the wisdom of this approach. The principles of rational bureaucratic organization insulate organizational members from inherent uncertainties and change in their environments and to promote inflexibility (Brunsson 1985). Individuals and organizations are encouraged to experiment, to be skeptical, to act on intuition, and to pursue incompatible goals; for through such behaviour they discover

<sup>&</sup>lt;sup>13</sup> As observed in these 20 SOEs, the control mechanisms built into the Economic Responsibility Contract (ERC) and the Internal Responsibility Contract (IRC) are premised on the primacy of stability and efficiency in the accomplishment of the agreed financial targets for the SOE as a whole.

<sup>&</sup>lt;sup>14</sup> The rapid economic changes in China compels many SOEs to cater for the environmental changes in their control systems such as the 4 department stores, which are moving towards the strategic control style in their responsibility accounting systems, as studied in this research.

<sup>&</sup>lt;sup>15</sup> The impact of these contingency variables on the organizational control systems are potential research topics in the Chinese enterprises.

their preferences and learn about their environment (Jonsson & Lundin 1977; Starbuck 1982). Incoherence and insecurity are promoted to counter tendencies toward inertia and perpetuation of the past. Formal control system should be designed to stimulate curiosity (Hedberg & Jonsson 1978). They should promote latent tensions, so that they become explicit motivators for action (Hedberg, Nystrom & Starbuck 1976). Degrees of confusion, overlap, and ambiguity are advocated to activate dynamics and discovery in organizations<sup>16</sup>.

Thus, contemporary literature and research suggest two "generic" approaches or principles for the design of formal control systems. Bureaucratic principles emphasize efficiency in task accomplishment; the alternative principle focuses more on the activation of dynamics for change. To an extent, this dichotomy is perhaps false. Polarities are drawn and arguments overstated. Katz and Kahn (1978) note that organizations possess both *maintaining systems*, which insulate them from change and uncertainty and perpetuate the status quo, and *adaptive systems*, which stimulate innovation and experimentation. Large organizations, in particular, may need degrees of structure and order. Simultaneously, there may be a need to foment pressures for change. Arguably, design options are best seen as ranging across a continuum, affording varying emphases to each of the approaches. This suggests an essential tension in designing formal control systems. It focuses attention on the question of an appropriate balance between *both* principles in systems design (Dent 1987)<sup>17</sup>.

Theorists have argued that relatively few real organizations possess the underlying 'rationality' which is assumed in market and bureaucratic forms of control. Parson (1960), Ouchi and Maguire (1975) and Williamson (1975) have argued that most hierarchies fail to transmit control with any accuracy from top to bottom. Simon (1964) has made a convincing case that most organizations do not have a single or an integrated set of goals or objectives and that the subunits of

<sup>&</sup>lt;sup>16</sup> The department stores and shareholding enterprises investigated in this research are more receptive and proactive to the environmental changes and opportunities (more dynamic control system) than the other wholly state-owned enterprises.

<sup>&</sup>lt;sup>17</sup> Both of the maintaining and adaptive systems exist together in the department stores and shareholding enterprises studied in this research in order to attain their ERC/IRC commitments on the one hand and to seek growth in the fast changing and competitive environment on the other hand. However, this observation is not tested in this research.

organizations are, as a matter of necessity, only loosely joined to each other. Evan (1966), Aldrich (1972) and Pfeffer (1976) have argued that the structure of most organizations is determined more by their environment than by any purposive, technologically-motivated managerial strategy. Hannan and Freeman (1977) have argued even more strongly that organizational form is isomorphic with ecological conditions, thus implying that organizations can be designed only by nature, through a process of selection; and Cohen, March, and Olsen (1972) have argued that organizational decision processes are far from our view of 'rationality' and have chosen instead the metaphor of the 'garbage can' to describe them.

## 2.5.2 Controllability in Control Systems

The concept of responsibility accounting is widely held to be an essential feature of any respectable management accounting system. The idea is a simple and an appealing one: in the evaluation of a manager's performance only the factors under his control should be considered (Gordon 1963; Ferrara 1964). Therefore, responsibility accounting and the controllability principle may be viewed as being inseparable (Bierman & Drebin 1972: 9; Dopuch, Birnberg & Demski 1974: 26; McNally 1980). The force of the controllability principle is recognised by Solomons (1965): 'It is almost a self-evident proposition that, in appraising the performance of divisional management, no account should be taken of matters outside the division's control (p.83).'

Controllability is defined generally as the ability of the manager to anticipate behaviour-outcomereward contingencies<sup>18</sup> (Choudhury 1986). This definition encompasses:

(1) Environmental or objective uncertainty which affects outcome. This has been the subject of the agency theory literature, as exemplified in Demski (1976), Demski and Feltham (1978), Baiman and Demski (1980) and Baiman (1982).

<sup>&</sup>lt;sup>18</sup> Autonomy, which often tends to be confused with controllability, refers to the freedom of choice between alternatives. Thus the manager may feel free to choose from a range of options but he may still be unable to influence (control) the consequence of the chosen action.

- (2) Role conflict and task ambiguity where the manager perceives his function, span of responsibility or the reward scheme to be inadequately specified. These aspects are discussed in Kahn el al (1964), Thompson (1967), Rizzo, House and Lirtzman (1968), and March and Olsen (1976). Included in this concept is the manager's own perception of external (environmental) and internal (knowledge-based) uncertainty (Kahneman & Tversky 1982).
- (3) The manager's influence over the reward scheme. This constitutes an extension of the controllability concept which is generally understood to refer to the control of outcome. Such a view is based on the plausible notion that the manager does not value outcome per se and if he is able to influence the end product, i.e. reward, whether extrinsic or intrinsic (Ronen & Livingstone 1975), he will perceive the situation to be controllable (Staw 1977)<sup>19</sup>.

One of the most commonly cited principles of control is that individuals should be held accountable only for results they can control. The rationale for the controllability principle, which is discussed in many works, including Maciariello (1984: 135-136), Merchant (1985a: 21-24) and Magee (1986: 268-269) is: first, if performance indicators are influenced by uncontrollable events, the indicators become less informative about the desirability of the actions the individual has taken; and second, holding individuals accountable for uncontrollable events can lead to dysfunctional behaviour. Some research has presented plausible reasons for not implementing the controllability principle. It has used both deductive and inductive reasoning (Merchant 1987).

The deductive work, based on economic theory, has presented three arguments as to why principals should hold agents accountable for outcomes over which they do not have complete control. One argument shows that holding agents accountable for the effects of random and uncontrollable phenomena (e.g. changes in product demand) and the effects of actions of other

<sup>&</sup>lt;sup>19</sup> Some of the ERC/IRC adopted by the SOEs investigated in this research provide exceptional clauses to take into account the uncontrollable factors affecting the responsibility centre managers in particular the linkage between performance and rewards. Therefore, the ERC/IRC systems are means to minimize the unfavourable impacts from the uncontrollable factors and environmental uncertainties, and allow rooms for revising the ERC/IRC.

managers (i.e. those effects caused by organizational interdependency) will cause agent's decisions to reflect "a [proper] degree of risk aversion, and the combined risk-bearing abilities of the owner and manager will exceed that of either alone" (Demski 1976: 233). This argument introduces the desirability of having subordinates share risks with their superiors as a justification for evaluating subordinates on random outcomes.

A second reason for holding agents accountable for some categories over which they have no control is to tell them how their decisions affect areas outside their control. Baiman and Noel (1985) show that it can be useful to charge agents for the costs of capacity. Zimmerman (1979) makes a similar argument for assigning the costs of shared resources.

A third argument is that in situations with imperfect postdecision information, agents should be evaluated on their accomplishments as they compare with those of other agents who face the same environment -- even though those agent's accomplishments are clearly outside the first agent's control. This relative performance evaluation is desirable because the broader data provide information about the agent's unobservable actions (Baiman & Demski 1980; Holmstrom 1982; Maber 1987). Antle and Demski (1988) offer that the information content perspective is a precisely defined controllability notion that accounts for other sources of information.

These deductive works are based on some simplifying assumptions. For example, in Demski's (1976) model, simplifications include excluding the cost of evaluation and the existence of alternative risk-sharing possibilities. Demski also assumed that the principal and agent were cooperative; that is, preference and belief information were assumed to be freely and completely passed among the individuals. Whether the findings are descriptive of a more realistic setting remains largely untested. The single empirical study available to date provided only partial support for the relative performance evaluation argument (Antle & Smith 1986).

Inductive researchers have not discussed the controllability principle by name, but they have provided some limited evidence about managers' lack of complete implementation of the controllability principle and some plausible reasons for the managers' actions. Hofstede (1968) observed several cases where the accounting system did not coincide with the responsibility

structure of the organization, "mostly because the rather static reporting system had not followed recent changes in the responsibility organization (p.32)."

Vancil (1979) collected data from 291 firms and found that profit-centre managers almost never have control over all the items for which they are held responsible. He concluded that assigning largely uncontrollable expenses (e.g. for administrative services) can be functional because it tells managers they should become involved in the benefit/cost trade-offs involved<sup>20</sup>.

### 2.5.3 Environment and Control Systems

The information-processing model of organizations predicts that, in an effectively functioning organization, the amount of information processed increases with increasing levels of uncertainty (Galbraith 1973; Tushman and Nadler 1978). The major source of uncertainty for an organization within its environment (Thompson 1967; Katz and Kahn 1978; Weick 1979), comprising five external components: competitors, customers, suppliers, regulatory groups, and the technological requirements of the industry (Bourgeois 1985). In addition, a firm's business strategy may also influence its actions in positioning products in certain niches or market segments of the competitive environment (Porter 1980).

Environmental uncertainty is highest for firms facing heterogeneous and dynamic environments. Environmental heterogeneity describes complexity and diversity in an organization's activities (Child 1972). Heterogeneity produces uncertainty owing to an absence of relevant information for decisions. This is illustrated in Galbraith's definition of uncertainty as "the difference between the amount of information required to perform a task and the amount of information already possessed by the organization (p.36)" (Galbraith 1973). To reduce this type of uncertainty, additional information may be gathered and processed to allow solution of a problem or

The above arguments for and against the allocation of uncontrollable costs to the responsibility centres are potential research topics in the Chinese enterprises. Some of these 20 SOEs (e.g. BCM3, BCRF, BPMH, SXSW) involve this issue in setting their internal transfer prices.

completion of a task<sup>21</sup>.

Environmental dynamism, by contrast, is the condition of instability and turbulence; i.e. changes in the environment are difficult to predict (Duncan 1972; Miles, Snow & Pfeffer 1974). This is a different type of uncertainty and relates to the ambiguity and conflicting interpretations inherent in information (Weick 1979; Daft & Lengel 1986). With this type of uncertainty, the problem or task may be poorly understood or subject to multiple interpretations (Mintzberg, Raisinghani & Theoret 1976). Collecting and processing additional information may be insufficient to clarify opportunities, problems and solutions.

The belief that the administrative structure of an organization should be aligned with its external environment (Lawrence & Lorsch 1967) is one of the central paradigms of modern organization theory. The number of studies, however, that have explored the information-processing link between environmental uncertainty and formal planning and control procedures is limited. Still unknown are conditions under which the bureaucratic organization (Weber 1947), controlled through specialization of tasks, rules and policies, and a clear hierarchy of authority, is appropriate or inappropriate to firms operating in uncertain environments<sup>22</sup>.

Early empirical work, such as Burns and Stalker (1961), indicated that uncertain environments require flexible, organic forms of organization. Conversely, stable and relatively predictable environments require bureaucratic, mechanistic forms of structuring. Burns and Stalker argued that organic firms operating in uncertain environments minimize their reliance on formal controls. Similar findings were reported by Miles and Snow (1978). Other studies, however, have concluded that environmental uncertainty in the form of intense product competition (Khandwalla

<sup>&</sup>lt;sup>21</sup> As mentioned by a few managers interviewed in this research, the promulgation of "socialist market economy" in China in recent years has intensified the environmental uncertainties such as the 5 components suggested by Bourgeois (1985). The SOEs need more sophisticated management information and control systems to sustain their survival and growth.

<sup>&</sup>lt;sup>22</sup> The department stores and equipment manufacturing enterprises studied in this research reveal some planning and control differences between organic (dynamic) and mechanistic (bureaucratic) types of organization and control respectively, but further in-depth empirical research (e.g. Simons (1995, 1996))can be performed.

1972), product innovation (Kamm 1980), and certain types of business strategy (Miller & Friesen 1982; Simons 1987a) can be associated with the increased use and perceived "tightness" of control procedures.

Most of these empirical studies have focused on an array of organizational characteristics in which formal controls represented a single variable from a larger set. The diversity of results in these studies illustrates that little attention has been given to understanding either the type of controls used by firms or the nature of the uncertainty that they face in their environments (Simons 1987b). Simons (1987b, 1995, 1996) performed case study research to identify more firsthand knowledge of the ways in which management accounting techniques are actually used in modern business organizations (Kaplan 1984a). Accordingly, Simons' studies used interviews, observation and the examination of relvant documentation in one well-managed company to focus on the role of control in certain business environments.

The traditional definition of the scope and practice of management control that was developed in the last few decades is now too restrictive as it is based on a context of large, hierarchically structured organizations that are now in relative decline. This decline has been caused by changes in the business and social environment that are reflected in the terminology of current management ideas. The traditional definition has also led to an emphasis on accounting-based controls that are becoming increasingly peripheral to fundamental needs of contemporary organizations. Organizations still need systems of management control, but it is likely that they will be very different to those found suitable in the past (Otley 1994, 1995).

### 2.5.4 <u>Interdependence in Control Systems</u>

Interdependence is the extent to which departments depend upon each other and exchange information and resources to accomplish their respective tasks (Van de Ven et al 1976; McCann & Ferry 1979). The concept of interdependence is proposed as an organizational variable relevant to control systems for two reasons.

First, interdependence reflects workflow and hence the amount of coordination and feedback needed among departments. The data available for coordination and feedback may be available from the management systems used to manage and control those departments (Thompson 1967; Van de Ven el al 1976; Tushman 1977). Second, several accounting researchers have identified interdependence across departments as a potentially important organizational variable for future management accounting studies (Watson & Baulmer 1975; Hayes 1977; Ginzberg 1980; Otley 1980; Kilmann 1983; Emmanuel & Otley 1985; Merchant 1985b; Chenhall & Morris 1986).

Machintosh and Daft (1987) conducted an interview and questionnaire survey which reported that the relationship between the organizational characteristic of departmental interdependence and the design and use of three elements in a package of management controls -- the operating budget, periodic statistical reports, and standard operating policies and procedures. The findings support the hypothesis that departmental interdependence is related to the emphasis placed on each management control system. Standard operating procedures were an important control device when interdependence was low. The budget and statistical reports were used more extensively when interdependence was moderate. When interdependence among departments was high, the role of all three control system diminished.

One interpretation of the findings is that the role of each control system reflects a fit between the need for information created by interdependence and the supply of information provided by the control system. Standard operation procedures are a standing body of knowledge that is appropriate for specifying standard behaviours across relatively stable and independent departments. Sequential interdependence creates a need for more data to schedule, plan, and monitor the flow of material and activities between departments. Budgeting and statistical reports, which can provide data on a monthly, weekly, or even a daily cycle, provide data that are more current and more relevant than standard operation procedures for the short time horizon needed for coordination. When interdependence among departments is reciprocal, the information requirements begin to outstrip the data supplied by formal control systems. These systems may be used for planning and scheduling, but special emphasis is given to face-to-face coordination and mutual adjustment.

Since managers cannot predict in advance the problems that may arise and the information required, the data contained in formal reports will not cover all problems, and hence will receive less emphasis than in the case of pooled and sequential interdependence. Thus as interdependence increases, data are needed that are current, timely, and pertain to unpredictable events. These data are supplied in turn by standard operation procedures, budgets, statistical reports and by direct managerial involvement in face-to-face coordination<sup>23</sup>.

<sup>&</sup>lt;sup>23</sup> The divisional interdependence in some of the 20 SOEs investigated in this research bear similar control characteristics as revealed by Machintosh and Daft (1987) in the following manner: low interdependence: the department stores use standard daily/weekly/monthly control reports; moderate interdependence: the equipment manufacturing enterprises employ tight budgetary control measures and production (statistical) control reports; and high interdependence: the iron & steel and textile manufacturing enterprises involve many ad hoc and face-to-face negotiations.

#### 2.6 PERFORMANCE MEASUREMENT

### 2.6.1 Accounting Measurement

Two distinct sets of variables require measurement. Firstly activity requires to be monitored along those dimensions defined as objectives. Thus, for example, if long-run survival requires the generation of a certain level of profitability then this requires measurement and comparison with the defined standard. Secondly, as the predictive models used contain an array of variables which are necessary to predict behaviour and performance, these predictor variables must also be measured (Otley & Berry 1980)<sup>24</sup>.

Accounting procedures have traditionally been designed in response to the need for the first kind of measurement. Thus they stress the components of objective-oriented measures such as production, cost and profit. Although influenced heavily by shareholder objectives, they are compatible with measuring partial objective achievement for other groups (e.g. price for customers; wages for employees etc). Indeed, it may be argued that certain income measures, for example, residual income, are surrogates for measures of overall enterprise viability, rather than serving the interests of any particular stakeholder group (Emmanuel & Otley 1976). But such measures possess little predictive power. The second purpose is partially served by systems which allow causes for deviations from standard to be deduced (e.g. the calculation of cost accounting variances), but even these systems have very limited predictive ability<sup>25</sup>.

<sup>&</sup>lt;sup>24</sup> The accounting measures adopted by most of the 20 SOEs investigated in this research focus on the activity performance as pre-determined in the ERC/IRC or other financial targets agreed with the government.

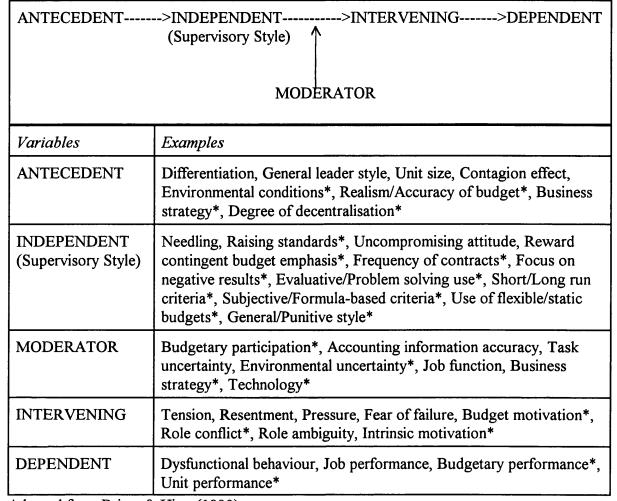
<sup>&</sup>lt;sup>25</sup> None of the 20 SOEs studied in this research is employing residual income to measure overall enterprise viability. Standard costing has been used by some of these SOEs (e.g. BCM3, BIMT, SSW5, GNFF, etc.) to measure the production performance.

By using accounting numbers to evaluate management performance, there are three significant factors which generally create difficulties in developing performance measures for a given manager. First, the actions and strategies implemented by the manager are not observable directly, so the manager's effort cannot be compensated directly for his input into the firm. Second, the full consequences of the manager's actions are not observable, in large part because the impact of those actions extend beyond his subunit of the firm and beyond his time as manager of that subunit. Third, uncontrollable events influence the consequences that are observed (Feltham & Xie 1994). Management accountants need to consider how to extend their role to include supporting all aspects of performance management such as non-financial, quantitative and qualitative indicators (Otley 1997)<sup>26</sup>.

### 2.6.2 A Measurement Model

Briers & Hirst (1990) have reviewed substantial relevant literature and identified a range of variables implicated in the use of budgetary information in performance evaluation. They have chosen to classify these variables as either antecedent, independent, moderator, intervening or dependent variables. "Supervisory style" has been adopted to refer to the key independent variable of interest, the way budgetary information is used in performance evaluation. Other variables were classified as: "antecedent" if they are considered to have a causal influence on the emergence of a supervisory style; "moderator", if the effect of supervisory style is thought to be dependent on their value; and "intervening", if they are both affected by supervisory style and have a causal effect on the dependent variable of interest (performance). The following figure shows the simple causal relations among, and examples of, these variable categories.

<sup>&</sup>lt;sup>26</sup> Wang (1986) and Zhang (1989) suggest similar difficulties to measure manager's performance by accounting numbers because of (1) higher autonomy in deciding actions and strategies has been delegated to managers; (2) short-term behaviour emerges as a result of meeting ERC/IRC targets; and (3) rapid economic reforms create intensive environmental changes and uncertainties.



Adapted from Briers & Hirst (1990)

#### 2.7 PERFORMANCE APPRAISAL & REWARDS

### 2.7.1 Performance Appraisal

The performance appraisal system contains two main elements: (1) a specification of the job that the subordinate has to do and the criteria that will define what constitutes good performance (e.g. operating budgets or specific production targets); and (2) a mechanism for gathering information about the adequacy of the behaviour that takes place (e.g. monthly management reports comparing budgeted and actual performance). Once the performance of an individual has been

<sup>\*</sup> Examples of factors of those variables that have been considered in the case studies of this research although they are not structured according to Briers & Hirst (1990) model. However, this model contains many contextual variables to be tested in future empirical research related to this study.

evaluated, then some form of reward (or more rarely punishment) has to be given which the individual can relate to the effort that he or she expended on their job. The rewards can be either economic (e.g. money or prizes) or psychological (e.g. praise or blame)<sup>27</sup>.

The essence of all performance appraisal and reward systems is the assumption that if good performance is rewarded, then an individual employee will be motivated to expend more effort in order to improve his or her performance so that he or she can enjoy the rewards that follow from the improvement in performance (Moizer 1991: 126; Banker et al 1996).

The main aim of a system of performance appraisal and rewards is the motivation of subordinates to perform well. The term 'motivation' means 'furnishing with a motive' or 'causing (someone) to act in a particular way'. In psychological terms, motivation is that which energizes, directs and sustains behaviour. There are three principal theories of the internal causes of behavioural choice: 'expectancy theory (Vroom 1964; Hackman & Lawler 1971; Lawler 1973; Ronen & Livingstone 1975; Brownell & McInnes 1986)', 'equity theory (Adams 1965)' and 'goal-setting theory (Lock 1978)'. The three theories emphasize different aspects of human nature.

### 2.7.2 Allocation of Rewards

Chen (1995) has performed a comparative study to explore preferences for allocating various organizational rewards and resources in the United States and the People's Republic of China. It sought to identify possible trends in allocation preferences in the two countries and the effects of cultural norms, organizational goal priorities, and reward types on allocation preferences. Organizational reforms in the US and the PRC offer ideal opportunities for exploring these matters. The two nations are known to have distinct cultural traditions of individualism and collectivism (Earley 1989, 1993; Meindl, Hunt & Lee 1989: 59-77), which have been linked directly to reward or incentive norms (Bond, Leung & Wan 1982; Leung 1988; Hui, Triandis & Yee 1991); but reward systems are changing in both countries. Innovative US companies are revamping their individual-based reward systems to support team-based reorganization and foster

<sup>&</sup>lt;sup>27</sup> Very similar procedures are adopted by the 20 SOEs in their ERC/IRC/Budgeting processes.

cooperation (Kanter 1989), and pioneering Chinese enterprises have been reforming their egalitarian reward systems to establish individual responsibility and encourage initiative and competition (Jackson 1992)<sup>28</sup>.

Chen's (1995) study proposed an integrative model that incorporates three well researched determinants of allocation decisions: cultural norms, organizational goals, and resource types. To define the "Allocation Preferences", three types of "Allocation Rules" have been considered most important (Deutsch 1973, 1985; Leventhal 1976: 211-239): (1) the equity rule, which mandates allocation proportional to each organization member's contribution or performance; (2) the equality rule, which mandates equal allocation to all members regardless of contribution; and (3) the need rule, which mandates allocation according to members' needs<sup>29</sup>. From these basic rules, Martin and Harder (1988) derived seven organization-based allocation rules: performance, rank, seniority, job-related needs, group equality, personal needs, and individual equality. These rules are believed to vary on the dimension of equality. Rules that result in unequal distribution of rewards are differential rules, whereas those that result in equal or nearly equal distribution are equalitarian rules<sup>30</sup>.

The differential-equalitarian distinction is similar to Reis's (1984) empirically established dimension of status orientation, which ranges from status assertion to status neutralization. Status assertion "creates, enhances, or perpetuates distances between people in terms of their standing on a status hierarchy"; status neutralization "minimizes existing differences by

<sup>&</sup>lt;sup>28</sup> As observed in these 20 SOEs, the linkage of performance and rewards stated in the ERC/IRC is mainly on collective or group incentive basis but within a division or department, individual initiative and competition are encouraged and remunerated accordingly.

<sup>&</sup>lt;sup>29</sup> Similar characteristics have been observed in these 20 SOEs as follow: equity rule: applied to more work/more pay in bonus; equality rule: applied to standard allowances (e.g. housing, inflation, attendance, etc.); and need rule: applied to fringe benefits (e.g. pension, medical, unemployment, etc.).

<sup>&</sup>lt;sup>30</sup> The 7 organization-based allocation rules suggested by Martin and Harder (1988) are now being considered as a "balanced score-card" in determining the employee's promotion and remuneration as evidenced in studying the 20 SOEs. Further empirical research focusing on this proposition can be performed in the Chinese enterprises.

establishing caretaking bonds or stressing the basic equality of all people (p.48)".

Cross-cultural research (*cultural model*) has found that members of collectivistic societies, such as ethnic Chinese communities, prefer equalitarian allocations, whereas individualistic nationals, such as US Americans, generally prefer differential allocations that match proportional contributions (Bond et al 1982; Leung & Bond 1984; Hui et al 1991). The key to the distinction between individualism and collectivism is concern for self-interest as opposed to concern for a group (Triandis 1989: 41-133). Collectivists prefer equalitarian allocations presumably because they are very concerned with creating and maintaining interpersonal harmony. Individualists prefer differential allocations because they are concerned with task achievement (Leung 1988; Triandis 1989: 41-133)<sup>31</sup>.

Allocation goals (*goal model*) are linked with the collective goals of a social system (Leventhal et al 1980; Mikula 1980: 167-217). To achieve the superordinate goal of survival, organizations must achieve derivative goals of productivity, social harmony, and individual development and welfare. However, the relative importance of various goals can vary from one organization to another and over time within a single organization as demands created by environments and members' needs change (Leventhal et al 1980). Typically, researchers have tested goal priority models in within-culture contexts, where differential rules are preferred when economic productivity is the priority but equalitarian rules are preferred when maintaining social harmony is the priority (Leventhal et al 1980; Deutsch 1985). A rationale for these relations is the instrumental utility of allocation rules (Wiggins 1945; Yamagishi 1984). Different rules have different consequences, and groups and individuals learn to adopt rules that are instrumental to the attainment of their goals<sup>32</sup>.

As evidenced in this research, in general the 20 SOEs are moving towards the differential allocations paradigm at enterprisewise as well as on individual employee basis although the total wages and group bonuses are still subject to the terms and conditions stated in the ERC/IRC.

<sup>&</sup>lt;sup>32</sup> The prevailing rapid economic development and profitability emphasis in China tend to apply differential rules in respect of employee remuneration but to some extent the government has to equalize the existing large wealth disparities among different industries and geographical locations.

The resource model has a theoretical basis in resource theory (Foa & Foa 1980: 99-131), according to which resources have distinct properties that signify and characterize types of social relationships, such as economic and noneconomic exchanges. Different resources satisfy different needs of the exchanging parties. Hence, not all resources equally fit given equity rules or differential rules are more appropriate for allocating material resources and equalitarian rules are more appropriate for socio-emotional resources.

Integrating the resource classification made by justice researchers (Tallman & Ihinger-Tallman 1979; Foa & Foa 1980) and the rewards classification made by motivation researchers (McGregor 1960; Herzberg 1966; Likert 1967b), Martin and Harder (1988) proposed a material-socioemotional distinction from grouping organizational rewards. Material rewards are typically involved in impersonal exchanges and socioemotional rewards are typically involved in interpersonal particularistic exchanges that enhance the participants' psychological well-being.

In Chen's (1995) comparative study, data from Chinese and US business organizations showed that the Chinese employees were economically oriented and preferred to invoke differential rules (those that result in unequal distribution of rewards) for the allocation of both material and socioemotional rewards whereas their US counterparts were humanistically oriented and preferred a performance rule for the allocation of material rewards but equality rules for socioemotional rewards<sup>33</sup>.

Another cross-cultural field study on the relationship between measurement, evaluation and reward of profit centre managers has been performed by Merchant, Chow & Wu (1995). The findings were generally inconsistent with the research propositions that Taiwanese firms in comparison with US firms have (1) smaller individual performance-dependent monetary rewards; (2) higher performance-dependent monetary rewards based on group; (3) less use of long-term incentives; and (4) more subjective performance evaluation. However, the study did reveal seven other variables that seem to be more important than national culture in explaining differences (and

<sup>&</sup>lt;sup>33</sup> Similar findings were observed in some of these 20 SOEs (e.g. department stores) that Chinese employees prefer differential rules for allocating both material (monetary) and socioemotional (intrinsic) rewards in order to enhance motivation and competition.

similarities) between the practices of the firms in the two countries. This list includes senior managers' education and experience, the company's type of business, managers' belief about the workings of their nation's stock market, the company's type of product, the nation's labour force mobility, the company's pattern of growth, and the use of consultants<sup>34</sup>.

### 2.8 CONTINGENCY THEORY<sup>35</sup>

### 2.8.1 Relevant Contingent Variables

The contingency approach to management accounting is based on the premise that there is no universally appropriate accounting system which applies equally to all organizations in all circumstances. Rather, it is suggested that particular features of an appropriate accounting system will depend upon the specific circumstances in which an organization finds itself. Thus a contingency theory must identify *specific aspects* of an accounting system which are associated with certain *defined circumstances* and demonstrate an *appropriate matching* (Dermer 1977; Otley 1980; Horngren 1982).

Conflicting results which could not satisfactorily be resolved within a universal framework, have been one source of stimulus for the development of contingency formulations. Concepts such as *technology* (Woodward 1965; Perrow 1967; Bruns & Waterhouse 1975; Piper 1978; Daft & MacIntosh 1978, 1981; Fry 1982), *size* (Williamson 1970; Child 1975; Merchant 1981, 1984; Jones 1985), *organization structure* (Baumler 1971; Child 1972; Hopwood 1972; Otley 1978; Merchant 1981; McCann & Selsky 1984; Jones 1985), *environment* (Khandwalla 1972, 1977; Gordon & Miller 1976; Hayes 1977; Amigoni 1978; Otley 1978; Pfeffer 1978; Waterhouse & Tiessen 1978; Gordon & Narayanan 1984; Govindarajan 1984), *strategy* (Chandler 1962; Fouraker & Stopford 1968; Child 1972; Rumelt 1974; Galbraith & Nathanson 1978; Miles & Snow 1978; Snow & Hrebiniak 1980; Hambrick 1981; Govindarajan & Gupta 1984, 1985) and *culture* (Flamholtz 1983; Markus & Pfeffer 1983; Chow et al 1995) have been invoked to explain

<sup>&</sup>lt;sup>34</sup> Although this research was designed before the publication of Merchant et al (1995) study, yet their findings are potential propositions to be tested in the Chinese enterprises to identify any similarities and differences with the Taiwanese firms.

<sup>&</sup>lt;sup>35</sup> Contingency theory and management accounting in China is described in Section 2.16.

why accounting and control systems have been found to differ from one situation to another. Emmanuel, Otley and Merchant (1990: 57-66) give a detail account of some of these contingent variables.

Typically, many researchers have investigated the effect of various contingency variables on the relationship between budget emphasis and both intervening and dependent variables; Otley (1978) with accuracy of accounting information; Hirst (1981, 1983) and Imoisili (1985) with task uncertainty; Brownell (1982b), Hirst (1987), Bottger & Hirst (1988) and Magner et al (1995) with budgetary participation; Brownell & Hirst (1986) with budgetary participation and task uncertainty; Govindarajan (1984) with environmental uncertainty; Brownell (1985, 1987) with environmental uncertainty and budgetary participation; Govindarajan & Gupta (1985) with business strategy; and Brownell & Merchant (1987) with technology. Implicit in some of these approaches (e.g. Govindarajan 1984) is the assumption that a match between budget emphasis and contingency factors will have a beneficial effect.

Furthermore, many studies have focused on the relationship between aspects of contextual variables (e.g. environmental and task uncertainty), management accounting system, performance and compensation (Galbraith 1977; Gordon & Narayanan 1984; Chenhall & Morris 1986; Gul 1991; Kren & Kerr 1993; Mia 1993; Gul & Chia 1994; Chong 1996; Fisher 1996). The design of information or control system should meet the requirements or demands as a result of uncertainty facing the organization (Tushman & Nadler 1978; Gerloff 1985). By matching the capacities with the requirements, the organization can improve its performance (Gerloff 1985; Nadler & Tushman 1988).

# 2.8.2 Impacts on Accounting and Control

Contingency theory has become popular because it provides order to organization theory and, by implication, the design of management accounting systems with organizations. Theory suggests that designers of accounting systems should consider the unpredictability of the organization's situation, structure their organization accordingly and then modify or design their systems consistent with the organization, its technology and environment (Cooper 1981). The 'order'

typically created by the use of contingency theory will be the maintenance of the *status quo* (the existing order). Contingency theory, as it has typically been understood in management accounting (Watson 1975; Gordon & Miller 1976; Cooper 1977; Waterhouse & Tiessen 1978), has been used in an inherently conservative fashion. This conservatism has been reflected in three broad ways.

First, by accepting the fundamental validity of existing techniques of control, contingency theorists have typically failed to consider the meaning and nature of organizational control (Otley & Berry 1980). We may question the assumption that control has to be equated with domination (Braverman 1974; Nichols & Benyon 1977; Cherns 1978). Secondly, by focusing on choices of efficient organizations and information systems, contingency theory has ignored the question of whose interests organizations can or should serve. Questions of effectiveness are rarely considered (Churchman 1968) and the problematic nature of concepts such as environment, uncertainty and organizations have not been sufficiently recognized when the design of information systems is being discussed (Ashby 1956; Beer 1975; Pfeffer 1978). And thirdly, contingency theorists have taken an unduly restricted view of the varieties of control and their uses in organizations (Burchell et al 1980).

By focusing on a simple-minded notion of science and rationality, there has been little consideration of organizations as social entities (Burns 1966; Pondy & Mitroff 1978; Boland 1979) and thus little recognition of the more symbolic forms of organizational control such as culture (Pettigrew 1979), myth (Jonsson & Lundin 1977) and magic (Gambling 1979). By using a relatively deterministic orientation to the study of organizational activity, many contingency theorists have tended to ignore issues of change and the ways organizations can learn, experiment and legitimise their activities in dynamic situations (Hedberg et al 1976; Amey 1979; Weick 1979).

## 2.8.3 Contingency Theory & Management Accounting in China

The importance of contingency theory has not yet been recognised, at least in the academic research, by the management accounting professionals in China. The only relevant introduction

of this theory that can be found in the literature search of this study is from Professor Li's (1994: 126-129) textbook (the only one in management accounting research in China) in which he briefly describes the meaning of contingent management and its relationships with organization structures, Theory X and Y, and leadership styles. Therefore, there is a big research gap and ample space for empirical research in studying the relationships and applications of contingency theory (and its contextual variables) in management accounting.

In fact some contingent variables, which have been invoked by many researchers to explain why accounting and control systems have been found to differ from one situation to another, have certain impacts on the management and responsibility accounting systems practised in China although very few empirical research have been done. The following briefly describe a few contingent variables which have direct or indirect effects on the planning and control (or responsibility accounting system) of the 20 SOEs investigated in this study.

- (1) Technology (see various authors) -- 6 (i.e. SMCW, GNFF, SCCW, SMEF, SXSW, BCM3) of the 15 manufacturing SOEs in this study emphasize the production technology innovation and improvement in their long-term plans by increasing the capital investments (e.g. importing foreign facilities and equipment) in order to diversify their products, improve production efficiency and enhance product quality and competitive edge (see Section 5.4.2 in Chapter 5). Most of the top managements believe that technology advancement would be the life-blood for survival and business growth.
- Size of firm (see various authors) -- in general the planning and control systems of the large-sized SOEs are more sophisticated than the medium- and small-sized SOEs mainly because the associated volume of business and the manpower and expertise available in the accounting function. For example in SSW5, a large iron and steel enterprise in Shanghai having 23,000 employees, their planning, control, evaluation and reward systems are far more complicated than BEEF, which is a small electrostatic equipment manufacturing factory in Beijing having 600 employees.
- (3) Organization structure (see various authors) -- is a major planning variable analysed in

this research along four dimensions: responsibility centre; decentralisation; appointment (personnel); and interdependencies (see Sections 5.1.1-4 in Chapter 5). The organization structures of most of these 20 SOEs are complicated in terms of role definitions and interactions mainly because of the prevailing "excess-staff" situation. During the last few decades, to ensure nearly full-employment in the urban cities, SOEs were compelled by the government authorities to recruit or absorb surplus labour force who did not have real assignments. In many cases, 'pseudo-jobs' were created to settle these redundant employees. Hence, the heavy payroll increased the operating costs and reduced efficiency per employee as well. For example, the annual output per labour (in tons) of SXSW, another large iron and steel manufacturer in Shanghai, was equivalent to 25% and 33% of the output rates in Japan and the USA respectively in 1995. Therefore, how to streamline the organization structures and reduce the labour force have become critical personnel issues encountered by the SOEs recently.

- (4) Environment (see various authors) is the most extensive contingent variable that covers both external and internal environments of a SOE. In Chapter 1, some political, legal, social, economical, organizational and behavioural factors affecting the SOEs have been discussed. They are recognised as the major external and internal environmental factors affecting the operation and management of the SOEs with specific focuses on their planning and control systems. In this world's largest populated and developing country, China is undergoing tremendous changes in these environmental factors at the macrolevel, and at the same time, the Chinese enterprises (in particular the SOEs) are subject to various kinds of reforms at the micro-level. Both scenarios justify different disciplines of social science research, including the management accounting research, as means to foster better solutions to revive or enhance the economic efficiency and performance in the Chinese enterprises. In the management accounting discipline, those environmental factors can be selected for specific empirical research in MAS as has been done in the western countries during the last few decades.
- (5) Strategy (see various authors) -- is specifically discussed in Chapter 5 relating to strategic themes, thrusts and suggestions (Section 5.3) and long-term planning (Section 5.5).

Strategic management has been delegated from the government central planning system to the enterprise's long-term planning and budgeting systems after the implementation of the 'Operation Mechanisms Transformation Legislation' since 1992. The enterprise's managers have been learning how to put strategic planning into actions and controls although their enthusiasm is still subject to many environmental influences as described in the last paragraph (4) in general and the macroeconomic control measures (since July 1993) in particular. Some in-depth empirical research on the relationship between strategy and responsibility accounting can provide better insights on how to design the planning and control systems.

# 2.9 MANAGEMENT ACCOUNTING & CULTURE<sup>36</sup>

# 2.9.1 Effects on Accounting

Culture is a problematic topic. It is ill defined (Smircich 1983). There is debate whether it is a unity concept (Martin & Siehl 1983). Culture has been defined to be the broad constellation of interpretative structures through which actions and events are rendered meaningful within a community (Geertz 1973). It is a human system (values, beliefs and knowledge) through which individuals attribute significance to their interaction and context. Expressed in this way, culture may not be observable directly. However, a distinction is often drawn between culture and its observable artefacts and rituals (Schein 1984). In so far as artefacts and rituals are symbolic of underlying values and beliefs, an appreciation of the significance ascribed to artefacts within a community is valuable in uncovering deeper constellations of meaning.

In the field of organizational analysis all manner of artefacts and rituals are observable such as office layouts, ceremonies, even the way things are done. Accounting practice is one such artefact. This suggests that a cultural perspective on accounting requires attention to the meanings and significance ascribed to accounting practice in particular settings, and their integration into wider structures of meaning for participants (Dent & Green 1985). Such analysis

<sup>&</sup>lt;sup>36</sup> Management accounting and culture in China is described in Section 2.9.3.

may be conducted at the organizational or societal level (Hofstede 1980; Horovitz 1980; Child 1981: 303-356; Goold 1986: 188-190; Meyer 1986). The relationship between culture and accounting is an important and neglected area for research (Dent 1986: 169).

There appears to be a general expectation in the literature that the effects of subordinate participation in budgeting and decision making will be different across nations because of cultural differences (French et al 1960; Hofstede 1968: 280-281; Brownell 1982c: 124; Daley et al 1985: 94). However, this expectation seems to be based on the general premise that culture is always potentially important, rather than on specific examination of the cultural characteristics which may give rise to similar or different responses to participation in different nations. In order to determine the cross-cultural effects of participation, it is necessary to work from a theoretical foundation of culture which permits culture to be broken down into its underlying characteristics or components. These components may then be examined for their implications for differential reactions to participation and for their distribution in different nations (Harrison 1992; Lau, Low & Eggleton 1995, 1997).

## 2.9.2 Cross-Country Analysis

Much evidence has been reported on how national cultures differ and how people of different national origins have different views of, and reactions to, management practices (Hofstede 1980; Child 1981; Pascale & Athos 1981; Yang 1984; Bartlett & Ghoshal 1988; Birnberg & Snodgrass 1988; Steers 1989: 293-326; Itami 1991; Nishimura 1995; O'Connor 1995).

It has been suggested that the accounting systems used in developing countries may be irrelevant to their needs because they originate in western countries with different cultural values. The accounting literature on this point, however, is vague in its assessment of exactly what aspects of western accounting systems fail to meet the test of relevance. Furthermore, it is not clear whether the differences between the needs of users in various countries are differences in kind or only differences in degree (Baydoun & Willett 1995).

The increasing dominance of Asian manufacturing firms in the global economy has raised an

important issue: whether these firms' superior manufacturing performance is caused by their management control systems, the national culture of their employees, or the interaction of these two factors (Cole 1979; Ouchi 1981; Pascale & Athos 1981). This explanation is consistent with the contingency theory of organizations (Hall 1987), which proposes that organizational structure is dependent on organizational context, and that context and structure interactively affect performance. Chow, Shields & Chan (1991) have tested the effects of national culture and management control system on manufacturing performance. The dimension of national culture studied was individualism (vs collectivism) because this work-related attribute has been noted as a major difference between Asian and Western cultures. In turn, the focus on cultural individualism motivated a study of two aspects of management controls: work flow interdependence and pay interdependence. The results are consistent with cultural individualism and management controls having independent, but not interactive, effects on manufacturing performance.

Chow, Kato and Merchant (1996) performed a comparative study in order to provide evidence useful for addressing descriptive and evaluative questions about control systems at the profit centre organization level of one U.S. manufacturing firm and a compatible (in size and industry) Japanese manufacturing firm. They find that overall, Japanese managers are subject to tighter controls than their U.S. counterparts. But when faced with controls of equal tightness, they are less likely to manipulate performance measures and to discard their good investment ideas.

# 2.9.3 Management Accounting & Culture in China

According to the Hofstede (1980) and Gray (1988) cultural models, China's accounting development and practice should be in the cluster that supports statutory control, uniform practices, a conservative measurement approach and secrecy in disclosure. A uniform and rigid system of financial reporting which is adaptable to China's recently emerged socialist market economy is in the "pipeline". The adoption of accounting standards in the later phases of the reforms makes a dramatic turning point in China's accounting history towards a more international Anglo-Saxon orientation in financial reporting (Chow et al 1995).

Based on an analysis (Chow et al 1995) of the authority for accounting systems, the accounting profession and accounting measurement and disclosure in China, it is argued that this development will be constrained by the influence of China's culture and its accounting sub-culture. While financial reporting will be governed by accounting standards, their development and enforcement will remain a governmental and legalistic function. Accountants will continue to rely heavily on detailed technical rules. This mixed orientation will constitute China's unique national identity in terms of its accounting and financial reporting system.

In order to determine the cross-cultural effects of accounting, it is necessary to work from a theoretical foundation of culture which permits culture to be broken down into its underlying characteristics or components. These components may then be examined for their implications for different accounting systems in different nations (Harrison 1992; Lau, Low & Eggleton 1995). From the studies of Hofstede (1980) and Gray (1988), a comparison of societal values between China and both the US and the UK is shown below:

Hofstede's Societal Value	China	US/UK	Gray's Accounting Value	China	US/UK
Power distance	Large	Small	Uniformity/ Flexibility	Uni- formity	Flexibi- lity
Collectivism/ Individualism	Collecti- vism	Individual- ism	Statutory control/ Professionalism	Statutory control	Profes- sionalism
Uncertainty avoidance	Strong	Weak	Conservatism/ Optimism	Conser- vatism	Opti- mism
Masculinity/ Femininity	Less Masculinity	More Masculinity	Transparency/ Secrecy	Secrecy	Trans- parency

Adapted from Chow et al 1995.

The above cross-country cultural comparison provides an useful framework for describing, measuring and explaining the relationships between these cultural variables or dimensions and the management accounting and control systems practised in China and other countries (Chow, Shields & Chan 1991). Very little of this kind of cultural research related to management accounting has been done in China.

#### 2.10 AN OVERVIEW OF MANAGEMENT ACCOUNTING

# 2.10.1 Traditional Approaches

Following Child (1977), Hopwood (1978) and Wood (1979), it would appear that there are major problems with contingency theory and its use in management accounting (Otley 1980). Management accounting seems to have developed, at least in part, to facilitate coordination of activities in diverse and dispersed organizations, to monitor performance of organizational subunits and to allocate funds to these sub-units (Chandler & Daems 1979). In short, management accounting may, in part, have been developed to aid managers in making decisions about the most appropriate ways of achieving their objectives.

Scientific management assumes that individual motivation and behaviour is based on economic rewards and penalties and that man is imaginative in maximizing his economic welfare. Control is achieved in scientific management through the manipulation of organizational rewards and sanctions and the directing of behaviour through a set of plans, rules and a hierarchy. This model of control is not only found in the work of Taylor (1947) and Weber (1947) but is also found in the theory of agency and organization (Alchian & Demsetz 1972; Demski & Feltham 1978).

Most textbook pictures of management accounting fit into this model (Horngren 1982). Accounting information is orientated towards score card and attention directing roles of information (Simon et al 1954). Responsibility Accounting systems and divisional reporting schemes reflect, reinforce, and thereby facilitate, the creation of the well-defined patterns of hierarchy, authority and responsibility that are found in bureaucracies. These accounting systems specify the actions to be reported, who has responsibility and authority to make decisions and on what criteria these decisions will be evaluated (Cooper 1981).

Most of the prescriptions offered by the applied economics branch of management accounting (Carsberg 1975) reinforce bureaucratic rationality and act as a means of coordinating and directing individual activity. The development of optimal production plans, inventory policies, investment strategies, pricing policies and so on provide the specific rules of organizational activity that will facilitate the objectives of the owners of the firm. Similarly, budgets and standard costing are typically viewed as techniques to achieve control through order. Budgets

are seen as ways of imposing the goals of top managers on other organizational participants and as means of scheduling tasks and achieving organizational coordination (Livingstone 1973). Not surprisingly, there has been some relatively careful work done on the optimal degree of difficulty of 'imposed' standards (Stedry 1960; Stedry & Kay 1966; Hofstede 1968) and the 'best' way to use organizational reward systems in the evaluation of individual performance (Argyris 1952; Cherrington & Cherrington 1973; Hopwood 1973; Otley 1978). Yet whilst the results of each of these studies is interesting in its own right, a major conclusion has been that the conflicting results about the uses of budgetary control systems may be dependent on the state of the organization and its environment (Baumler 1971; Otley 1978).

# 2.10.2 New Working Environment

Automated manufacturing technology which forms the nucleus of the 'factory of the future' is becoming an increasingly significant factor in competitive battles across the developed world. This growth in advanced manufacturing technologies (e.g. MRP, JIT, FMS, AMT, etc.) is seen by many to be making new demands on organisational information systems in general and accounting and control systems in particular. It has been argued that managers faced with having to make decisions in complex technology driven situations are supplied with information by the firm's internal management systems which is not considered to be adequate for this environment and, in effect, which often is misleading (Berliner & Brimson 1988). Consequently, products are being mispriced, overheads misallocated and organisational processes mismanaged. It is thus important for the management accountant to become aware of the novel demands perceived as being made on internal accounting systems by modern production systems and to reassess the role of management accounting in an altered production environment (Kaplan 1984a: 101; Neumann & Jaouen 1986: 132; Kaplan 1988b: 39-40; McNair et al 1988: 18; Bromwich & Bhimani 1994: 11-13).

Many modern management accounting techniques such as cost driver analysis or activity-based costing (Cooper & Kaplan 1987: 169-203; Horngren 1995), backflush accounting (Foster & Horngren 1988), throughput accounting (Galloway & Waldron 1988), life-cycle costing (Berliner & Brimson 1988), materials requirements planning (Mackey 1991: 193-203), non-cumulative

costing and total quality control techniques, are only beginning to be implemented in practice in a limited sense. Many of these innovations are advocated on the basis of their potential benefits within a theoretical framework. Empirical evidence as it emerges, will no doubt help in assessing the validity of some of these ideas (Bromwich & Bhimani 1994: 87).

#### 2.10.3 Research

Much of the received knowledge of management accounting research of the last five decades has been regarded with scepticism by academics and has never been overwhelmingly accepted in practice (Bromwich 1987: 217). The body of knowledge used by practice in all but a few areas has remained loyal to a set of practices which had reached maturity and obtained widespread application by the early 1950s. These techniques had been developed mainly in practice and at the interface between practice and practically oriented academics (Kaplan 1984a).

During the 1980s, accounting researchers in the UK have become increasingly interested in the nature of management accounting practice. This interest was initially prompted by a perceived gap between the theory and practice of management accounting, and especially the generally held belief that the conventional wisdom of management accounting textbooks is not widely used in practice. However, this belief was based on anecdotes, occasional visits to companies and a few published studies of the use of particular management accounting techniques (Scapens 1991). There was clearly a need to establish the nature of management accounting practice through empirical research (Cooper et al 1983: 2) such as this study where the major objective is to understand the responsibility accounting systems practised in the state-owned enterprises in China through field work (i.e. exploratory case study).

After reviewing the above literature, some relevant theories and empirical evidence relating to (1) organizational theories (Section 2.4); (2) control systems (Section 2.5); (3) performance measurement (Section 2.6); (4) performance appraisal and rewards (Section 2.7); (5) contingency theory (Section 2.8); and (6) culture (Section 2.9) have been incorporated into the research instrument and case writing of this study. These are the elements which capture the essential features of this research question or problem (Section 1.3 in Chapter 1).

#### PART B: PEOPLE'S REPUBLIC OF CHINA

## 2.11 ECONOMIC DEVELOPMENT & OPEN DOOR POLICY

In 1978, an important year in the history of the People's Republic of China (PRC), at the Third Plenary Session of the Eleventh Central Committee of the Chinese Communist Party, a series of economic reforms and open-door policies were announced. These reforms and policies had penetrating influences into every stratum of the economy, ranging from the production responsibility system adopted in the rural farms, diversified manufacturing factories established in villages and small towns<sup>37</sup>, to operational reforms of the industrial enterprises in the big cities. The pace of these economic reforms has been speeded up significantly right after the South China's visit by the Chinese top leader, Mr Deng Xiao Ping, during January 1992. His major message was to further open the economic doors in the 1990s. With regards to legislation, the Chinese government has enacted and promulgated many laws and policies in the last ten years to facilitate the economic enhancement. The following are some of them which have direct implications on the core of this study.

- (1) Company Law (1993)
- (2) Socialist Market Economy (1992)
- (3) Regulations for State-Owned Industrial Enterprises Operation Mechanisms

  Transformation (1992)
- (4) Shareholding Enterprise Transformation or Privatization (1990)
- (5) Bankruptcy Law (1986)

One of the most important objectives of the above mentioned laws and policies is to improve the economic efficiency of the state-owned enterprises (SOEs) and the motivation of their employees (Lin & Yau 1994).

<sup>&</sup>lt;sup>37</sup> According to the results of the 'Agricultural Economic Quantitative Research' reported by the Chinese Social Science Academy, there were 250 million peasants producing the agricultural products and 100 million people working in the township factories (enterprises) at the end of 1996. They accounted for 28% of the total population in China (Hong Kong Wen Wei Po Newspaper on 24 December 1996).

#### 2.12 STATE-OWNED ENTERPRISES ECONOMIC EFFICIENCY

The major purpose of these laws and regulations is to delegate more autonomy to the SOEs to ensure that they are self-financed, self-managed, self-regulated and self-developed (Beijing Review 1984; Reynolds 1987: 10-11; Bromwich & Wang 1991). The "Regulations for State-Owned Industrial Enterprises Operation Mechanisms Transformation (1992)" with 7 chapters and 54 articles was announced by the State Council on 24 July 1992. The major objectives of this law of transformation are to motivate the enterprises to be market-oriented and to raise the economic productivity and efficiency of the SOEs.

Autonomy regarding purchasing, production, selling, distribution, labour employment and remuneration, capital and fund raising, merger and takeover, winding-up and bankruptcy are delegated to the enterprise managements and accountants who can adopt and implement the management accounting methods (typically the responsibility accounting) more rigorously and effectively. Further refinement on this law of transformation was one of the five major themes discussed during the Third Plenary Session of the 14th Central Committee of the Chinese Communist Party held in November 1993.

Another important ongoing reform is the Socialist Market Economy which was the major theme of discussion and was written into the PRC's Constitution during the 14th People's Congress held during October 1992. The implementation of this economic style will result in the future planning, operation and control in the SOEs to be more market driven. As a result, planning and control responsibilities fall squarely on the shoulders of the enterprise managements. Enterprises are allowed the autonomy to purchase and supply according to their own marketing and production plans. They are also permitted to price their products or services according to market conditions. In addition, their investment decisions in terms of fixed assets acquisitions, enterprise mergers and takeovers, and divestments will be enlarged. All these consequences are affecting the management accounting systems employed by the SOEs.

However, after implementing these laws and regulations, 34.3% of the large and medium SOEs incurred losses in the first quarter of 1995, and to put them onto the road to recovery is

undoubtedly of paramount importance<sup>38</sup>. The proportion of large and medium-sized SOEs reporting losses increased to 45% and total amount of loss was Renminbi<sup>39</sup>(RMB)69 billion (an increase of 45.7% compared with the same period in 1995) for the year of 1996<sup>40</sup>. It has been estimated that the income tax levied on the SOEs by the government dropped by 70% from RMB175 billion in 1995 to RMB54 billion in 1996<sup>41</sup>. Another adverse example was that 88% of the 19,476 SOEs in Guangdong Province (where Hong Kong is a city in this province) incurred losses in 1996 and 3,260 SOEs had debit balances in their networth<sup>42</sup>.

Although the SOEs in China account for 49% and 41% of the total National Industrial Output Value in 1992 and 1996 respectively<sup>43</sup>, they have imposed a heavy financial burden onto central and regional governments. The total subsidies for these enterprises amounted to RMB70 billion in 1993, RMB50 billion in 1995 and RMB101 billion in 1996. Part of these ailing SOEs have been subject to merger, takeover, management-buyout, leased-out or contracted-out to foreign investors in order to improve their operations and make them more market oriented<sup>44</sup>.

Nevertheless, from a long-term perspective, the ultimate panacea to sustain and enhance the economic efficiency of these SOEs is to improve their management technologies especially their management accounting methods and techniques including the "Responsibility Accounting System".

<sup>&</sup>lt;sup>38</sup> See Wen Wei Po (Hong Kong Newspaper) on 28 March 1995.

<sup>&</sup>lt;sup>39</sup> Renminbi (RMB) is the monetary currency used in China. The market exchange rate at the end of 1996 is approximately US\$1=RMB8.3.

<sup>&</sup>lt;sup>40</sup> See Wen Wei Po (Hong Kong Newspaper) on 31 December 1996.

<sup>&</sup>lt;sup>41</sup> See *Hong Kong Oriental Newspaper* on 15 December 1996.

<sup>&</sup>lt;sup>42</sup> See Wen Wei Po (Hong Kong Newspaper) on 28 December 1996.

<sup>&</sup>lt;sup>43</sup> See *Wen Wei Po* (Hong Kong Newspaper) 1996 Annual Review p.14 published on 3 January 1997.

<sup>&</sup>lt;sup>44</sup> See Wen Wei Po (Hong Kong Newspaper) on 23 May 1994 and 6 January 1996, and Hong Kong Oriental Newspaper on 15 December 1996.

#### 2.13 MANAGEMENT ACCOUNTING DEVELOPMENT IN CHINA

## 2.13.1 Early Development (1949-1978)

Since 1949, the Chinese accounting system has been designed to elicit uniform accounting information which could be used for national financial budgeting and economic planning, national income statistics and national bank credit planning (Zhou 1988; Scapens and Meng 1993). The traditional macroeconomic orientation of Chinese accounting meant that accounting information lacked relevance for managerial planning and control at the enterprise level (Bromwich & Wang 1991).

During the 1950s, many SOEs emphasized the "Work Team" concept. Work-teams were cost centres at the lowest level. These teams or groups of workers were responsible for achieving their planned production, cost and also assigned profit targets (Maschmeyer & Yang 1990). Production tasks were assigned to work-teams rather than to individual workers. Individualism was suppressed and group efforts encouraged. Actual group performance was measured against the targets to determine the group bonuses which were divided among the members according to their own rules (Kwang 1966; Yang 1981). Contrary to contemporary practice, top management of these enterprises were responsible for meeting production quotas only, paying little attention to financial results (Skousen & Yang 1988). In fact the "Work-Team" concept was the foundation of "Responsibility Accounting System" which has been widely developed since 1987.

During the 1960s, many SOEs focused on the "Working Capital and Cost Control" of divisional, departmental and work-team levels in order to make the best use of scarce resources and improve profitability. Turning into the 1970s, the "Internal Profit System" was used in many enterprises to increase the cost and profit awareness of factory managers although the majority of commodity prices were still under the control of the government (Shi & Lin 1989). Both facets of management accounting practice have contributed trial-and-error experience to the subsequent development of the responsibility accounting system.

However, the above developments in management accounting have not achieved great results because of the low productivity created by the "Big Rice Pot" system (described in Section

1.1.4(2) in Chapter 1 and Section 2.15.4 below), the government controlled policies and the self-reliance national policy since 1949. During the three decades to 1979, management accounting as a discipline had not been well recognised in China.

# 2.13.2 Further Development (1979-1989)

The theme of the transformation of the Chinese accounting system has coincided with general economic reforms seeking to increase decision-making power concerning production, supply, marketing, financing, pricing, personnel, wages and bonuses at the SOE level and to loosen centralized control (Zhou 1987; Bromwich & Wang 1991).

When many SOEs were given the authority to sell at least a portion of their products in response to market demand, and to retain a portion (around 20%) of profits for the benefit of workers, accounting techniques to facilitate this profit-oriented and "increased autonomy" management system were needed. The enterprises could not model these accounting techniques on the Soviet system. Profit centres were better developed by using western management accounting methods. The proclamation of open-door policies in 1978 encouraged the Chinese academics to study, translate and publish western management accounting methods, primarily from American accounting textbooks and journals (Yang 1987; Skousen & Yang 1988; Hau 1991). The following were some of these major publications:

Chen, Xiuhqui. 1980. Management Accounting. Mechanical Industry Publication (Beijing). Yu, Xiuin. 1983. Management Accounting. China Finance & Economics Press (Beijing). Li, Tanmin. 1984. Management Accounting. Central Broadcasting & Television University Publication (Beijing).

Wang, Xahyau. 1987. Management Accounting. Economic Science Publication. (Beijing). Shi, Ranjing, and Lin, Baohuai. 1989. Management Accounting. Shanghai People's Press.

The above textbooks have adopted the western management accounting models into some management accounting systems, typically the responsibility accounting, with Chinese characteristics. Many of these new management accounting methods were quickly endorsed by Chinese national accounting associations such as the Accounting Society of China and many

other provincial accounting associations, various state ministries, bureaux, as well as administrative corporations. The new concepts were immediately implemented, at least by the enterprise managers and accountants who had limited technical training only (Meng 1987). Education programmes and seminars were initiated, and the curricula of management and accounting in the universities were modified accordingly.

A number of western concepts like variable and fixed costs, contribution margin, cost-volume-profit analysis, flexible budgets, variable costing and service department cost allocations started to be used by Chinese accountants and managers. Of these methods, the responsibility accounting and the cost-volume-profit analysis were the most extensively applied (Ding 1981; Yang 1982). However, whether wholesale moves toward the various management accounting systems employed in the western enterprises are appropriate is questionable (Firth 1996). Morsicato & Radebaugh (1979), Schweikart (1986), and Scapens & Meng (1993) caution that the adoption of western management accounting standards in the other countries (e.g. China) may be suboptimal due to different environmental conditions and thus lead to economic inefficiency.

Fundamental to the use of the profit centre accounting method was the determination of "profit" in a free-market economy in which prices were subject to supply and demand. The situation in China was quite different in this respect during this period from 1979 to 1989. Although the central government had introduced many economic reforms, the market was far from being operated by supply and demand only. Prices for most industrial and consumable commodities were set by the government via the State Price Control Bureau.

The investment concept, and optimization of investment returns were still largely unexplored in China during the 1980s. For many years, the performance measurement of SOEs have been related mainly to the achievement of production quotas. Profit was largely viewed as any savings from the predetermined production costs. Capital investment in individual enterprises was largely determined and controlled by the government (Firth 1996). Increases in profit due to increased investment could not generally be attributed to the efforts of enterprise management. Thus, managers endeavoured only to meet the production quotas and "profit" goals with no heed to inventory and asset investments. To most Chinese managers, concepts such as return on

investment, residual income and time value of money had little meaning (Bromwich & Wang 1991).

## 2.13.3 Recent Development (1990-1996)

Seeking to link closely accounting with enterprise management, a theory of "Accounting Management" has evolved since the early 1990s in China. The concept stipulates that accounting is one of the most important management activities rather than being a management tool or information system. According to this emergent perspective, accounting should play an active and positive function in forecasting, planning, evaluating, analysing as well as controlling business operations (Ding 1992; Li 1992).

In a typical medium- or large-sized SOE, the "chief accountant", the "chief economist" and the "chief engineer" are the three deputies to the chief executive of the enterprise. In some SOEs, a new section dealing with routine management accounting matters is set up within the accounting and finance department. In others, a new office under the chief executive usually called the "enterprise management office" or "general manager office" is set up to apply management accounting knowledge to assist top management. These different arrangements also reflect the varied importance given to management accounting functions in different SOEs.

The crux of enterprise accounting reform has been the shifting of attention from merely bookkeeping to participating in managerial decision-making and control, from retrospective reporting to prospective forecasting and the use of feedback control, from serving the needs of state control to assisting and advising the enterprise's decision-makers (Bromwich & Wang 1991).

Many authors (Shi & Lin 1989; He & Lin 1991; Yu 1991) and practitioners hold that the establishment of a new responsibility accounting system is the key to enhance the economic efficiency of the SOEs. Only when a new enterprise accounting system which directly serves management is set up can the nature and functions of accounting be actually achieved. Some academics have proposed a new accounting subject called "Responsibility Accounting" separated from the management accounting syllabus.

#### 2.14 RESPONSIBILITY ACCOUNTING DEVELOPMENT IN CHINA

During the 1980s, many SOEs instituted a kind of "Responsibility Accounting System" known as the "Internal Responsibility Contract (IRC)", which is mainly a four-step mechanism (Yan & Long 1987; Wan & Wei 1993).

## 2.14.1 Establishing Responsibility Centres

The overall responsibilities for an enterprise for meeting the target level of annual turnover and profit are divided and assigned to various internal units and centres (e.g. production departments, work shifts and even individual workers) which together constitute the enterprise. Profit and cost centres are also identified in order to identify income generating and cost control responsibility.

# 2.14.2 Targets Setting

Every year, the financial targets prescribed in the "Economic Responsibility Contract (ERC)" (for an example, see Section 4 of Data Analysis 1 in Volume 3 [pp.6-7]) are always established as the primary guidelines used by the enterprise top management for the responsibility centres' managers to formulate the terms and conditions within their IRCs, and then negotiate them with the top management until compromises are reached and contracts signed. The IRC contains both financial and non-financial targets, the achievement of which will determine the group and individual bonuses of that responsibility centre. The financial targets stipulated in the IRC normally include sales, production values (or added-values), capital and working funds, costs and expenses. On the other hand, the non-financial targets may embrace production quantity and quality, product mix and variety, labour productivity and efficiency, material consumption, safety record, production capacity and quality, and even birth control!

## 2.14.3 Internal Transactions

In some large SOEs, a system of "Internal Bank" is established. The system is similar to the internal transfer pricing mechanism in other countries. Products and services are provided to an internal unit at prices set by the enterprise management, after consultations with the managers

concerned. Transfer prices are set on the basis of market price, cost or cost plus an appropriate margin. Internal currency and cheques originated by internal banks under the auspices of the enterprise's department of finance or accounting are commonly used for the settlement of interunit transactions. Interest is paid on deposit and charged on credit extended by the bank. This system can also act as a means to monitor the working capital levels and flows among the responsibility centres or units within the enterprise (Shi & Zhang 1994; Liu & Zhang 1996).

#### 2.14.4 Performance Evaluation

The financial and non-financial targets agreed upon for each IRC are usually evaluated on a periodic basis. Actual performances are measured against the pre-set targets in order to control the operational progress and award the group bonus. Furthermore, internal transfer prices set for the internal banking system facilitate an objective performance measurement and encourage efficiency and goal congruence within the enterprise. Performance evaluation for each unit can be based on the actual profit relative to the target profit levels. Usually, performance is linked with material, socio-emotional and moral incentives (Foa & Foa 1980; Zhao 1988; Cheng 1989).

## 2.14.5 Conclusion

Evidently, both ERC and IRC systems should lead to better economy, efficiency and effectiveness of SOEs. The targets set in the ERC are segregated and passed on the organisational hierarchy through the IRC system which bears great similarities to the western responsibility accounting practice (Bromwich & Wang 1991; He & Lin 1991: 2 & 107).

#### 2.15 PROBLEMS OF RESPONSIBILITY ACCOUNTING IN CHINA

The applications of responsibility accounting have encountered some problems although many government officials, academics and practitioners have promoted and refined this management accounting system for almost a decade. The following six causes provide some explanations of the problems.

## 2.15.1 Economic Responsibility Contract (ERC) System

Under the direction of Deng Xiao Ping, who in 1981 was the PRC's Premier, the first ERC was signed between the Beijing Municipal Government and the Capital Iron & Steel Corporation (the largest steel work in China) in 1981. The major terms and conditions were as follow<sup>45</sup>:

- (1) The enterprise must hand-over to the government the predetermined annual profit (disregarded the actual financial performance) which was based on a compound growth rate of 7.2% per annum. The surplus profit over the target could be wholly retained by the enterprise. The government would not invest any additional capital.
- (2) The retained earnings should be appropriated 60% to the production development reserve fund, 20% to the employee welfare fund, and 20% for the employee bonus.
- (3) The annual gross wages paid should not exceed 80% of the annual profit before tax.
- (4) The enterprise had the autonomy to sell 15% of the planned production to its own customers. Any surplus production over the plan could be sold by the enterprise in the free markets.
- (5) The ERC period was for 15 years from 1981 to 1995 (the longest one ever in China).
- (6) The authorities, responsibilities and rewards of this ERC should be underwritten by or delegated to individual employees of the enterprise.
- (7) The enterprise had autonomy to invest by using the production development reserve fund.
- (8) The enterprise had import and export rights.

The Capital Iron & Steel Corporation exceeded the financial targets in all the 15 years under this ERC. Having had this successful experience, the State Council of China promulgated the ERC system across all the SOEs in April 1987 and enacted the "State-Owned Industrial Enterprises Economic Responsibility Contract Temporary Regulations" in February 1988. This ERC system was adopted by over 90% of all the SOEs by the end of 1992<sup>46</sup>. Under such a system, the top management or chief executive of a SOE entered into a contract with its supervisory authority

<sup>&</sup>lt;sup>45</sup> See Wen Wei Po (Hong Kong Newspaper) on 1 November 1994.

<sup>&</sup>lt;sup>46</sup> See Wen Wei Po (Hong Kong Newspaper) on 9 November 1993.

and other government agencies (municipal or provincial government) in return for full autonomy to manage its business operation (Yu 1988).

The contract requires enterprise management to reach some prescribed target levels of turnover and profit upon which sales and income taxes are levied. The period of the contract is normally three to five years. The basic turnover and profit targets set for the first year are based on the average levels attained in the preceding three years and subject to negotiation between the two parties. Then, usually there will be a compounded growth percentage added to the subsequent years. After handing-over the pre-determined taxes and profits to the municipal or provincial government, the enterprise can retain the surplus for the business growth, capital investment, distribution of bonus and providing welfare (e.g. housing) for the employees. Such a contract is renewable subject to satisfactory performance of the enterprise management (Fan & Schaffer 1991: 16-17; Arthur Andersen 1993: 70; Chow, Cooper & Tang 1993).

It is evident from the above that the ERC system is designed to (1) assure a stable growth in government's income; (2) change government's control from direct to indirect; and (3) create an environment for better economic management of the SOEs (Xie & Lin 1992). In order to achieve the prescribed levels of financial performance, the enterprise management and accounting personnel should participate in technology improvement, investment analysis, product and market development, sales and promotion strategies, cost control, and wages and bonus determination (Yan & Chen 1988).

Although a small portion of the SOEs (i.e. about 9,200 in total) have been converted into shareholding enterprises and have ceased their ERCs, over 69% of the remaining SOEs are still practising ERCs or equivalent agreements with the government in 1996<sup>47</sup>. The government believes that before the widespread use of and the maturity of socialist market economy, the ERC system is the best means to delegate the management autonomies to the SOEs in order to make them be self-financed, self-managed, self-regulated and self-developed<sup>48</sup>.

<sup>&</sup>lt;sup>47</sup> See Wen Wei Po (Hong Kong Newspaper) on 7 February 1996 and 16 July 1997.

<sup>&</sup>lt;sup>48</sup> See Wen Wei Po (Hong Kong Newspaper) on 4 November 1994.

However, over 34% and 45% of the SOEs, which are using the ERCs, have incurred financial losses in 1995 and 1996 respectively. The following are the four major reasons (Liu & Liu 1994).

- (1) The "short-term behaviour" of the enterprise management leads to inadequate long-term investments in research and development, production facility and equipment, product and market development, human resources, education and training (Arthur Andersen 1993: 69; Chow, Cooper & Tang 1993; Liu & Zhang 1996:113-118).
- (2) The relatively "low sales and profit targets" set in the ERC do not really motivate the enterprise management to capitalize the business opportunities and potentials (Liu 1989).
- (3) Managers of individual responsibility centres within an enterprise may overemphasize the interests of their own responsibility centres, and avoid modifying or improving their own targets even when the economic environment faced by the enterprise has been changed. This negative behaviour can affect the coherence of targets across the enterprise and make it difficult to realise the targets of the enterprises as a whole (Scapens & Meng 1993).
- (4) As the sole owner, the state still exerts influences on planning, decision making, administration and personnel affairs in the operation of these enterprises (Lin & Yau 1994).

Partly because of the above reasons, modern management techniques, including management accounting methods, have not been well implemented in these SOEs.

To replace this ERC system, many enterprises have adopted the "Income Tax System" under which the enterprises are required to pay sales tax, value-added tax, consumption tax and other miscellaneous local service taxes, which are based on the amount of turnover. In addition, income tax has to be paid according to taxable profit after deducting operating costs and allowable expenses. Therefore, the higher the profit after tax, the more will be the retained earnings without any pre-determined targets as set in the previous ERC.

In parallel with the income tax system, many government officials, business managers, accounting practitioners and academics believe that "Shareholding System" or privatization is the best means to solve this problem faced by the government in the 1990s (Chow, Cooper & Tang 1993;

Jefferson 1993; Lin & Yau 1994)<sup>49</sup>.

According to a survey on 371 shareholding or privatized enterprises by the State Council at the beginning of 1994, 53.7% of the respondents agreed that significant operational changes had occurred after the ownership transformation<sup>50</sup>. After the first year of conversion, the following financial indicators of this sample of shareholding enterprises (overall average) had increased by:

Average output per employee	57.3%
Profit before tax per employee	85.2%
Sales profit margin	49.2%
Return on capital employed	39.3%
Wages per employee	44.0%

The promulgation of shareholding enterprises by the government was encouraged by these promising economic results.

# 2.15.2 Shareholding System

The transformation of wholly SOEs into shareholding enterprises is a national policy which has been further facilitated in the second half of the 1990s. According to the "Company Law" enacted in December 1993 and implemented in July 1994, "Meeting of Shareholders (AGM)" should be the highest authoritative body of these companies. On the other hand, the major duties of the "Board of Directors" are to execute the resolutions passed by the meetings of shareholders to decide on the operation and investment plans of the company. Furthermore, the "Supervisory Committee" is to check on the financial affairs of the company and to supervise the law and regulation violating acts and the directors and managers in performing their duties<sup>51</sup>.

<sup>&</sup>lt;sup>49</sup> The State Securities Supervisory Commission stated that shareholding transformation, especially listing overseas, could enhance the management and control systems in the SOEs (see Hong Kong *Wen Wei Po* Newspaper on 30 December 1996).

<sup>&</sup>lt;sup>50</sup> See Wen Wei Po (Hong Kong Newspaper) on 7 May 1994.

<sup>&</sup>lt;sup>51</sup> See Company Law. 1993. *People's Congress of China* (December): Chapter 2. Sections 37, 38, 45, 46, 52, 53, 54.

Some of the provisions in the Company Law seem to have vested the planning, control and management autonomy to the meeting of shareholders, board of directors and supervisory committee (see p.332 of Volume 3). A survey of 89 shareholding enterprises showed that 47% of the shares were owned by the state, 28% by other enterprises, 15% by individuals and 10% by foreign investors (Liu 1992). Over 50% of the shares in all the 8 shareholding enterprises investigated in this research were held by their supervisory state authorities.

Thus, the enterprise controlling power is still rested in the hands of the regional government who can impose directives and exert influence on every aspect of the enterprise. As a result, the enterprise management may not have the authority, autonomy and motivation to operate the business. To solve this problem, the state can materialise the spirit and provisions of the Company Law, and fully delegate the authority and responsibility to the chairman of the board. The state can also uplift its visible hand from the shareholding enterprises. Under these circumstances, the enterprise management will be able to use the management accounting techniques to enhance the long-term economic efficiency and profitability for the enterprise (Lin & Yau 1994).

#### 2.15.3 Market Discipline

In western countries, it is usually assumed that if an enterprise does not compete successfully in the market it will fail to earn sufficient profits and, in the long run, it will become bankrupt. Currently such a market discipline is not common in China. Although there has been a Bankruptcy Law since 1986, less than 1,500 SOEs have actually been made bankrupt despite the fact that about 180,000 SOEs were still loss-making in 1996. A major reason is that if many SOEs are to be bankrupted, large numbers of workers and employees would lose their jobs, and this could cause political instability due to the lack of a well-structured social welfare system although the government has been implementing successive plans to strengthen this system<sup>52</sup>. Thus, in the future Chinese SOEs may be subject to the "discipline of the market", but as yet they remain relatively protected.

<sup>&</sup>lt;sup>52</sup> See Wen Wei Po (Hong Kong Newspaper) on 20 January 1996.

Since the managers of the SOEs in China are not subject to market disciplines to the same extent as western managers, it is not surprising that Chinese managers do not give as much priority to the economic and financial management of their enterprises as their western counterparts. Before the SOEs in China do really become independent economic entities, management accounting is unlikely to play a major role in the management of Chinese enterprises (Scapens and Meng 1993).

## 2.15.4 Big Rice Pot

The "Big Rice Pot" ideology or the "Three Iron Bowls" (iron employment, iron work position, iron wages) concept has not really been abolished because it has still taken root and exerted an adverse influence on the IRC system. In may large- and medium-sized SOEs, laying off the redundant employees (may be as high as 20%-30% of the labour force) will create many social problems in the light of the current insufficient employment social welfare and benefits in China<sup>53</sup>. Hence, economic efficiency and productivity could not be enhanced significantly although the responsibility accounting has been widely implemented in the SOEs.

In addition to reform the social welfare system in China, the government should enforce, according to the "Operation Mechanisms Transformation Regulations" and "Labour Law" enacted in 1992 and 1995 respectively, to allow the enterprise management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowls" practices. The duration of an employment contract is usually from one to five years subject to review and renewal. This employment contract system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the enterprise managers and employees.

<sup>53</sup> See Wen Wei Po (Hong Kong Newspaper) on 29 November 1997.

# 2.15.5 Computer Applications

Due to the lack of funds, the use of computers has not been actively promoted in many SOEs, in particular, the medium- and small-sized enterprises. Only the profitable large SOEs can afford to install mainframes or mini-computers, and the medium enterprises employ stand-alone personal computers to automate the production management, inventory control, purchasing, sales and accounting functions. The development of "Local Area Network System (LANS)" rarely exists in these enterprises. Therefore, it is difficult for various levels of management to retrieve instantly relevant information from the computer system to enhance the management efficiency.

Four visits were made to the Xiamen Fork Lift Truck (XFLT) which had 1,100 employees and achieved RMB180 million of turnover in 1994. As from 1986 to 1994, this enterprise has invested over a million dollars of RMB (Renminbi) in both hardware (e.g. a centralised minicomputer) and software (e.g. tailor-made package). Furthermore, a postgraduate in computer science was recruited in 1989 from the Fudan University (Shanghai most famous university) to head the computer centre. It was amazing that in a few years' time, a LANS has been built up to integrate the sales, purchasing, inventory, production, accounting (financial and management reporting), wages, fundflow (cash flow) sub-systems.

The economic efficiency of this enterprise has been greatly improved since the early 1990s and it is now one of the top ten SOEs in Xiamen which is one of the five coastal special economic zones since 1981. Since 1993, this enterprise has started a joint-venture with a well-known German company to establish a manufacturing plant in Xiamen which will be the largest of its kind in China. The researcher had a chance to talk with a top executive of this German Company in September 1994 and was told that the major reason to choose XFLT to be their partner was because of their efficient management system. It is evident from this example that the use of computers or automation is a crucial tool to facilitate the installation of AIS or MIS as a cornerstone to support the management accounting applications in China.

# 2.15.6 Management Knowledge

In parallel with the economic reforms and open-door policies, the management systems and techniques currently adopted by Chinese SOEs need to be enhanced via learning from the western countries. Since the early 1990s, the promulgation of the shareholding system, operation mechanisms transformation and socialist market economy have created favourable environments for the SOEs to manage their own operations, to improve the financial performance and to increase the benefits to the government, the enterprises and the employees.

However, it will take a long time to change the mind set and management practice of millions of managers in China. In Chinese enterprises, management control is sometime based on loyalty, seniority and trust. Chief executives are usually very authoritarian and manage their enterprises through direct involvement and personal relationships, rather than through accounting numbers (Wang 1986; Zhang 1989). Chinese accountants frequently complain that management accounting is not used for management control and chief executives attach little importance to it. For example, in a study by Meng (1991), accountants at the Beijing Oil Machinery Factory complained that they could not use management accounting methods because their senior executives knew little about management accounting and they prefer to rely on their own business experience.

The lack of concepts of effective management and the inadequate knowledge of management accounting techniques among the enterprise's senior management, who are usually old-aged people, have been the blocking factors against the further development of management accounting theories and practices<sup>54</sup>. Education and training as described in Chapter 1 (Section 1.2.3.1) should be one of the best ways to promote this management intelligence transformation process (Bromwich & Wang 1991).

<sup>54</sup> See Wen Wei Po (Hong Kong Newspaper) on 25 November 1996.

The literature review in Part B of this chapter, in particular the descriptions on "Responsibility Accounting Development in China" (Section 2.14) and "Problems of Responsibility Accounting in China" (Section 2.15) has addressed the essential features of the changes in planning and control systems adopted by the SOEs in the 1990s. These recent changes justify the research problem or question (Section 1.3 in Chapter 1) to be investigated by conducting some field work.

#### 2.16 CONCLUSION

The lack of clarity and confounding evidence as shown in the literature review coupled with the dynamic changes in China make it very difficult to have a clear overall framework for this research. However, Goold and Campbell's Strategic Framework offers some means of classification to be applied in this study. Hence, there is a need for exploratory case study on this topic.

The literature reviews are by no means exhaustive but they serve the dual purposes of providing (1) rich theoretical propositions, research findings and practical experiences to design and conduct this research; and (2) suggestions to explain the phenomena revealed in this research. In such an 'exploratory case study' research, it is not intended and may not be feasible to test some of these normative or positive hypotheses quantitatively although some simple parametric and non-parametric statistical analyses are performed to verify the changes of responsibility accounting style of 20 SOEs within a modified management framework (i.e. Goold and Campbell's Strategic Management Grid). Instead, the above intensive literature search can pinpoint or highlight many similarities and discrepancies between theories and practices relating to the substances of responsibility (or management) accounting system in China which will be worthwhile potential research areas for this and other researchers.

# **CHAPTER 3: RESEARCH METHODOLOGY**

#### 3.1 INTRODUCTION

This chapter firstly describes the classical social science research paradigms which have provided guidance for the researcher to identify the appropriate research methodology to be used in this study (Section 3.2). Then the justifications for employing the "*Exploratory Case Study*" method are explained (Section 3.3). Finally, the detail procedures from research conceptualization to thesis writing are reported (Section 3.4) before the concluding remark (Section 3.5).

### 3.2 RESEARCH PARADIGMS

# 3.2.1 Social Science Research Paradigms

Burrell and Morgan (1979) propounded a very useful framework for classifying various research paradigms in the social sciences. This is based on two sets of philosophical assumptions concerning the "nature of social science" and the "nature of society". The social science assumptions are interrelated and deal with (1) epistemology; (2) ontology; (3) human nature; and (4) methodology. The societal assumptions make a distinction between a society which strives toward social order on the one hand and social change on the other hand (Burrell & Morgan 1979: 1-7).

(1) Epistemology refers to the assumptions about the 'nature of knowledge' -- about how one might begin to understand the world and communicate this knowledge to fellow human beings. There are two extreme views on the nature of knowledge. The first one is called "positivism" (or scientific knowledge) which seeks to explain and predict what happens in the social world by searching for regularities and causal relationships between its constitute elements (objective approach). The second view of knowledge is called "anti-positivism" which rejects the standpoint of 'observer' and maintains that one can only 'understand' by occupying the frame of reference of the participant in action (subjective approach).

- Ontology concerns the nature of reality and the very essence of the phenomena under investigation. This may actually be considered as a continuum where, at one extreme there is termed as "realism" which states that the social world is viewed as having an empirical concrete existence which is independent of external, or prior to human, cognition (objective approach). At the other extreme, it is called "nominalism" (or conventionalism) which views that the social world external to individual cognition is made up of nothing more than names, concepts and labels used to structure reality (subjective approach). Morgan and Smircich (1980) developed a six-way classification encompassing the objective and subjective extremes of the reality continuum which will be considered in Section 3.2.2 below.
- (3) Human nature concerns the relationship between human beings and their environment or society. At one extreme is "determinism" which regards man and his activities as being completely determined by the situation or 'environment' in which he is located (objective approach). At another extreme is the "voluntarism" which views human behaviour a completely autonomous and free-willed (subjective approach).
- (4) Methodology in social science research depends on the three sets of assumptions concerning epistemology, ontology and human nature. The "ideographic" view (subjective approach) to social science is based on the view that one can only understand the social world by obtaining first-hand knowledge of the subject under investigation. It thus places considerable stress upon getting close to one's subject and exploring the detailed background and life history. On the other extreme is the "nomothetic" view (objective approach) which lays emphasis on the importance of basing research upon systematic protocol and technique. It is common in this latter approach and methods employed in the social sciences, which focus upon the process of testing hypotheses in accordance with the construction of scientific tests and the use of quantitative techniques for analysis of data. Surveys, questionnaires, personality tests and standardised research instruments of all kinds are prominent among the tools which compromise nomothetic methodology.

The following research paradigms have been chosen for the present study after considering their suitability to the current environment in China.

Assumption	Paradigm	Approach	Reason of Choice
Epistemology	Anti-Positivism	Subjective	To understand the 'inside' operation of the Responsibility Accounting (RA) in the Chinese SOEs.
Ontology	Nominalism	Subjective	RA system is regarded as 'artificial creations' whose utility is based upon their convenience as tools for planning and control.
Human Nature	Determinism	Objective	RA system is subject to the planning and control influences from the legislation, ownership and economic changes.
Methodology	Ideographic	Subjective	Despite the existence of 'determinism' paradigm, the 'ideographic' is thought more appropriate for this research.

On balance the research methodology and assumptions selected are more towards the ideographic than nomothetic but it should be recognised that these terms describe the polar positions. The definition of the research question requires a methodological stance more consistent with the research assumptions underlying the subjective approach.

The assumptions about society emphasize a dichotomy between a society which strives towards social order or regulation (i.e. cohesion and stability) and a society which questions status quo, division of interests and power distribution thereby providing a rationale for radical change (social change). According to Burrell and Morgan (1979), these two dimensions of society and social science create four paradigms as illustrated in the following diagram.

**NOMOTHETIC** 

# THE SOCIOLOGY OF RADICAL CHANGE 'Radical Humanist' 'Radical Structuralist' **SUBJECTIVE OBJECTIVE** 'Interpretative\*' 'Functionalist' THE SOCIOLOGY OF REGULATION Subjective Approach Objective Approach to Social Science To Social Science **POSITIVISM** - EPISTEMOLOGY-ANTI-POSITIVISM REALISM ONTOLOGY NOMINALISM VOLUNTARISM -HUMAN NATURE-**DETERMINISM**

Adapted from Burrell and Morgan (1979: 3 & 22)

**IDEOGRAPHIC** 

**METHODOLOGY** 

<sup>\*</sup> The present research is classified into this domain.

However, it should be borne in mind that Burrell and Morgan framework only represents a convenient means of classifying and appreciating various approaches to social science research. The most common criticism of this model relates to the strict dichotomies between the "objective" and "subjective" categories. These extremes and mutually exclusive paradigms have been considered unrealistic from a practical point of view (Morgan & Smircich 1980; Hopper & Powell 1985; Chua 1986). Furthermore, different paradigms cannot be rationally compared as they are 'incommensurable' or they are grounded in different traditions (or cultures such as in China) which literally inhabit different worlds (Kuhn 1970). Again on balance the research methodology in this study can be classified as interpretative. There is growing appreciation of the need to triangulate research methods when dealing with social science research.

#### 3.2.2 Scientific & Naturalistic Research

The distinction between scientific and naturalistic approaches to the development of accounting theory is well explained by Abdel-Khalik and Ajinkya (1979). They point out that the naturalistic paradigm generates "Class A" theory which is inductive, descriptive and seeks to present reality as it is, derived from factual observation. In contrast, the scientific paradigm "Class B" theory is deductive, normative, and anticipates what the world should be like. It is logically derived from assumptions or elementary propositions which are external to the phenomena under investigation. Although there exists an element of deduction in defining the research boundaries and domain from the literature review (Chapter 2) and identifying the research hypotheses (Chapter 1), the wide scope of research and method of data collection require inductive, descriptive and interpretative analysis. Therefore, the present research relates more to "Class A" theory.

Morgan and Smircich (1980: 492) developed a six-way classification of ontological assumptions concerning the nature of the social world (see the table below). This classification was used by Tomkins and Groves (1983) to explain the linkage between each ontological category and its associated research style or methodology. They are intended to provide a rough typology for thinking about the various views that different social scientists hold about human beings and their world.

Ch.3: Research Methodology

Six Basic Ontological Assumptions (Morgan & Smircich 1980)							
Ontological Assumptions	Human Nature Assumptions	Epistemological Stance (Basic)	Some Favoured Metaphors	Research Methods			
Reality as a concrete structure	man as a responder	to construct a positivist science	machine	lab experiments surveys			
Reality as a concrete process	man as an adaptor	to study systems, process, change	organism	historical analysis			
Reality as a contextual field of information	man as an information processor	to map contexts	cybernetic	contextual analysis			
Reality as a symbolic discourse	man as an actor: the symbol user	to understand patterns of symbolic discourse	theatre, culture	symbolic analysis			
Reality as social construction	man as a social constructor: the symbol creator	to understand how social reality is created	language game, accomplish- ment, text	hermeneutics			
Reality as projection of human imagination	man as pure spirit, consciousness, being	to obtain phenomenolo- gical insight, revelation	transcendental	exploration of pure subjectivity			

The above model could be thought of as a continuum ranging from the **strict objectivist** (from top) view of the first category to the **strict subjectivist** (to bottom) view of the last category. The first three categories represent scientific paradigms while the last three constitute naturalistic research paradigms. In terms of this six-way classification, the present research is closer to the 'reality as social construction' ontological assumption.

The scientific approaches are the dominant modes of inquiry adopted by accounting researchers. Tomkins and Groves (1983: 362) explained that this usually begins with the identification of a research problem from a review of the existing literature. The research problem is then transformed into hypotheses with a specification of independent and dependent variables representing the treatment involved. Subsequently, a highly structured or pre-determined

protocol for data collection and mathematical or statistical analyses follows, leading to an almost exclusively quantitative validation of the hypotheses under investigation. Tomkins and Groves (1983) argue that this hypothetico-deductive orthodoxy has constrained the range of issues explored by accounting researchers and that it has left academic accounting literature adrift from the reality of everyday practice. Hence they advocate a shift in paradigm to redress the balance.

The "interpretive paradigm" (as shown in the 4 paradigms matrix in Section 3.2.1) is informed by a concern to understand that world as it is, to understand the fundamental nature of the social world at the level of subjective experience. It seeks explanation within the realm of individual consciousness and subjectivity, within the frame of reference of the participants as opposed to the observer of action (Burrell & Morgan 1979: 28).

For example, the interpretive research paradigm adopted in the present research conforms with the well established approach in sociology for studying organisations such as the SOEs in China (Silverman 1970: 159-163). This research process is not just one of establishing empirical 'facts', but also involves the 'interpretation' of observed social practices (Scapens 1992). Furthermore, the choice of an interpretive research perspective was based on a fundamental belief in the usefulness of the more 'naturalistic' research paradigm (Tomkins & Groves 1983; Chua 1988).

#### 3.2.3 Case Study Approach

In the last decade, there have been several calls for accounting research studies based on the case study or clinical methods (Kaplan 1983, 1984a, 1984c; Scapens 1983, 1990; Tomkins & Groves 1983; Chua 1986; Horngren 1986). In this regard, the Harvard Business School sponsored a colloquium on field research studies in management accounting in June 1986. The 13 papers presented at this colloquium have been published in an edited volume by Bruns and Kaplan (1987). Each paper represented research on a management accounting issue within an actual organization (or organizations) so that through this study, the researchers could learn more about field research methods and determine whether an organizational study could provide new insights for their teaching and research activities. Some of the key features of qualitative research design based on the methodological guidance given by Bruns and Kaplan (1987) are now considered.

It has been observed that rigorous accounting research of the hypothetico-deductive and model building varieties have proved very effective in areas where the issues at stake were well documented and generally accepted. However, Bruns & Kaplan (1987) note that:

"In cases where the phenomena are poorly documented, or where recent changes in the environment make even well-documented conventional wisdom suspect, it becomes important to opt for research methods that fully capture the relevant phenomena.... One should not expect researchers to be able to use rigorous research methods when studying, describing, and classifying poorly understood phenomena (p.4)."

These recommendations are pertinent to the present study because academic literature on the implementation of the Responsibility Accounting System is rare, if not in existence at all. Furthermore, the topic is very poorly understood and documented in an empirical manner. Also application of western management accounting (which is not based on single or universal framework) adds to the complexity.

Four important criteria for evaluating good case study or clinical research which have been developed and agreed upon by the Harvard Business School (HBS) faculty are taken into account in designing the current study (Bruns & Kaplan 1987: 1-14). These relate to the choice of subject matter, research design, data interpretation and practical implications of results.

# (1) Choice of Subject Matter

The HBS faculty recommend that case study researchers choose a significant topic, ask good questions and explore original themes. A good topic is recognised in terms of its importance to practitioners and/or its potential for making advances in the conceptual development of the area investigated. It is agreed that originality occurred when the phenomenon is previously undescribed or unexplained. The topic of the current study presents considerable potential in this respect since no prior studies have been conducted on the implementation of the Responsibility Accounting in China and much of its associated phenomena were previously undescribed or unexplained in the literature. Furthermore, this research addresses the serious lack of systematic field research into understanding managerial accounting practices in their political, organisational and wider social and societal contexts (Roberts & Scapens 1985).

# (2) Research Design

The second recommendation concerns the research design. It covers the choice of sites for the study and research strategies. Emphasis is laid on the need for rich and evocative data describing organisational phenomena and their environmental contexts via interviews, possibly using anecdotes (case writings) to enhance communication and understanding for the readers.

Besides semi-structured interviews, the case studies also incorporate the use of unobtrusive measures (both adopted in this research). Unobtrusive measures are techniques for measuring or observing behaviour which, at the same time, eliminate reactivity problems. Reactivity refers to the behaviour of an individual who is aware of being observed. Archival records are unobtrusive measures because they may reflect certain attitudes of the record keepers which may be of interest to researcher (Webb et al 1966: 13-21; Cozby 1977: 33-34; Yin 1984: 87-88).

# (3) Data Organisation and Interpretation

The third issue recognised by the HBS faculty is the organisation and interpretation of case study data. It is recommended that if individuals at the research site are quoted, then it should be in their own terms rather than in edited academic jargon. The use of previously existing concepts and metaphors is considered essential in organising the data with a view to making them accessible and understandable to readers. The research findings can then be contrasted with existing theories and concepts. Bruns & Kaplan (1987) state that this might even disprove hypotheses by pointing out that:

"Clinical research is most powerful when it shows that conventional models and wisdom do not apply in actual situations; used in this mode, clinical evidence could disprove hypotheses. Greater skill is required to use clinical evidence to establish new propositions and theories (p.7)."

The "Case Analyses" and "Data Analyses" contained in Volume 2 and 3 are trying to capture these aspects. Case writing not only sets down the circumstances of the case, but also provides enough evidence to convince readers that this researcher has a good understanding of the relevant circumstances and that the explanations given are based on sound reasoning (Scapens 1990: 276).

# (4) Implications for Practice

The final criterion for evaluating case study research concerns its implications for practice. The findings from the research study may be useful. The implications for practice are clear, and appropriate qualifications in light of the sample size and types of organizations studied, are noted. The findings ring true to an informed reader, though the practitioners do not have to agree with the analysis, interpretation, or prescription offered by the researcher. Major implications are highlighted in the "findings chapter" (i.e. Chapter 7).

## 3.3 JUSTIFICATION FOR THE METHODOLOGY

Every method in accounting research has its respective strengths and which method to be used depends on its suitability for specific problems. The spectrum of research methods ranges from large scale quantitative questionnaire surveys to a qualitative participant observation case study. Quantitative questionnaire survey methods have great deductive power in verifying normative and positive theories and hypotheses, but were deemed inappropriate for the research questions in the present study include lack of clear literature, process of adaptation of change and longitudinal aspect. They could have imposed false assumptions and abstracted interpretations in the research and questionnaire design.

The "case study" is but one of several ways of doing social science research. In general, case studies are the preferred strategy when "how" or "why" questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context. Such "explanatory" case studies also can be complemented by two other types -- "exploratory" and "descriptive" case studies (Yin 1984: 13).

In asking questions of 'how?' and 'why?'during the interviews, this researcher could avoid the influence of dominant principles, theories, models, preconceptions and distortions prevalent in the contemporary accounting literature. The purpose of the case study interviews was to find out information and explanation about the changes of planning and control systems of the SOEs in China, and the research should not be just looking for simple and precise answers. Therefore, qualitative open-ended interviews (supported by a semi-structured questionnaire) were chosen

as the main research method because only the interviewees could reveal the historical and detailed development of their responsibility accounting systems in terms of the planning and control aspects. In-depth and repeated interviews across a number of years were likely to be less biased than deterministic questionnaire studies because respondents could explain the areas of study in their own words rather than fit in with predetermined answers in the questionnaire. A second advantage is the production of a wealth of detailed information about the various issues under investigation which provide better understandings to the readers and this researcher for future related research topics.

By using this qualitative method of personal interviews, problems of complex influences of the research subject and the researcher (Covaleski & Dirsmith 1990) were keenly felt, and this researcher has consciously maintained reflexivity in the fieldwork. Inevitably, the researcher was also the chief research instrument, so the quality and reliability have to be guaranteed by the honesty, independence and integrity of the researcher (Patton 1990) who brought the value of human insights, flexibility and ability to build on tacit knowledge (Guba & Lincoln 1985: 268-276).

To maintain the validity of this research approach, it must also incorporate methods and source triangulation (Patton 1990) to yield reliable insights about a complex and sensitive accounting issue which has been treated as confidential in most of the Chinese SOEs. This study used a combination of pilot case study, data-gathering methods, documentary analysis and partial quantitative questionnaire survey methods to build towards the qualitative interview research. Through empathetic neutrality, non-judgemental and holistic inquiry, this researcher could identify the all-round answers or suggestions to the research questions from the empirical data. In this way, it is hoped the real world has been captured.

The specific and practical reasons for employing "Exploratory Case Study" method in this research are described in Section 1.8.4 of Chapter 1 which also addresses the specific aspects of rigour and credibility such as external validity. Finally, Keating's (1995) management accounting case study model can also be employed as a very useful framework to summarise the whole research logic of this empirical study.

Keating (1995) classifies four distinct types of case studies spanning into three stages of research in management accounting as shown in the following table.

Stages of Theory Development	Types of Case Study	Objectives
Theory Discovery	Theory Discovery Case	To map novel, dynamic, and/or complex phenomena ignored or inadequately explained by existing theories.
Theory Refinement	1. Theory Illustration Case	To establish the plausibility of a specific theoretical perspective by demonstrating its capacity to illuminate some previously unappreciated aspect of management accounting practice.
	2. Theory Specification Case	To refine a sparse, underspecified theory in order to make it amenable to broad scale statistical test or critical case test.
Theory Refutation	Crucial Test/Counterpoint Case	To falsify or otherwise refute a well-specified theory.

In terms of Keating's (1995) management accounting case study model, the primary objective of this study falls into the "Theory Discovery Case" type aiming at exploring the reasons for responsibility accounting practices in 20 Chinese SOEs (as described in Chapters 4 to 6). In addition, the hypotheses testing of responsibility accounting style changes (and the associated planning and control influences) are similar to the "Theory Illustration Case" by employing a theoretical perspective (Goold and Campbell's (1991) Management Style) to demonstrate the longitudinal development of the responsibility accounting in a sample of SOEs (as described in Chapter 7). Furthermore, the comparisons between literature (or theory) research and findings of this study (as described in the footnotes of Chapter 2) are close to the "Theory Specification Case" type and suggest various propositions and hypotheses to be tested subsequently in larger scale studies.

#### 3.4 RESEARCH PROCEDURES

The following procedures were carried out from the research conception in October 1991 to writing up this thesis since February 1997.

## 3.4.1 <u>Literature Review</u>

The literature review has not just taken place early in the research sequence. In fact it has been an on-going process from the beginning to the end of this whole project in order to keep up to date with the literature related to this topic. The state of the literature search needed to be kept under close review, in consultation with my supervisor and colleagues, to avoid becoming overconcerned with other people's work at the expense of creativity. But some literature seemed to be uncritical catalogues of all that has been found which vaguely related to the topic regardless of the merits of the work. Therefore, an insightful evaluation of the literature was required to clarify the gaps in the field and the way in which the proposed search is intended to fill them (Gill and Johnson 1991: 21).

Another issue was that the literature concerning the responsibility accounting was limited to publications in the Chinese accounting textbooks and journals and they largely referred to the basic concepts and principles of responsibility accounting without much description on the contemporary practices, problems and solutions of its operation in the Chinese enterprises. Furthermore, responsibility accounting (and also management accounting) articles published in the international accounting journals were limited as well. Despite this lack of prior research situation, extensive and intensive effort has been spent on the literature search from the following avenues in the UK, China and Hong Kong (including local and overseas publications):

- (1) accounting and management textbooks;
- (2) accounting and management journals;
- (3) accounting research projects;
- (4) accounting conference presentations;
- (5) government publications;
- (6) accounting and business magazines; and
- (7) newspapers.

# 3.4.2 <u>Preliminary Case Study</u>

As described in Section 1.8.1 in Chapter 1, during the one-month study visit to the Shanghai University of Finance and Economics (SUFE) in August 1991, the researcher visited 8 large-sized manufacturing SOEs in Shanghai to learn their accounting reform with specific focus on the management accounting development. From these interviews with the senior managements and observations in the plant tours, the researcher learnt a lot about the political, social, economical, organisational and behavioural factors affecting the management accounting development in China since the 1950s. The exposure gained from these preliminary interviews plus some literature review created a foundation to initiate a research proposal on this topic for the PhD programme.

## 3.4.3 Pilot Test

Sections 1.8.2 and 1.8.3 in Chapter 1 tell the successive stories of how the researcher prepared for the research proposal and presented it twice in Glasgow before he was admitted as a PhD student by the Department of Accounting and Finance in the University of Glasgow during the period from October 1991 to September 1992. As a pilot test before the final research design, a total of 13 SOEs (as listed in Section 1.1.4 in Chapter 1) were visited during the same period of time in order to have a better understanding of the contemporary issues related to the responsibility accounting systems operated in those SOEs.

## 3.4.4 Research Design

The researcher stayed in the University of Glasgow for the first 3-month "residential period" from January to March 1993 in order to (1) undertake course work; (2) carry out literature research; (3) meet with the supervisor regularly; (4) determine the research plan and timetable with the supervisor; and (5) set the research data collection instrument and agree with the supervisor. Eventually, the whole research design (see Sections 1.3 - 1.6 in Chapter 1) was completed at the end of March 1993 and then the data collection period commenced in April 1993.

## 3.4.5 Sample Selection

Since the "Case Study" approach has been adopted as the research method of this study, the "Sample Size" or number of enterprises to be investigated was limited. The following criteria have been decided for selecting some Chinese enterprises as research subjects:

- (1) State-Owned Enterprises (SOEs)<sup>1</sup>; either
- (2) Wholly SOEs; or
- (3) Shareholding SOEs (i.e. government is holding less than 100% of shares);
- (4) located in Beijing, Shanghai, Xiamen or Guangzhou<sup>2</sup>;
- (5) included 'manufacturing' and 'service' industries; and
- (6) number of employees at least 500.

During the data collection period from April 1993 to September 1995, the following 20 SOEs were selected as research subjects for investigation.

<sup>&</sup>lt;sup>1</sup> In the 1990s, SOEs still account as the majority of all the business entities in China in terms of national industrial output, assets investment, turnover and number of employees. Almost all the large and medium SOEs have been operating the responsibility accounting system in one way or another.

<sup>&</sup>lt;sup>2</sup> Many large and long-established SOEs are located in the coastal cities like these four whereby the economic development is rapid under the government designated policies and the inflow of foreign investment. Furthermore, the researcher has close connections with the top universities in these four cities. Through the assistance of the faculty members in these Chinese universities, the researcher has been introduced to the senior managements of the targeted SOEs.

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	Location/Enterprise Name	Business Nature	Size@
1	Beijing No.3 Cotton Mill*	Textiles Manufacturing	Large
2	Beijing Friendship Hotel*	Hotel Services	Large
3	Beiren Printing Machinery Holdings Ltd.#	Machine Manufacturing	Large
4	Beijing Instrument Machine Tool Works*	Machine Manufacturing	Medium
5	Beijing Chunshu Rectifier Factory*	Machine Manufacturing	Medium
6	Beijing Electrostatic Equipment Factory*	Machine Manufacturing	Small
7	Shanghai No.5 Iron & Steel Works*	Iron & Steel Manu.	Large
8	Shanghai Xinhu Iron & Steel Works*	Iron & Steel Manu.	Large
9	Shanghai Metallurgical Equipment Factory*	Machine Manufacturing	Large
10	Shanghai No.2 Cotton Mill#	Textiles Manufacturing	Large
11	Shanghai No.1 Department Store#	Retailing Services	Large
12	Shanghai Crane & Conveyor Works*	Machine Manufacturing	Medium
13	Shanghai Measuring & Cutting Tool Instruments Factory*	Instrument Manufacturing	Medium
14	Xiamen Fork Lift Truck Plant*	Vehicle Manufacturing	Medium
15	Xiamen Luquan Industries General Company*	Beverage Manu.	Small
16	Guangzhou Nan Fang Building Group Ltd.#	Retailing Services	Large
17	Guangzhou Friendship Department Store#	Retailing Services	Medium
18	Guangzhou Dongshan Department Store#	Retailing Services	Medium
19	Guangzhou Lonkey Industrial Co. Ltd.#	Consumables Manu.	Medium
20	Guangzhou Nan Fang Flour Mill#	Food Manufacturing	Medium

<sup>\*</sup> Wholly SOEs before and after 1992.

For more background information of the above 20 SOEs, refer to Tables 1A-E in Appendix 1.

<sup>#</sup> Converted into Shareholding Enterprises since 1992 or 1993.

 <sup>@</sup> Small-Sized Enterprise = 501 - 900 employees
 Medium-Sized Enterprise = 901 - 2,500 employees
 Large-Sized Enterprise = 2,501 or over employees

# 3.4.6 Data Collection Instrument Design

After extensive literature review and intensive enterprise visits (pilot test), a semi-structured research instrument was designed for interviewing participants and agreed with the supervisor at the end of March 1993. The research instrument is attached in both Case Analyses (Volume 2) and Data Analyses (Volume 3) for easy reference. The interview covered the following issues:

Section 1	Histor	ry and Background			
Section 2	Legal	Legal Form and Organisation Structure			
Section 3	Finan	Financial Indicators			
Section 4	Econo	omic Responsibility Contract System (ERCS)			
Section 5	Planni	ing System			
	5.1	Organisation Structure			
	5.2	Strategic Themes			
	5.3	Broad Strategic Thrusts			
	5.4	Long-Term Plans			
	5.5	Short-Term Plans			
	5.6	Setting Targets Through Internal Responsibility Contracts			
	5.7	Setting Targets Through Budgets			
	5.8	Capital Budgeting			
	5.9	Transfer Pricing			
Section 6	Contr	ol System			
	6.1	Decentralisation and Control			
	6.2	Agreeing Targets			
	6.3	Reporting Requirements			
	6.4	Performance Measurement Criteria			
	6.5	Rewards and Incentives			

There are some 'open-ended questions' under each of the above sections in order to probe into the details of every factor and variable defined in the research design. Based on these open-ended questions, data and information were collected during the repeated interviews in the 20 SOEs.

## 3.4.7 Data Collection

During the data collection period from April 1993 to September 1995, the researcher travelled to Beijing, Shanghai, Xiamen and Guangzhou frequently in order to interview the senior managements of the selected 20 SOEs repeatedly. It could not expect to collect all the information or answer all the questions required in the first interview which should be quite informal and sometimes ended up at a dining table. In minority cases, tape recording was not permitted. A few meetings afterwards, a friendship between a manager and the researcher has been built upon which further and more relevant data or information could be acquired. At this stage, hardcopy of some required documents such as organisation chart, ERC, IRC, budget, etc. could be obtained as well.

The reasons for visiting each SOE at least two times across the years are:

- (1) to go through all the questions as far as possible in the lengthy semi-structured research instrument which could not be completed in one interview of about 3 to 4 hours;
- (2) to identify changes in the planning and control systems, and other related issues along the years as the legislation, ownership and economic influences (research variables) are carrying on (longitudinal study);
- (3) to verify the validity of information and data provided by the interviewees at different times (internal triangulation effect); and
- (4) to obtain more in-depth information and explanation (both verbal and documentation evidence) from the managers at interviews.

The following table is a summarized record of the many interviews on these 20 SOEs.

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EC@	Personnel Interviewed	Dates of Interviews#
SSW5(01)*	Mr Huang Han Bin (Chief Accountant)	(1) 13.09.91 (2) 25.01.92 (3) 16.09.92 (4) 27.09.92 (5) 10.09.93 (6) 06.09.94 (7) 07.02.95
XFLT(02)*	Mr Wang Zhao Liang (Chief Accountant)+ Mr Huang Tian Qing (Assistant Chief Accountant)+	(1) 22.09.92 (2) 08.06.93 (3) 15.09.93 (4) 14.09.94
GFDS(03)*	Mr Zhu Zu Xuan (Deputy-General Manager) Mr Ho Li Qian (Assistant Chief Accountant)	(1) 07.07.93 (2) 29.10.93
GDDS(04)*	Mr Chen Hang (Deputy-General Manager)	(1) 10.07.93 (2) 30.10.93
BEEF(05)*	Mr Quo Zhong Mao (Chief Accountant)+ Miss Li Xiao Min (Cost Accountant)+	(1) 22.05.93 (2) 30.08.93 (3) 03.09.94
SMCW(06)*	Mr Tao Yi Seng (Chief Accountant)+ Mr Ju Wei Ya (Ass. Chief Accountant)+	(1) 17.09.92 (2) 07.09.93 (3) 12.09.94 (4) 10.02.95
GNFF(07)*	Mr Cheng Qi Chang (Chief Accountant)+ Mr Lai Ping (Managing Director)+	(1) 11.12.93 (2) 11.08.94
GNFB(08)*	Mr Zheng Jian Zhong (Ass. General Mgr.)+ Mr Shaw Tim (Accounting & Fin. Mgr.)+	(1) 10.12.93 (2) 13.08.94
BCRF(09)*	Mr He Gao Hua (Chief Accountant)	(1) 31.08.93 (2) 30.08.94 (3) 12.09.95
BIMT(10)*	Mr Wu De Cheng (Chief Accountant)	(1) 01.09.93 (2) 01.09.94
SDS1(11)	Ms Lee Shu Hua (Chief Accountant)	(1) 11.09.93 (2) 05.09.94 (3) 10.02.95
SCCW(12)*	Ms Zhu Mei Di (Chief Accountant)+ Ms Zhu Zhi Mei (Deputy Finance Manager of the Holding Enterprise)+	(1) 06.09.94 (2) 12.01.95
SMEF(13)*	Mr Weng Wei Shan (Finance Manager) Ms Tao Wen Quen (Ass. Finance Manager)	(1) 12.09.91 (2) 28.05.93 (3) 08.09.94 (4) 06.02.95
SCM2(14)*	Ms Zhou Wei Min (Chief Accountant)	(1) 15.09.91 (2) 10.09.93 (3) 12.09.94 (4) 08.02.95
SXSW(15)*	Mr Ni Zhong Fong (Ass. Chief Accountant) Mr Zhang Ke Qin (Financial Accountant)	(1) 11.09.93 (2) 07.09.94 (3) 12.01.95

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EC@	Personnel Interviewed	Dates of Interviews#
GLIL(16)*	Ms Huang Yan Qing (Finance Manager)	(1) 29.10.93 (2) 01.04.94 (3) 12.08.94
XLIG(17)	Ms Lin Chu Zhi (Deputy General Manager) Mr Ye Ren Chu (Administration Manager)	(1) 17.09.93 (2) 14.09.94
BCM3(18)*	Mr Hsu Ching Soon (Chief Accountant)	(1) 04.09.93 (2) 31.08.94 (3) 13.09.95
BFSH(19)	Ms Zhang Lin (Finance Manager)+ Mr Sun Yu Qing (Ass. Finance Manager)+	(1) 04.09.93 (2) 31.08.94 (3) 11.09.95
BPMH(20)	Ms Zhang Wei Fen (Finance Manager)	(1) 02.09.93 (2) 30.08.94 (3) 15.09.95

<sup>@</sup> Enterprise Code (Number) - See Abbreviations on front page xii for the full names.

Usually, each interview could only last for one morning or one afternoon (about 3-4 hours) due to other business occupied by the manager(s) and the feeling of fatigue of both the interviewer and the interviewee(s). But sometimes the travelling hours were quite long because of the poor traffic conditions especially in Shanghai and Guangzhou. Therefore, the researcher used to ride on his bicycle from the Shanghai University of Finance and Economics to the targeted enterprises in Shanghai. A round-trip to Shanghai No.5 Iron and Steel Works (located at the northeastern suburb) would take three hours if the researcher was in good physical condition!

## 3.4.8 Data Analyses

During the data collection period from April 1993 to September 1995, "*Data Transcription*" was carried out in parallel. In fact, data transcription was the first step of the data analysis. Based on the semi-structured interviews, data and information were collected during the interviews with the senior managements of the 20 selected SOEs. Then these data and information recorded in

<sup>\*</sup> Tape recording was allowed.

<sup>#</sup> Although most the above 20 SOEs were visited after 1992 when the legislation, ownership and economic changes had taken place, all the interviewees were asked to compare the differences in their planning and control systems, and other related issues before and after 1992.

<sup>+</sup> Participants were interviewed separately.

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tapes and draft papers, and documents provided by the interviewees were transcribed into a standard format or report called "*Data Analysis*" for each SOE. The 20 sets of "Data Analyses" are bound in Volume 3. The contents layout of each Data Analysis was in accordance with the sequence of the interview. Relevant descriptions, figures and examples are referring to the specific questions in the research instrument for data source trail.

Each Data Analysis was updated after the SOE had been visited again. The following table indicates the completion dates and last review dates of these 20 Data Analyses.

EC*	C. Date#	R. Date@	EC*	C. Date#	R. Date@
SSW5(01)	28.01.94+	07.02.96	SDS1(11)	29.12.94	12.03.96
XFLT(02)	04.02.94	01.03.96	SCCW(12)	18.01.95	17.03.96
GFDS(03)	23.02.94	06.03.96	SMEF(13)	06.02.95	19.03.96
GDDS(04)	01.03.94	06.03.96	SCM2(14)	28.02.95	18.03.96
BEEF(05)	07.03.94	06.03.96	SXSW(15)	31.03.95	22.03.96
SMCW(06)	15.06.94	04.02.96	GLIL(16)	07.04.95	23.03.96
GNFF(07)	30.04.95	09.03.96	XLIG(17)	03.06.95	24.03.96
GNFB(08)	23.05.95	10.03.96	BCM3(18)	05.12.95	24.03.96
BCRF(09)	26.08.95	10.02.96	BFSH(19)	12.01.96	24.03.96
BIMT(10)	31.08.95	10.03.96	BPMH(20)	30.01.96+	24.03.96

<sup>\*</sup> EC = Enterprise Code/Number

<sup>#</sup> C. Date = Completion Date (complete the first report)

<sup>@</sup> R. Date = Last Review Date (review the accuracy and update information obtained in post-completion date interviews)

<sup>+</sup> First and Last Data Analysis Completion Dates

As a result of the long data collection period (2.5 years), the 20 Data Analyses could only be fully completed at the end of January 1996 and then they were finally reviewed in the next two months as shown in the table above. The major purpose of these 20 Data Analyses is to organise and interpret the 20 case study data collected in order to help the readers understand the planning and control systems actually practised in these 20 SOEs and their changes due to the various legislation, ownership and economic reforms which happened in recent years (refer to Sections 3.2.3(2) & (3)). Furthermore, the rich and evocative data describing organisational phenomena and their environmental contexts via interviews provide hints and insights for future empirical research relating to the responsibility accounting in China.

## 3.4.9 Case Analyses

During the third "residential period" staying in University of Glasgow for 1 month in July 1995, the researcher agreed with the supervisor to develop another 20 sets of "Case Analysis" which were based on the previous 20 sets of "Data Analysis" (data transcriptions). The major purposes of these 20 "Case Analyses" are:

- (1) to trace each planning and control **parameter** to the respective **questions** in the semi-structured research instrument;
- (2) to identify the factors affecting each planning and control parameter;
- (3) to quantify as objective as possible the degree of **planning or control influence** on each factor and parameter; and
- (4) to summarize all the planning and control parameters and represent the final results into the responsibility accounting style grid.

Most of the selected planning and control parameters and the essence of the responsibility accounting style grid come from the literature of Goold and Cambell<sup>3</sup>. The 20 sets of "Case Analysis" are bound in Volume 2 which is an extension or appendix to this "*Thesis*" (i.e. Volume

1). As indicated in the following table, all of these 20 Case Analyses were completed after

<sup>&</sup>lt;sup>3</sup> Goold, M. & Campbell, A. 1991. Strategies and Styles: The Role of the Centre in Managing Diversified Corporations. Blackwell Business.

finishing of all the 20 Data Anal	vses as mentioned i	in Section 3.4.8 above.

EC*	DA Date#	CA Date@	EC*	DA Date#	CA. Date@
SSW5(01)	28.01.94	21.07.95+	SDS1(11)	29.12.94	17.06.96
XFLT(02)	04.02.94	07.04.96	SCCW(12)	18.01.95	20.06.96
GFDS(03)	23.02.94	14.07.95	SMEF(13)	06.02.95	26.06.96
GDDS(04)	01.03.94	05.04.96	SCM2(14)	28.02.95	03.07.96
BEEF(05)	07.03.94	30.04.96	SXSW(15)	31.03.95	09.07.96
SMCW(06)	15.06.94	12.05.96	GLIL(16)	07.04.95	29.07.96
GNFF(07)	30.04.95	24.05.96	XLIG(17)	03.06.95	07.08.96
GNFB(08)	23.05.95	31.05.96	BCM3(18)	05.12.95	11.08.96
BCRF(09)	26.08.95	15.06.96	BFSH(19)	12.01.96	01.09.96
BIMT(10)	31.08.95	17.06.96	BPMH(20)	30.01.96	05.09.96+

<sup>\*</sup> EC = Enterprise Code/Number

Both "Data Analyses" and "Case Analyses" are important "documentation work" for this researcher and for other investigators to repeat the same or similar study in order to test its "reliability" (Yin 1984: 45).

# 3.4.10 Thesis Writing

Immediately after finishing the 20 "Case Analyses" in September 1996, the "*Thesis Writing*" commenced. With continuous hardwork, the first full draft of this thesis was completed in March 1997 and submitted to the supervisor. Based on the supervisor's comments, substantial amendments had been made before the second full draft was submitted to the supervisor at the end of August 1997. Then, after receiving further suggestions from the supervisor, additional amendments had been made before the third full draft was submitted to the external examiner via

<sup>#</sup> DA Date = Data Analysis Completion Date

<sup>@</sup> CA Date = Case Analysis Completion Date

<sup>+</sup> First and Last Case Analysis Completion Dates

the supervisor in February 1998.

# 3.5 CONCLUSION

By using the "Social Science Research Paradigms" suggested by Burrell and Morgan (1979), it can be seen that the "interpretive research paradigm" is the most appropriate methodology to be employed for the present study. This choice of "naturalistic research paradigm" is further supported by the work of Morgan and Smircich (1980) in classifying 6 types of ontological assumptions. As recommended by many accounting researchers during the past decade, "Case Study Approach" should be an appropriate method to be adopted in this management accounting research which is more "exploratory" oriented (Kaplan 1986d). Given the objective of this study is to examine the process, obstacles and adaptation to changes of responsibility accounting in Chinese business enterprises, fieldwork in the form of exploratory case studies seems appropriate. The number of diverse and potentially influential variables effecting this would be unmanageable unless some link to the literature was made. The development and use of hypotheses should therefore be seen as providing boundaries for the investigation rather than complying with the strict hypothesis-deductive approach of positivism.

Although the steps proceeded during this research project were quite time-consuming and subject to many constraints, nevertheless, experiences and results have shown that they were correctly employed and put into actions in view of the unique business and social environments in China. Bearing in mind that management accounting development in China is just at an infant stage and many Chinese managers do not understand much about accounting research, this researcher has to obtain the first-hand knowledge of the subject under investigation by putting himself within the frame of reference of the participants (or SOE's managers).

This researcher believes that by using "Exploratory Case Study" in this preliminary investigation, it can generate ideas and hypotheses on many aspects related to the responsibility accounting in China which may be subject to rigorous empirical testing at a later stage (Scapens 1990; Ryan, Scapens & Theobald 1992).

# CHAPTER 4: ANALYSIS OF DATA I - ENTERPRISES INFORMATION

#### 4.1 INTRODUCTION

This is the first of the three data analysis chapters describing the general information of the 20 SOEs (subjects) investigated in this research. Firstly, background information of the subjects concerning their nature of business, ownership and total assets are summarised by various tables with explanations (Section 4.2). Secondly, the financial performance of the subjects in terms of turnover and profitability are analysed and evaluated for the period from 1992 to 1995 (Section 4.3). Thirdly, the Economic Responsibility Contract System (ERCS) adopted by the subjects during the past ten years are narrated in respect of their durations, targets and changes (Section 4.4). Finally, a summary of facts highlighting the major observations in the previous sections is given at the end of this chapter (Section 4.5).

#### 4.2 BACKGROUND OF SUBJECTS

Despite the constraints and difficulties in selecting the sample for this research as described in Section 1.9(5) of Chapter 1 (i.e. research limitations), a portfolio of 20 SOEs has been investigated which includes manufacturing and servicing industries, wholly state-owned and shareholding enterprises, different scales of operation and entities in four cities from north to south in China. Among the existing 190,000 large- and medium-sized SOEs in China, these 20 SOEs represent a very insignificant percentage of the whole population. Therefore, it is not expected to achieve any generalisability from the findings of this study.

### 4.2.1 Nature of Business

The 20 SOEs in the sample can be classified according to the following three criteria (see Tables 1A-1E in Appendix 1):

# (A) Geographical Location & Business Type

Cities	Manufacturing Business	Servicing Business
Beijing	BEEF(05), BCRF(09), BIMT(10), BCM3(18), BPMH(20)	*BFSH(19)
Shanghai	SSW5(01), SMCW(06), SCCW(12), SMEF(13), SMC2(14), SXSW(15)	SDS1(11)
Xiamen	XFLT(02), XLIG(17)	
Guangzhou	GNFF(07), GLIL(16)	GFDS(03), GDDS(04), GNFB(08)
	15 SOEs (75%)	5 SOEs (25%)

<sup>\*</sup> Enterprise Code & Number

# (B) Geographical Location & Type of Industry

Cities	Beijing	Shanghai	Xiamen	Guangzhou
Manufacturing : Iron & Steel Textiles Machine & Tool	18# 10,20 05,09	01,15 14 06,12,13	.02	
Electronic Equip. Motor Vehicle Food & Beverage Consumables			02 17	07 16
SOE Count (15)	5	6	2	2
Servicing: Department Store Hotel	19	11		03,04,08
SOE Count (5)	1	1	0	3
Total Count (20)	6	7	2	5

<sup>#</sup> Enterprise Number

# (C) Geographical Location & Size by No. of Employees

Cities	Beijing	Shanghai	Xiamen	Guangzhou
Small SOE (501-900)	05#		17	
Medium SOE (901-2,500)	09,10	06,12	02	03,04 07,16
Large SOE (Over 2,500)	18,19 20	01,11,13, 14,15		08
Total Count	6	7	2	5

<sup>#</sup> Enterprise Number

The size of an enterprise is defined by its number of employees as stated in the above table.

# 4.2.2 Ownership

Among the 20 SOEs, there are two types of ownership, namely, "Wholly SOE" and "Shareholding SOE" which are presented as follow (see Tables 1A-1E in Appendix 1):

Cities	Beijing	Shanghai	Xiamen	Guangzhou
(A) Wholly SOE (before 1992) Wholly SOE (after 1992)	BEEF(05) BCRF(09) BIMT(10) BCM3(18) BFSH(19)	SSW5(01) SMCW(06) SCCW(12) SMEF(13) SXSW(15)	XFLT(02) XLIG(17)	
SOE Count	5	5	2	0
(B) Wholly SOE (before 1992) Shareholding (after 1992)	BPMH(20)*	SDS1(11)* SCM2(14)*		GFDS(03) GDDS(04) GNFF(07) GNFB(08) GLIL(16)#
SOE Count	1	2	0	5

<sup>\*</sup> Shares listed in the Shanghai Stock Exchange.

<sup>#</sup> Shares listed in the Shenzhen Stock Exchange.

The above 12 SOEs under category A remain "Wholly SOE" before and after 1992. Whereas, the 8 SOEs under category B were transformed from "Wholly SOE" into "Shareholding SOE" in 1992 and 1993.

For the 4 unlisted, shareholding enterprises, the shareholders and their percentages of shareholding are as shown below:

Enterprises	Government	Employees	Total
GFDS(03)	85%	15%	100%
GDDS(04)	80%	20%	100%
GNFF(07)	84%	16%	100%
GNFB(08)	75%	25%	100%

For the 4 listed shareholding enterprises, the shareholdings and their percentages of shareholding are shown below:

Enterprises	Government	Other Enterprises	Public & Employees	Total
BPMH(20)	62.5%	25%	12.5%	100%
SDS1(11)	60%	21%	19%	100%
SCM2(14)	63%	27%	10%	100%
GLIL(16)	60%		40%	100%

The government is the majority shareholder holding over 50% of the shares in all the above 8 shareholding enterprises. In other words, the government or its authorized agencies can still influence the planning and operation of these shareholding enterprises through the board meetings or by other means.

Shareholding transformation or privatization of the SOEs in China is in a preliminary stage or trial period. Among the total 400,000 SOEs, about 9,200 (2%) have been transformed into shareholding enterprises at the end of 1996. There are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for approving the conversion into shareholding enterprises (Chow et al 1994: 115-116; Liu & Zhang 1996: 50-53). In addition, in order to keep close macroeconomic control, it is the government policy not to privatize some industries, such as the steel, transportation, power and telecommunication industries.

Geographically, Guangzhou and Shanghai have more shareholding enterprises than the other cities because they are close to the two stock exchanges and their economic development is earlier and faster than the other cities. In fact, Shenzhen has more shareholding enterprises than Guangzhou since one stock exchange is located at Shenzhen, but there are no enterprises in Shenzhen selected for investigation in this study.

### 4.2.3 Total Assets

Total assets is defined as the sum of fixed assets and current assets. Measuring in terms of this criterion, the 20 SOEs are classified as follows (see Tables 1A-1E in Appendix 1):

Total Assets*	Beijing	Shanghai	Xiamen	Guangzhou
25 - 100	BEEF(05) BCRF(09)	SCM2(14)	XFLT(02) XLIG(17)	GFDS(03) GDDS(04)
101- 200	BIMT(10)	SMCW(06) SCCW(12) SMEF(13)		GNFB(08)
201- 500	BCM3(18) BFSH(19)	SXSW(15)		GNFF(07) GLIL(16)
Over 500	BPMH(20)	SSW5(01) SDS1(11)		

<sup>\*</sup> In Rmb'm

It is interesting to note the relationship between the total assets and number of employees of the 20 SOEs if *Linear Regression Model* is applied as shown below:

Set the formula : Y = a + bX

Where : Y = Total Assets (in Rmb'm)

X = No. of Employees (in thousand)

a & b = Constants

[There are 20 readings for Y and X as found in Tables 1A-1E]

Equations :  $\sum Y = na + b(\sum X)$ 

 $\sum XY = a(\sum X) + b(\sum X^2)$ 

Solve Equations :  $Y = -277 + 203X^*$ 

[Y and X can be termed as independent and dependent variable

respectively]

\* See SPSS output per Table 4 in Appendix 1

The power of this linear equation (formula) to predict the total assets by the number of employees can be represented by the "Coefficient of Correlation" (R) which is within the range of either 0 to +1 or 0 to -1. Based on the 20 readings for Y and X as shown in Tables 1A-1E, it is calculated that R=0.91507 (per Table 4) which means there is a close relationship between these two variables. From this statistical observation, both total assets value and number of employees can be used as indicators of the enterprise size in this study or perhaps in other research samples.

All the 8 listed or private shareholding enterprises as shown in 4.2.2(B) have revalued their total assets, in particular the fixed assets, before the conversion from wholly state-owned to shareholding enterprises. Under the supervision of the State Assets Administration Bureau, there are rules and regulations governing this specific purpose of asset revaluation before the shareholding transformation in order to determine the net worth or shareholders' fund of the enterprise (see Section 2 of Data Analysis 3 in Volume 3 [p.56]). The Bureau has authorised over 1,000 CPA firms to perform the asset revaluation service and produce certification.

#### 4.3 FINANCIAL PERFORMANCE

## 4.3.1 Turnover

The turnover figures of the 20 SOEs during the years of 1992 to 1995 (some have not been disclosed) are shown in Tables 1A-1E of Appendix 1. Most of these SOEs have achieved different extents of growth in terms of turnover except there were some year to year fluctuations in 7 SOEs (i.e. Enterprise Nos.05,07,09,13,14,15,20) particularly in 1994 due to the effects which resulted from the macro-economic policies implemented by the government since July 1993 (see Section 3.5 of Case Analysis 7 in Volume 2 [p.148]). The worst one is BCRF(09) whose sales have declined during these years and losses were incurred in 1994 and 1995 because of product/market strategic problems and keen competition (see Section 3.5 of Case Analysis 5 in Volume 2 [p.96]).

Going into more detail, Table 5 in Appendix 1 indicates the turnover growth percentages (compared with last year) of the 20 SOEs in the years of 1993, 1994 and 1995. The following 5 SOEs have high turnover growth rates (over 20%) during this 3-year period:

Enterprise	Business Nature	Annual Turnover Growth %		owth %
Code		1993	1994	1995
GFDS(03)	Department Store	52	27	
GDDS(04)	Department Store	74	50	
SMCW(06)	Instrument & Tool Manufacturing	61	44	37
GNFB(08)	Department Store	53	24	
XLIG(17)	Beverage Manu.	89	38	

The nationwide macroeconomic control mechanisms instituted since July 1993 has adversely affected the financial performance of most of the industries in China. However, the negative impact seems to have a lighter effect on the retailing industry or consumable products as evidenced by the above figures concerning the turnover growth rates of the three department stores in Guangzhou, the small measuring and cutting tools factory in Shanghai, and the Coca-

Cola manufacturing plant in Xiamen. Obviously, the demands for these mainly consumable products remain high in respect of the fast growing economy and a huge population of 1.2 billion in China.

The decline of average growth percentages (i.e. 33% [1993], 16% [1994], 16% [1995]) of all these 20 SOEs as shown in Table 5 can reinforce the macroeconomic control effects (bank credit control, interest rate control, capital project control, etc.) which emerged significantly in 1994 and 1995. Many economists around the world have forecasted the moderate and planned relaxation of these control measures in 1996 and 1997 which would keep the economic growth in China going in a fast, steady and healthy manner.

# 4.3.2 Profitability

Looking into the Profit Before Tax (PBT) of the 20 SOEs as shown in Tables 1A-1E, four enterprises, namely, BEEF(05), BCRF(09), SMEF(13) and BCM3(18), were either break-even or loss making in some of the years from 1992 to 1995. Further, Table 5 in Appendix 1 indicates the annual PBT growth rates (compared with last year) of the 20 SOEs during the same period of time. The overall annual growth rates of all the 20 SOEs were negative (i.e. -6% and -5% respectively) for 1994 and 1995. The major reasons leading to the poor financial performance of these enterprises during the last four years were:

- (a) high inflation rates (1993-22.7%, 1994-21.7%, 1995-14.7%);
- (b) substantial bank loan interest (1995 prime rate 14%);
- (c) accelerated depreciation\*;
- (d) bad debt written off\*;
- (e) change of costing method from full absorption to manufacturing\*;
- (f) obsolete products;
- (g) outdated production facilities and technologies;
- (h) lack of capital/fund for fixed assets investment;
- (i) keen local and overseas' competition;
- (j) short-sighted product/market strategies;
- (k) quality of management and control;

- (1) large redundant workforce;
- (m) non-productive wages and benefits for (l);
- (n) higher value-added tax; and
- (o) macroeconomic control measures (especially in Beijing).
- \* (c), (d) and (e) are related to the implementation of the first Enterprise Accounting Standards since July 1993.

For more details, refer to Section 3 of Case Analysis 5 [p.96], Case Analysis 9 [p.196], Case Analysis 12 [p.272], Case Analysis 13 [pp.298-299] and Case Analysis 18 [pp.431-432] in Volume 2.

Tables 1A-1E in Appendix 1 also show the PBT as percentages of Turnover for the 20 SOEs during the years from 1992 to 1995. The last column in Table 5 indicates the average PBT as a percentage of Turnover of the 20 SOEs over the same period of years. The latter set of figures reveals that 9 SOEs attained less than 5% of average profit margin in the last four years, and two of them (i.e. BCRF(09) and SMEF(13)) even had an average loss margin.

Among the 8 shareholding enterprises, except GNFB(08) and SCM2(14), their average profit margins over the years were above the overall average of 5.3% (all 20 SOEs) especially the two listed enterprises (i.e. GLIL(16) and BPMH(20)). The two wholly SOEs, XLIG(17) and BFSH(19), also attained average profit margins of 9.1% and 11.3% respectively due to the booming demands for their products and services.

# 4.4 ECONOMIC RESPONSIBILITY CONTRACT SYSTEM (ERCS)

## 4.4.1 ERC Periods

As shown in Tables 1A-1E in Appendix 1, other than XFLT(02), BFSH(19) and BPMH(20), the other 17 SOEs have signed one or two ERCs with the local or municipal government in the last ten years. *The normal duration of the ERC was 5 years* except the two ERCs of BEEF(05) and BCRF(09) which were standing and subject to annual review, and also the two ERCs of GNFF(07) which were three and two years respectively.

Although ERC has not been formally applied to XFLT(02) and BFSH(19), nevertheless, these two enterprises have agreed with the local government similar terms and targets as the other SOEs in this study and therefore effectively are subject to ERC. BPMH(20) has not entered into any ERC since its establishment as a shareholding enterprise in 1993, but its holding SOE has been undertaking ERC since the mid-1980s.

# 4.4.2 ERC Targets

There are different forms of ERCs for the SOEs to choose from and with different financial and non-financial targets. The chosen format is usually mutually agreed between the enterprise and the government. The targets agreed in the old and existing ERCs of these enterprises as shown in Tables 1A-1E are summarised below:

- (a) PBT in the base (first) year<sup>1</sup>;
- (b) PBT annual growth rate;
- (c) Percentage of targeted PBT handover to the local government;
- (d) Percentage of over-targeted PBT handover to the local government;
- (e) Income tax (on PBT) rate or exemption;
- (f) Foreign exchange to be gained;
- (g) Gross wages linked up with targeted PBT;
- (h) Gross wages increase in line with over-targeted PBT<sup>2</sup>;
- (i) Expenditure levels i.e. R&D, depreciation, etc.;
- (j) Bank loan repayment exempted from income tax;
- (k) Technology improvement level; and
- (1) Other qualitative targets (see Section 4.4 of Case Analysis 7 in Volume 2 [p.149]).

<sup>&</sup>lt;sup>1</sup> Usually determined according to the average annual profit of the three years preceding the base year for that specific enterprise.

<sup>&</sup>lt;sup>2</sup> The annual gross wages growth rate cannot exceed the profit growth rate and productivity per employee growth rate to ensure larger retained earnings for the enterprise and sufficient returns to the government.

For a full- and real-example of ERC, see Section 4 of Data Analysis 6 in Volume 3 [pp. 140-144].

# 4.4.3 ERC Replacement

All the 8 shareholding enterprises ceased their operating ERCs when they were converted from wholly SOEs to shareholding enterprises in 1992 and 1993. According to the rules and regulations governing the shareholding enterprises, either listed or private-owned, they are subject to the new taxation system implemented since January 1994 and any existing ERCs must be abandoned. In fact, the other wholly SOEs are replacing their existing ERCs by the new taxation system just like the shareholding enterprises (see Section 4.7 of Case Analysis 6 in Volume 2 [p.123]) (Liu & Zhang 1996: 140-141).

The sources of tax as shown in Tables 1A-1E are mainly sales, income and other municipal taxes. In some cases (i.e. BEEF(05), SMCW(06), BCRF(09) and BIMT(10)), the financial targets remain the same even though no formal ERCs have been carried on. Additional targets such as accounts receivable, zero PBT and capital expenditure can be found in some enterprises.

In general, the labour efficiency and productivity performances have been increased after shareholding conversion compared with the ERC system because without good profit there would be no handsome dividends distributed and for the listed enterprises the share market price would be affected as well. However, under the ERC system, once the target profit has been achieved, the predetermined wages, bonuses and benefits-in-kind will be awarded plus other favourable terms like bank loan repayment could be tax deductible. Therefore, the shareholding enterprises have been facing higher pressure and challenge to enhance the overall economic efficiency year after year (see Section 4 of Data Analyses 3 & 16 in Volume 3 [pp.59-60 & 514-516]).

## 4.5 SUMMARY

- (1) Among the 20 SOEs investigated in this research, 75%(15) belong to the manufacturing business and 25%(5) are in the servicing business. (see 4.2.1(A))
- (2) Among these 20 SOEs, there are 5 machine and equipment production plants and 4 department stores which are the largest groups in the manufacturing and servicing industries respectively. (see 4.2.1(B))
- (3) Measured in terms of number of employees, there are 9 medium-sized and 9 large-sized SOEs of which the latter group are mainly located in Beijing and Shanghai. (see 4.2.1(C))
- (4) There are 12 entities which remain wholly SOEs before and after 1992 without any concrete plans of shareholding transformation because there are a lot of stringent rules and regulations imposed by the government and Bank of China. (see 4.2.2)
- (5) There are 8 SOEs transformed into shareholding enterprises in 1992 and 1993. Half of these enterprises have been listed in either the Shanghai or Shenzhen Stock Exchange while the other 4 are private-owned shareholding enterprises. In all cases, the government is holding over 50% of the shares and, being the majority shareholder, the government can influence the planning and control systems of these shareholding enterprises. (see 4.2.2)
- (6) By using the simple linear regression analysis, it is discovered that there is a close relationship between the total assets value and the number of employees in these 20 SOEs. It may be suggested that both parameters can be used for categorizing the size of the SOEs in this study or in other research samples. (see 4.2.3)
- (7) The macroeconomic control measures enforced by the government since July 1993 have affected adversely the financial performance of these 20 SOEs in 1994 and 1995. Indications of stagnant or weakened turnover and profitability growth rates were revealed in the financial statements of most of these 20 SOEs. (see 4.3.1 & 2)

- (8) Other than the macroeconomic control effect, another 14 reasons explained by the interviewees of these 20 SOEs are listed as contributors to the unsatisfactory financial performance of these enterprises during the last few years. (see 4.3.2)
- (9) The high demands on consumable products have maintained good turnover and profit growth in certain industries such as department store, printing, food and drinks as observed in this sample of enterprises. (see 4.3.1 & 2)
- (10) In general, the shareholding enterprises (especially the listed enterprises) outperformed the wholly SOEs in terms of turnover and profitability in this sample of subjects during the period from 1992 to 1995.
- (11) The normal duration of the ERCs in most of these 20 SOEs was 5 years with a few exceptions of 2 to 3 years or of a standing (yearly review) nature. (see 4.4.1)
- (12) The general financial and a few specific non-financial targets agreed in the ERCs of these 20 SOEs are listed. (see 4.4.2)
- (13) Once a SOE is transformed into a shareholding enterprise, its operating ERC will be ceased and subject to different taxnets such as income, value-added, consumption, service and other municipal taxes. (see 4.4.3)
- (14) In fact, most of the ERCs have been and will be phased out in these 20 SOEs irrespective of the enterprise ownership (wholly or shareholding SOE), and replaced by the new taxation system adopted since January 1994. (see 4.4.3)

# CHAPTER 5: ANALYSIS OF DATA II - PLANNING INFLUENCE

#### 5.0 INTRODUCTION

Goold and Campbell (1991: 36) describe planning as the influence which concerns top management's efforts to shape strategies as they emerge and before decisions are taken. It is a measure of the top-down involvement of the headquarters (or top management) in major decisions, and of the contribution that the headquarters makes to the strategy proposals developed in the business units. It is through planning influence that the headquarters seeks to improve the quality of thinking that surrounds major decisions.

The headquarters' influence on the proposals made by business managers is a function not only of the objectives that are set and the instructions given, but also the atmosphere within which the unit managers operate. The organization structure, the review processes, the type of guidance from the headquarters, the way overlaps are managed and the way scarce resources are allocated, all have an effect on the headquarters' planning influence.

Soon after the inception of the People's Republic of China in 1949, all the industrial, commercial and public enterprises were transformed into "state-owned" by 1953. A State-Owned Enterprise (SOE) means all its assets or shares are fully-owned by the government or all the people in China. Then different ministries, bureaus and councils under the direction of the State Council (central government) in Beijing are responsible to administer and supervise their respective enterprises. The 20 Chinese enterprises investigated in this study are all SOEs. They are either wholly SOEs (12) with all the assets owned by the government or shareholding SOEs (8) whose major shareholders (over 50% of shareholding) are still the government. Therefore, in terms of agency theory, the government or its representatives (e.g. ministry, bureau, council, etc.) is/are the principal(s) and the enterprise management or managers is/are the agent(s).

These 20 SOEs are under the administration and supervision of their respective government

authorities as listed in the following table<sup>1</sup>.

SOE Code	Government Authorities	Notes
SSW5(01), SMEF(13), SXSW(15)	Ministry of Metallurgical Industry	1
XFLT(02), SMCW(06) BCRF(09), BIMT(10), SCCW(12), BPMH(20)	Ministry of Machine-Building Industry	2
GFDS(03), GDDS(04), GNFB(08), SDS1(11)	Ministry of Internal Trade	3
BEEF(05)	Ministry of Electronics Industry	4
GNFF(07), GLIL(16), XLIG(17)	China National Light Industry Council	5
SCM2(14), BCM3(18)	China National Textile Industry Council	6
BFSH(19)	National Tourism Administration Bureau	7

# Notes<sup>2</sup>

# (1) Ministry of Metallurgical Industry

Its major duty is (a) to *draw up strategies*, *plans*, *policies and economic regulations* for the development of the metallurgical industry (including iron and steel works); and (b) to provide information services to enterprises while *exercising supervision* over them if necessary.

# (2) Ministry of Machine-Building Industry

Its main duties are (a) to formulate strategies, policies, legislation and regulation for the

<sup>&</sup>lt;sup>1</sup> Different central and local government authorities/departments may have direct macroeconomic control measures on their respective SOEs at various degrees. The associated planning differences are tested in the Secondary Hypotheses H3 (location) and H4 (industry) respectively.

<sup>&</sup>lt;sup>2</sup> See China: Government Organisation & Personnel (Vol.1: Central Government). Huanan Economic Journal Ltd. (Hong Kong) 1995. (Information from State Council of PRC) Words in italic indicate the government planning influence on the SOEs in various activities.

development of the industry; (b) to give the industry guidance on the direction of its development; (c) to progressively build up an indirect management system for the industry; and (d) to boost the machinery and motor vehicles industry according to state industrial policies.

# (3) Ministry of Internal Trade

Its main duties are (a) to study and formulate principles, policies and commodity circulation system reform plans and to implement them; (b) to coordinate the planning, construction and management of national and regional commodity markets so as to foster the development of a unified commodity market system; (c) to draw up development strategies for the commodity circulation sector, plan for the construction of major facilities for commodity circulation, assist the State Planning Commission in maintaining a supply-demand balance and sufficient national stock of daily life essentials, work out market forecasts and disseminate market information; and (d) to administer the commodity circulation sector and promote reform of the operation mechanism of enterprises in the sector.

# (4) Ministry of Electronics Industry

Its major duties are (a) to formulate strategies, policies and regulations for the development of the electronics industry; (b) to plan and coordinate the growth of the industry's different sectors; (c) to speed up the industry's technological progress; (d) to foster the electronics market and the development of group enterprises while regulating the development of the industry at the macro-level; and (e) to provide information services.

# (5) China National Light Industry Council

Its major functions are (a) to *improve planning* for the light industry; (b) to implement industrial policies; and (c) to guide the industry at the macro-level and provide services.

## (6) China National Textile Industry Council

Its main duties are (a) to administer the textile industry with the focus on improving planning; (b) to implement textile industrial policies; (c) to guide the industry at the macro-level; and (d) to provide information services.

# (7) National Tourism Administration Bureau

Its major functions are (a) to draw up and implement mid- and long-term as well as annual plans for the development of the industry; (b) to examine and approve the designation of travel agents and hotels serving foreigners while exercising administration over them; (c) to formulate and implement strategies for expanding the tourist market; (d) to administer the formulation of regulations on fees, charges and statistical surveys of the industry; (e) to map out, implement and supervise the tourist industry's financial and accounting systems, the system of foreign exchange revenues and expenditures, and the wage system.

The almost half-a-million industrial, commercial and public state enterprises (including their related organisations) makes it necessary for the ministries, councils and bureaus in the central government (Beijing) to delegate the work to their corresponding authorities located in all provinces and cities in order to supervise their respective SOEs scattered around the whole country. In addition to these government authorities, the SOEs are also under the administration of and influence from the local or municipal governments acting as additional supervisory bodies. This may cause the geographical or location differences in the planning influences on the 20 SOEs investigated in this study (tested in the Secondary Hypothesis H3).

Before the economic reforms started in 1979, the central planning system dictated all planning and control (long- and short-term) in the SOEs. Therefore, all the SOEs were just acting as a vehicle to carry out the activities according to the commands directed from their government authorities. After the economic reforms took off in the 1980s, most of these central government authorities under the State Council have been restructured. They started to work out the strategic or long-term plans with the SOEs under their administration in a partnership style to enhance participation from the enterprise managements, but in many cases, the top managements were only consulted at the planning process.

Turning into the 1990s, the promulgation of the market economy and SOE operation mechanisms transformation have pushed further reconstruction of the State Council organisations and redefined their roles and functions. Hence the use of guidance and promotion of reform have been adopted as described in the earlier notes to the above 7 government authorities. The formulation

of strategies, plans, policies and regulations are not totally top-down processes, but initiation and participation from the SOEs are required. However, the degree of involvement varies from industry to industry and from enterprise to enterprise depending on many factors. Some of these factors will be addressed in this chapter.

The measuring parameters used by Goold and Campbell (1991) are adopted in this study to gauge the extent of planning influence (as an external dimension) in each of the selected 20 SOEs from their respective government authorities. The degree of planning influence on each SOE will in turn affect the planning influence (as an internal dimension) of the top management (e.g. general manager, board of directors, etc.) in the responsibility centres within the enterprise<sup>3</sup>.

To measure the planning influences on the 20 SOEs and their responsibility centres (both external and internal dimensions) in this study, the following 7 variables are employed:

- 5.1 Organisation Structure\*;
- 5.2 Review Process\*;
- 5.3 Strategic Themes, Thrusts and Suggestions\*;
- 5.4 Long-Term Planning (Resource Allocation)\*;
- 5.5 Short-Term Planning/Budgeting\*;
- 5.6 Internal Responsibility Contracts#; and
- 5.7 Management of Interdependencies (Transfer Pricing)\*.
- \* All the 6 planning influence variables used by Goold and Campbell are employed in this study.
- # This is the additional variable which is the core of the responsibility accounting system adopted in the SOEs in China.

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<sup>&</sup>lt;sup>3</sup> Because of this direct relationship between the external and internal dimensions of planning influence, the measurement procedures and the scores on the two dimensions are combined.

Under each of the above 7 variables, there are 3 to 4 sub-variables or parameters to further measure and analyse the extent of planning influences before and after 1992. In each variable or parameter, the measurement is on a 5-point scale ranging from Greatest Planning Influence (0) to Least Planning Influence (4). The detailed ranges are as follows:

Very High	[VH]	(0.0 - 0.5)
Very High-High	[VH-H]	(0.6 - 1.0)
High	[H]	(1.1 - 1.5)
High-Medium	[H-M]	(1.6 - 2.0)
Medium	[M]	(2.1 - 2.5)
Medium-Low	[M-L]	(2.6 - 3.0)
Low	[L]	(3.1 - 3.5)
Very Low	[VL]	(3.6 - 4.0)

For each SOE, sub-variable scores are combined to give an average measure for a variable e.g. organisation structure. Each sub-variable has equal weighting and the scores pre- and post-1992 are calculated in this way. Similar procedures are used to determine the planning scores of the other 6 variables pre- and post-1992. The higher the score, the lower planning influences for the external and internal dimensions in the responsibility accounting system of a SOE.

Then the 2 weighted-averages of all the 7 variables in each SOE are equal to the overall planning influences (external and internal dimensions combined) before and after 1992 (for comparison and hypothesis testing purposes). By going through Sections 5.1-5.7 of any one of the Case Analyses in Volume 2, the quantification process of this study is demonstrated. The justification and elaboration of the sub-variables are also provided at Volume 2.

Tables 2A-G in Appendix 1 summarize all the planning parameter scores before and after 1992 for all the 20 SOEs. For better visual pictures of these planning scores and their changes before and after 1992, each variable and their corresponding parameters are depicted in the following High-Low Charts (see Appendix 2):

Chart 5.1	Organisation S	Structure	
	Chart 5.1.1	Responsibility Centre	
	Chart 5.1.2	Decentralisation	
	Chart 5.1.3	Appointment	
	Chart 5.1.4	Interdependencies	
Chart 5.2	Review Proces	SS	
	Chart 5.2.1	Central Planning	
	Chart 5.2.2	Operation	
	Chart 5.2.3	Participation	
	Chart 5.2.4	Review & Communication	
Chart 5.3	Strategic Ther	nes, Thrusts & Suggestions	
	Chart 5.3.1	Themes	
	Chart 5.3.2	Thrusts	
	Chart 5.3.3	Suggestions	
Chart 5.4	Long-Term Pl	ans	
	Chart 5.4.1	Central Planning	
	Chart 5.4.2	Operation	
	Chart 5.4.3	Participation	
	Chart 5.4.4	Review & Communication	
Chart 5.5	Short-Term Pl	ans	
	Chart 5.5.1	Central Planning	
	Chart 5.5.2	Operation	
	Chart 5.5.3	Participation	
	Chart 5.5.4	Review & Communication	
Chart 5.6	Internal Respo	nsibility Contracts	
	Chart 5.6.1	Target Bias	
	Chart 5.6.2	Participation	
	Chart 5.6.3	Review & Communication	
	Chart 5.6.4	Incentive	

Ch.5: Analysis of Data II

Chart 5.7 Management of Interdependencies

Chart 5.7.1 Characteristics

Chart 5.7.2 Participation

Chart 5.7.3 Review

High-Low Chart 5.0 in Appendix 2 is the overall weighted-average planning scores of all the 20 SOEs in this study. Looking into this chart, it is noted that SDS1(11) has the highest planning score of 3.3 after 1992 and the least planning influence (external and internal combined) compared with the other 19 SOEs. On the other extreme, BEEF(05), BCRF(09) and SCCW(12) have the lowest planning score of 2.3 after 1992 and the highest planning influence. The planning scores and influences of the other 16 SOEs are falling in between these two extremes of a continuum.

The explicit and implicit reasons behind the planning score and influence of each variable or parameter are explained in the following 33 sections (5.1-5.7) of this chapter. In each of the following 33 sections, firstly, some facts and changes relating to that specific variable or parameter are narrated, and secondly, some observations from the corresponding High-Low Chart are explained.

Finally, a summary of major facts and findings will be listed in the last section (5.8) of this chapter.

### 5.1 ORGANISATION STRUCTURE

Each one of these 20 SOEs in the research sample is under the administration of a certain local government authority categorised by industry as described in Section 5.0 above. Before the economic reform started in early 1980s, the planning and control systems of these SOEs were dictated by their respective government authorities. They acted just like cost centres with the major responsibility of meeting production quantities, mixes and costs.

Since the beginning of 1990s, in particular after 1992, the government authorities have delegated more autonomy in terms of planning and control to SOEs under their umbrella. Now the major roles played by the government authorities for their enterprises are (1) appointing the factory

(general) manager and the communist party secretary; (2) maintaining a macroeconomic control or balance on the 5-year plans; (3) providing information services; and (4) acting as a bridge or facilitator between the government and the enterprises in policy matters such as capital investment, import and export autonomy, taxation, ownership transformation, mergers, etc.

The common organisational style which these 20 SOEs adopt is a "functional structure" type. A typical example is XFLT(02) where the organisation structure can be divided into six divisions under the direct control of the Factory (General) Manager who has a Management Office responsible for most of the enterprisewide planning and control functions. These 6 divisions are production, sales, finance, technical, administration and tertiary enterprises headed by the chief engineer, chief economist, chief accountant and 3 deputy factory managers respectively (see Section 2 of Data Analysis 2 in Volume 3 [pp.31-32].

The planning influences in respect of "organisation structure" from (1) the government on the enterprises (external dimension); and (2) the enterprise management on the different responsibility centres (internal dimension) are measured on the following 4 criteria:

- 5.1.1 Responsibility Centre;
- 5.1.2 Decentralisation;
- 5.1.3 Appointment (Personnel); and
- 5.1.4 Interdependencies.

The results of these 4 yardsticks measured on the 20 SOEs are described in the next 4 sections (i.e. 5.1.1-4) which can firstly be summarized in the High-Low Chart 5.1.

(a) The planning influences (external and internal combined) on the organisation structures in the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) and 3 consumable products manufacturers (i.e. GNFF(07), GLIL(16) and XLIG(17)) are relatively less than the other enterprises. In other words, their planning scores are higher before and after 1992 because they are all producing or selling consumable products having very high demands from the domestic markets of over 1.2 billion of people.

- (b) The 7 SOEs as mentioned in (a) above were transformed into shareholding enterprises (XLIG(17) has an equity joint-venture with the US Coca-Cola) in 1992 and 1993. After these conversions, the ownership and management of these shareholding enterprises are supposed to be separated. The top management (e.g. board of directors) are vested with full autonomy to plan and control all the operations. Since then, the top management has been decentralising more responsibility to each department store such as initiating the annual budget and the internal responsibility contract. The profit responsibility lies with the centre or department store managers who should decide their own strategies in marketing, selling, purchasing, cost control, recruiting and training, etc., in order to achieve the targets set in the budgets or contracts on the one hand and to create a solid foundation for future sales or profit growth on the other hand.
- (c) The planning influence (external and internal combined) on the organisation structures in the other manufacturing enterprises is comparatively higher than the retailing enterprises and consumable manufacturing enterprises as indicated in (a) above. Some suggested reasons are given in the next 4 sections (i.e. 5.1.1-4).
- (d) From the overall increases in planning scores among these 20 SOEs, obviously higher autonomy of internal organisational planning and control has been delegated to the responsibility centres since 1992. Some interviewees mentioned that even their middle management have involved their subordinates (lower management) in planning, control and decision making.

# 5.1.1 Responsibility Centre

(A) Evidence reported in Section 5.1.1 of the 20 Case Analyses in Volume 2.

For most of the manufacturing concerns in the 20 SOEs (including the hotel BFSH(19)), the production workshops or factories were treated as "cost centres" before 1992. The cost centre managers or production managers were responsible for the volume/mix of outputs as well as the cost of production. After 1992, many of these production functions have been converted into "profit centres" whose managers have been delegated more autonomy in terms of setting transfer prices, cost management and production control (see Section 5.1 of Case Analysis 1 in Vol.2).

However, in XFLT(02) and BCM3(18), in order to avoid the conflict in setting internal transfer prices and calculating internal profits, the production workshops or factories remain as cost centres after 1992. Another counter example is SCCW(12) whose production workshops had been classified as profit centres before 1992, but the difficulty of determining internal profits due to input materials mix and inflation, they have been converted back to cost centres after 1992.

An exceptional case is XLIG(17) whose production factories have been treated as profit centres before and after 1992. Further, the Coca-Cola manufacturing factory (with the US investment) is measured on return on investment as well. This is the only apparent "investment centre" among the 20 SOEs in this research sample.

Other than the production workshops or factories, the other functions or service departments (e.g. sales, purchasing, accounting, personnel, etc.) are usually treated as "expense centres" under tight expense budgets which are either given by or agreed with the top management without extensive negotiation.

As far as the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) are concerned, their selling functions or stores have been treated as "profit centres" before and after 1992. They are held accountable for their bottom lines (i.e. internal profit) which are directly linked with the amount of group bonus of individual stores. Some of these store managers are allowed to formulate their own short term tactics or strategies in the annual planning exercise.

- (B) Observations from the High-Low Chart 5.1.1.
- (a) The internal planning influence on the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) and 3 consumable product manufacturers (i.e. GNFF(07), GLIL(16) and XLIG(17)) is relatively less than the other enterprises. In other words, their planning scores are higher before and after 1992 because their selling and production units have always been treated as profit centres with higher autonomy in planning and operation (see Section 5.1 of Case Analysis 4 in Volume 2 [pp.75-77]).

- (b) The internal planning influence on 5 manufacturing enterprises (i.e. BCRF(09), BIMT(10), SCCW(12), SXSW(15), BCM3(18)) is comparatively higher than the other enterprises with lower planning scores both before and after 1992. They are geographically located closer to the central government (Beijing) and subject to higher macro-economic measures from their respective government authorities (see Section 3 of Case Analysis 9 in Volume 2 [pp.196-197]).
- (c) The internal planning influences reduce the greatest or planning scores increase the largest in SSW5(01), BEEF(05) and SMCW(06). They are trying to enhance the profit awareness of their responsibility centres in light of the stagnant turnover and deteriorating profit margin.

### 5.1.2 Decentralisation

(A) Evidence reported in Section 5.1.2 of the 20 Case Analyses in Volume 2.

Before the promulgation of "mechanisms transformation legislation" and the "market economy" started in 1992, most of these 20 SOEs and their division, factory, workshop or department managers were responsible for the production volumes and costs as agreed in the Economic Responsibility Contracts (ERCs between government and enterprises) and Internal Responsibility Contracts (IRCs between top management and centre managers). Therefore, classifying these SOEs and their operating units into cost centres were appropriate.

Under the increasing delegation of planning, control and management autonomies from the government to the top management, and then to the operating units down through the organisational hierarchy, the economic responsibility lies with the top management who initiates and negotiates the terms and conditions of the ERC with the government authorities. In turn, the internal operating units (e.g. factories and workshops) are responsible to fulfil their economic, financial and qualitative targets as agreed in their IRCs. In view of this decentralisation process, all the 20 SOEs have become profit centres and many of their internal operating units have been converted into profit centres as well, although they are still subject in some degree to planning and control influences from the government and top management respectively in light of different macro-economic control measures and local government policies and regulations.

In addition to the turnover and profit targets as agreed in the IRCs, most of the store managers in the 4 department stores have been delegated certain operational decision-making in purchasing, selling, marketing, cost control and personnel.

- (B) Observations from the High-Low Chart 5.1.2.
- (a) The extent of decentralisation in the 3 department stores (i.e. GFDS(03), GNFB(08), SDS1(11)) and the Coca-Cola manufacturer (i.e. XLIG(17)) are relatively higher than the other enterprises. In other words, their planning scores have been higher before and after 1992 because higher autonomy in planning, control and management has been delegated to the top management by the Ministry of Internal Trade and National Light Industry Council, and in turn to the various levels of middle or even lower management.
- (b) The degrees of decentralisation in 8 manufacturing enterprises (i.e. XFLT(02), BCRF(09), BIMT(10), SCCW(12), SXSW(15), BCM3(18), BFSH(19), BPMH(20)) are comparatively lower than the other enterprises with lower planning scores after 1992. They are geographically located closer to the central government (i.e. all the 5 SOEs in Beijing) policy controls and subject to many product, market and personnel changes.
- (c) Decentralisation has been extended most and planning scores have been increased the largest in the manufacturing industry such as SSW5(01), BEEF(05), SMCW(06), SMEF(13), GLIL(16). They are trying to motivate different levels of management to be more actively involved in the planning and control processes in order to cope with the uncertainties and changes (see Section 1 of Data Analysis 13 in Volume 3 [p.407]).

# 5.1.3 Appointment

(A) Evidence reported in Section 5.1.3 of the 20 Case Analyses in Volume 2.

The appointments of the "communist party secretary" and "enterprise chief executive" in all of these 20 SOEs up to now are still decided by the government authorities. Even in cases of the shareholding enterprises of which the boards of directors can nominate the chairmen and vice-chairmen, yet these appointments require the approval of the local authorities (e.g. State Assets

Administration Bureau). In fact, the party secretary is the representative from the government to ensure some macro-economic and political policies are under control. In some of the wholly SOEs (e.g. SSW5(01), BCRF(09), BIMT(10), SMEF(13), etc.) the party secretaries are involved in the planning, control and decision making (both long- and short-term) processes.

Before the "operation mechanisms transformation" promulgated in 1992, some key or senior positions in the enterprises (particularly the wholly SOEs), such as the deputy general managers, chief engineers, chief economists and chief accountants were appointed by the government authorities. Similarly, these posts could be removed and the respective personnel could be 'laid off' by the authorities as well (see Section 5.1 of Data Analysis 12 in Volume 3 [p.364]).

However, after 1992, as observed in these 20 SOEs, most of their top management can appoint their senior management staff such as the deputy general managers and the three chiefs<sup>4</sup>. For example in SSW5(01), the managers in the 14 production factories can decide their own organisation structures and personnel affairs but important changes should be approved by headquarters. In the Coca-Cola joint-venture of XLIG(17), the foreign partner (represented by Swire Bottle Hong Kong) can appoint a few senior management staff and decide the specific organisation structure and personnel affairs after discussion and agreement with the Chinese partner (this is allowed under the local government policies approved in Xiamen).

- (B) Observations from the High-Low Chart 5.1.3.
- (a) Similar to 5.1.1. above, the staff appointment influence (both from the government (external) and top management (internal)) on the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) and 3 consumable product manufacturers (i.e. GNFF(07), GLIL(16) and XLIG(17)) is relatively less than the other enterprises. In other words, their planning scores are higher before and after 1992 because they have always been treated as profit centres with higher autonomy in designing their organisational structures and determining personnel affairs (see Section 5.1 of Case Analysis 7 in V.2).

<sup>&</sup>lt;sup>4</sup> As reported by the *Wen Wei Po* (Hong Kong Newspaper) on 21 July 1997, 30% of the industrial SOEs in Shanghai have openly recruited their senior or middle management either within the enterprise/industry or in the labour market.

(b) The appointment influences (both external and internal) on 8 manufacturing enterprises (i.e. XFLT(02), BEEF(05), SMCW(06), BCRF(09), BIMT(10), SCCW(12), SMEF(13), BFSH(19)) are comparatively higher than the other enterprises with lower planning scores after 1992. They are geographically located closer to the central government (Beijing) and subject to various degrees of organisational changes during the recent years.

### 5.1.4 Interdependencies

(A) Evidence reported in Section 5.1.4 of the 20 Case Analyses in Volume 2.

There are 10 manufacturing enterprises which involve intra-enterprise supply of products within their own industries such as metallurgical (i.e. SSW5(01), SMEF(13), SXSW(15)), textiles (i.e. SCM2(14), BCM3(18)), equipment and instrument (i.e. BEEF(05), SMCW(06), BCRF(09), BIMT(10), BPMH(20)). In most of the cases, the quantities and costs of cross-supplies are still planned and determined by the respective government or supervisory authorities.

Among these 20 SOEs, the production units of the 10 manufacturing enterprises have higher interdependencies due to the internal transfer of intermediate products or services (see Table 2G in Appendix 1). These organisational relationships cause debatable planning, control and measurement issues mainly in terms of transfer quantities and prices.

Before the operation mechanisms reform started in 1992, the quantities and costs of internal cross-supplies were largely determined by the top management after the centre managers had been consulted. However, in realising the autonomy delegation after 1992, most of the responsibility centres or operating units are allowed to negotiate the internal cross-supply transactions but some interference and arbitration by the top management are involved.

Before 1992, the internal transfer pricing method of these 10 manufacturing enterprises was "standard cost without markup" except SSW5(01) and BPMH(20) due to their arms-length transactions among their very large production factories. After 1992, the general methods used by these 10 enterprises are "standard cost plus" and "negotiated market price" giving room for the internal buyers and sellers to bargain, but of course, interventions from the top management are necessary to settle some unresolved arguments.

- (B) Observations from the High-Low Chart 5.1.4.
- (a) The arbitration influences (both from the government (external) and top management (internal)) on the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) and the 3 manufacturing enterprises (i.e. SMEF(13), SCM2(14), GLIL(16)) are the least because of very minimal interdependencies within the enterprises and among the operating units within an enterprise (see Section 2 of Data Analysis 3 in Volume 3).
- (b) Contrary to (a), the arbitration influences (both external and internal) on SXSW(15) and BCM3(18) are the highest among the other enterprises because of the close interdependencies of internal transactions among the production units (see Section 2 of Data Analysis 1 in Volume 3 [pp.4-5]).
- (c) SSW5(01), BEEF(05), SMCW(06), BCRF(09), BIMT(10) are the 5 manufacturing SOEs which have the largest increases in planning scores which indicates that their top management has allowed greater freedom to the operating units to settle their interdependent issues.

### 5.2 REVIEW PROCESS

Since the economic reform started in the early 1980s, all the local and municipal governments and their agencies have complied with the national 5-year plans (e.g. the 5th plan from 1976-1980 and the 9th plan from 1996-2000) as laid down and directed by the central government in Beijing. In turn, these government authorities and agencies set out both the long- and short-term plans for those enterprises and entities to implement under their ambit of supervision. For example, the Ministry of Metallurgical Industry and its hundreds of local authorities and agencies directed the long- and short-term plans of all the steel works and other related industries (e.g. iron ores, machines and equipment, import/export trade, etc.) across the country.

In parallel with the open-door policy and economic reform, every manufacturing and servicing industry has to adopt a more rigorous, dynamic and flexible planning process in order to keep abreast with the fast changing technologies and markets. Inevitably, higher autonomy has to be delegated to the local and municipal government authorities and agencies to formulate and review

the long- and short-term plans with the enterprises under their regional umbrellas. As a result, the enterprise managements have been involved in the planning and review process with the government authorities since the 6th national plan (1981-1985). But of course the degree of participation is different from one industry to another (e.g. iron and steel versus retailing) and from one type of ownership to another type (e.g. wholly SOE versus shareholding SOE).

The promulgation of operation mechanisms transformation and market economy since 1992 have further opened the door of planning participation for the enterprise managements who can initiate their strategic or tactical plans on the one hand and have to formulate their own annual budgets on the other hand. Similarly, the extent of participation varies form enterprise to enterprise.

The planning influences in respect of "review process" from (1) the government on the enterprise (external dimension); and (2) the enterprise management on the different responsibility centres (internal dimension) are measured on the following 4 criteria:

- 5.2.1 Central Planning;
- 5.2.2 Operation;
- 5.2.3 Participation; and
- 5.2.4 Review and Communication.

The results of these 4 yardsticks measured on the 20 SOEs are described in the next 4 sections (i.e. 5.2.1-4) which can firstly be summarized in the High-Low Chart 5.2.

(a) The 5 SOEs in Guangzhou (all are shareholding and 3 are department stores) and 2 listed enterprises, one in Beijing (i.e. BPMH(20)) and one in Shanghai (i.e. SDS1(11)), have indicated lower planning influences (both external and internal) since 1992 as compared with the other enterprises in this study. In other words, their planning scores have been higher before and after 1992 because they are producing or selling consumable products having continuous high demands from the domestic markets. Further, as implied in the shareholding enterprise legislation (e.g. Company Law 1994), the semi-privatization (government is still the majority shareholder in all cases) of a SOE should leave greater power of planning and control to the board of directors which is collectively held accountable to more diverse stakeholders (see Section 5.2 of Case Analysis 3 in Vol.2).

- (b) The 2 SOEs in Xiamen (i.e. XFLT(02), XLIG(17)) have encountered less and less external planning influences from the municipal government since 1992 because Xiamen is one of the five special economic zones in China which enjoys more favourable local government policies (at least ten) as compared with the other cities across the nation.
- (c) Among the 20 SOEs in this study, most of the SOEs in Beijing and some in Shanghai are still experiencing certain external planning and review influences from the central and municipal governments mainly because of their (1) locations closer to the central authorities (i.e. the ministries of the State Council); (2) wholly state-ownership; and (3) unstable or unsatisfactory financial performance (see pp.411-412 of Volume 3).

## 5.2.1 Central Planning

(A) Evidence reported in Section 5.2.1 of the 20 Case Analyses in Volume 2.

Before 1992, the enterprise long-term planning coincided with the national 5-year plans. For most of the 12 wholly SOEs investigated in this research, their long-term plans were initiated, monitored, reviewed and modified by the government authorities while the enterprise managements were only consulted. These long-term plans involved capital projects which required substantial investments in terms of funds injected from the government or borrowed from the state-owned banks but the high interest rate of over 15% indicated the tight monetary control policy adopted across the country in the last few years. Therefore, most of the long-term capital investment decisions had to be centralised by the government authorities (e.g. steel and machinery industries) in order to make the best use of the limited availability of capital funds.

Despite the shortage of funds in the capital market, the promulgation of mechanisms transformation and market economy in the SOEs after 1992 have encouraged the enterprises to be self-financed, self-managed, self-regulated and self-developed through careful and viable strategic plans equipped with some assistance from the government such as preferential bank loans, reduced tax rates and granting export rights. These measures have induced the SOEs to formulate their own long-term plans. With regard to the shareholding enterprises, the governmental influence on the long-term planning is less than the wholly SOEs because the board of directors has assumed this responsibility although the government's representative (e.g.

communist party secretary appointed by the State Assets Administration Bureau) is usually sitting on the board, so a certain external planning influence can still be exerted.

As observed in these 20 case studies, it seems that the government authorities have delegated the annual planning or budgeting exercise to the enterprise management since 1992 irrespective of the form of ownership these SOEs are. The details will be discussed in Section 5.5 below.

- (B) Observations from the High-Low Chart 5.2.1.
- (a) The central planning influence on most of the shareholding enterprises (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11), GLIL(16), BPMH(20)) is relatively less than the other wholly SOEs among these 20 enterprises. Higher planning autonomy has been delegated to the board of directors of these shareholding enterprises according to Company Law.
- (b) The 2 SOEs in Xiamen (i.e. XFLT(02), XLIG(17)) have been subject to less governmental planning influence than the other cities because Xiamen is a special economic zone which benefits from some favourable policies granted by the central government (see Section 5.2.1 of Case Analysis 2 in Volume 2 [p.34]).
- (c) Contrary, the central planning influences on some wholly SOEs (i.e. BEEF(05), SMCW(06), BCRF(09), BIMT(10), SCCW(12), BCM3(18)) are comparatively higher due to their locations closer to the central government (Beijing) and lack of capital funds in these industries (i.e. machinery, instrument and textiles manufacturing).

# 5.2.2 Operation

(A) Evidence reported in Section 5.2.2 of the 20 Case Analyses in Volume 2.

As mentioned in Section 5.2.1 above, before the 1990s, the enterprise long-term planning was running in line with the nationwide 5-year plans compiled by the central government. For most of the 12 wholly SOEs in this research, their long-term plans were driven by their supervisory agencies or government authorities while the participation from the enterprise managements were usually limited to consultation only. Therefore, other than the profit targets the enterprise

managements were not really motivated to actualise the strategic milestones which were not promoted by themselves in the long-term plans (usually 3-5 years). Furthermore, the achievement of the financial targets agreed in the ERC during the contract period may induce the enterprise management to commit "short-term behaviour" such as overlooking the investment in product/market research and development, facilities, equipment (in particular computers), human resources (e.g. training and education).

On the other hand, the 8 shareholding SOEs, which are mainly engaged in retailing and consumable products, have started to initiate, review and modify their long-term plans since the early 1990s. Most of them are located further away from the central government and subject to less macro-economic controls and local government policies and regulations.

Before 1992, the annual planning or budgeting process did not involve much participation from the middle or lower management in most of the 12 wholly SOEs. In some cases, the top managements gave directions e.g. sales, production volume and mix, quality improvement, wastage rates, etc. to the responsibility centres for them to comply with. Since 1992, under the operation mechanisms reform and market economy promulgation, these SOEs have been encouraged to participate in the planning process and may extend their planning horizon beyond one year. Therefore, the top managements may exert less interference in divisional or departmental planning decisions, but without reducing the tight financial or budgetary control.

Since 1992, many enterprises visited in this research have implemented a regular formal planning process for reviewing, discussing and sanctioning the annual plans or budgets and the internal responsibility contracts. This budgeting process starts during the last quarter of the year and ends in February of the next calendar year. Based on some guidelines provided by the top management e.g. sales, profits, production value/mix, etc., each division or department initiates an annual plan or budget in which some key criteria are used as the measurement yardsticks of the internal responsibility contract. Iterative discussions and negotiations are carried out between the top management and the responsibility centres until compromises result and budgets are settled (see Section 5.2 of Data Analysis 6 in Volume 3 [pp.145-147]).

- (B) Observations from the High-Low Chart 5.2.2.
- (a) There are 3 categories of enterprises having higher planning review autonomy:
  - (i) the shareholding department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) (see Section 5.2 of Case Analysis 3 in Volume 2 [pp.56-57]);
  - (ii) the listed enterprises (i.e. SDS1(11), SCM2(14), GLIL(16), BPMH(20)); and
  - (iii) the enterprises in Xiamen special economic zone (i.e. XFLT(02), XLIG(17)).
- (b) The planning influences on the 5 wholly SOEs in Beijing (i.e. BEEF(05), BCRF(09), BIMT(10), BCM3(18), BFSH(19)) and another SOE SCCW(12) in Shanghai are higher as explained in Section 5.2.1(B)(c) [also see pp.257-258 of Data Analysis in Volume 3].

## 5.2.3 Participation

(A) Evidence reported in Section 5.2.3 of the 20 Cases Analyses in Volume 2.

As mentioned in Section 5.2.2 above, since the long-term planning process was a rather top-down approach before 1992, it seemed to be a discussion between the government authority and an enterprise in which the latter party had to undertake the final decisions made by the authority. As stipulated in the operation mechanisms transformation regulations implemented since July 1992, the top management of a SOE should be responsible for formulating and accountable for fulfilling the long-term plans. Then gradually the enterprise management has been learning to initiate their long-term plans under the guidance of their supervisory bodies, their internal strengths and weaknesses, and their external opportunities and threats. In doing so, some SOEs such as the shareholding enterprises consulted the middle management in reviewing the long-term plans (usually 3 to 5 years) as well (see Section 5.2 of Case Analysis 11 in Volume 2).

As far as the annual planning or budgeting process is concerned, the degree of participation from an enterprise would seem to depend very much on its (1) type of industry; (2) form of ownership; and (3) geographical location which will be mentioned in (B) of this section. In general, as from 1992, the top managements of these 20 SOEs have been fully responsible for the short-term planning review process although their supervisory bodies might agree with or provide some key financial indicators (e.g. turnover, profit, production volume, etc.) to the top managements.

- (B) Observations from the High-Low Chart 5.2.3.
- (a) Among the 20 SOEs, the degrees of planning participation are the highest in 2 department stores (i.e. GNFB(08), SDS1(11)) and both of them are shareholding enterprises.
- (b) The next higher degrees of planning participation are the other 2 department stores (i.e. GFDS(03), GDDS(04)) and 5 manufacturing enterprises (i.e. SMCW(06), GNFF(07), SMEF(13), SCM2(14), GLIL(16)). Most of them are shareholding enterprises producing and selling consumable products (see Section 5.2 of Data Analysis 16 in V.3 [p.518]).
- (c) Because Xiamen is one of the five special economic zones, more open policies are available for the SOEs there. XFLT(02) and XLIG(17) have actually participated in both the long- and short-term planning exercises since the late 1980s.

## 5.2.4 Review & Communication

Although the long-term planning process in most of these 20 SOEs was a rather top-down process before 1992, the 5-year plans were still reviewed annually between the government authorities and the enterprise management. Significant changes (e.g. capital project abandonment, product development, etc.) must be approved by the government authorities, while minor changes (e.g. organisational structure, personnel, pricing, etc.) could be initiated and sometimes determined by the enterprise management. The major contents of the long-term plan were usually reported during the Annual Employees Congress (for wholly SOEs) or Annual General Meeting (for shareholding SOEs), but details would not be explained.

As from 1992, the enterprise management is quite eager to review their own-formulated long-term plans at least twice every year or even on a quarterly basis. Most of the wholly SOEs' supervisory bodies participate in this review process and sometimes suggestions or even directions are made. For the shareholding SOEs, their boards of directors usually have the full autonomy to review and amend their long-term strategies, although in some situations they need the assistance from their government authorities such as approval or recommendation for applying bank loans for capital investment (see Section 6.2 of Case Analysis 14 in Volume 2).

The shareholding enterprises are usually more transparent in disclosing the long-term plans to their employees at different levels through meetings, documents and publications. They may also reveal the tactical or administrative plans leading to the long-term goals. However, for some wholly SOEs, the top managements are still reluctant to communicate the long-term plans to the middle or lower management because top managements' commitments to these plans are not strong and fear of changes made by their government authorities.

The fixed budget concept was employed in these 20 SOEs before 1992. The annual plans or budgets were reviewed between the top and middle management at least twice every year but amendments were made only due to significant changes (e.g. inflation, product mix, government policy, etc.) which would be reflected in the revised budgets and internal responsibility contracts.

In view of the dynamic market economy and higher budget participation since 1992, the annual plans, budgets and IRC are reviewed at least quarterly or even monthly and amendments can be made more frequently especially by using computers. The flexible budget model is gaining acceptability by both the management and employees as long as their rewards and incentives as agreed in the internal responsibility contracts are not affected too much.

- (B) Observations from the High-Low Chart 5.2.4.
- (a) The planning review and communication process is most liberal in SDS1(11) mainly because it is one of the largest listed department stores in China and it is undergoing a lot of diversified businesses including a joint-venture of setting up Asia's largest shopping complex in Eastern Shanghai (Pudong) with Yohan in Japan.
- (b) All the 5 shareholding enterprises (4 department stores and 1 consumable product manufacturer) and the listed printing machines manufacturer in Beijing (i.e. BPMH(20)) make extensive use of their planning review and communication processes because they are accountable to different stakeholders in terms of achieving targeted returns on investment, dividends and retained earnings for growth (see Section 1 of Data Analysis 20 in Volume 3 [pp.619-621]).

(c) The 2 SOEs (i.e. XFLT(02), XLIG(17)) in Xiamen special economic zone also indicate higher concern in planning review and communication to cope with the changing product and market development (see Section 5.2 of Case Analysis 17 in Volume 2 [pp.410-1]).

### 5.3 STRATEGIC THEMES, THRUSTS & SUGGESTIONS

It is usual practice for the traditional (especially old) SOEs to promulgate various strategic themes to their employees through different means such as meetings, notice boards or banners. Some of these themes are disseminated by the government such as operation mechanisms transformation (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc. They are the core spirits and supreme guidelines for the nationwide SOEs to observe and attain when planning, implementing and evaluating their activities.

To accommodate the changing external environments and internal expectations, the enterprise management reinforces the strategic themes by more specific strategic thrusts which are given to or agreed with the responsibility centres. Typical strategic thrusts discovered in these 20 SOEs are quality control, customer service, management control, technology improvement, etc. They are usually translated into concrete strategic, tactical and operational plans.

Sailing along the charted route, the captain (i.e. enterprise management) should ensure the ship is on the right direction. From time to time, the top management of an enterprise has to provide specific suggestions in the planning, review and control processes in every responsibility centre or unit so that not only the strategic themes and thrusts can be recognised, but in a more down-to-earth sense that the final financial targets can be achieved as well. As observed in these 20 SOEs, the ways and extents of conveying the specific suggestions to the business centres and units varies from one enterprise to another depending on many factors such as (1) central/local government influence; (2) macro-economic control; (3) form of ownership; (4) type of industry; (5) financial performance; and (6) management style.

A department store in Guangzhou (i.e. GNFB(08)) which is a shareholding enterprise is a good

example to understand how they put various strategic themes, thrusts and suggestions into actions (see Section 5.3 of Data Analysis 8 in Volume 3 [pp.232-236]).

The planning influences in respect of "strategic themes, thrusts and suggestions" from (1) the government on the enterprises (external dimension); and (2) the enterprise management on the different responsibility centres (internal dimension) are measured on the following 3 criteria:

- 5.3.1 Themes;
- 5.3.2 Thrusts; and
- 5.3.3 Suggestions.

The results of these 3 yardsticks measured on the 20 SOEs are described in the next 3 sections (i.e. 5.3.1-3) which can firstly be summarised in the High-Low Chart 5.3.

- (a) The 4 department stores in Guangzhou and Shanghai (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) have the highest scores or the least planning influences compared with the other SOEs. They possess the following 5 characteristics:
  - (1) further away from the central government in Beijing;
  - (2) shareholding enterprises;
  - (3) retailing industry;
  - (4) higher profit margin; and
  - (5) strategic management emphasis.
- (b) The 5 SOEs in Beijing (except BPMH(20)) have the lower scores or the higher planning influences (both external and internal) mainly due to the following different characteristics compared with the department stores just mentioned in (a) above:
  - (1) close to the central government in Beijing;
  - (2) wholly state-owned enterprises;
  - (3) manufacturing (i.e. textiles and machinery) and servicing (i.e. hotel) industry;
  - (4) lower profit margin (or loss-making); and
  - (5) financial control bias.

(c) The high planning influences (both external and internal) as shown in SSW5(01) and XFLT(02) are explained in the following sections.

### 5.3.1 Themes

(A) Evidence reported in Section 5.3.1 of the 20 Case Analyses in Volume 2.

In most of these 20 SOEs, the strategic themes promulgated by the top management before 1992 were tied in with the slogans propounded by the central government. Examples were the further promotion or refinement of economic responsibility contract in 1990, the production and product quality control in 1991 and the enhancement of profitability in 1992. Therefore, these themes were enforced by both the government and the enterprise management so that all the employees in an enterprise had to bear them in mind when they were performing their duties.

After 1992, more diversified and balanced strategic themes have been suggested by the top management of these 20 SOEs. The followings are the major or more important ones:

- (1) total quality assurance (e.g. SSW5(01), XFLT(02), GNFF(07), GLIL(16), XLIG(17), BPMH(20));
- (2) customer satisfaction (e.g. GFDS(03), GDDS(04), SDS1(11), BFSH(19));
- (3) product/market development (e.g. BEEF(05), SMCW(06), SCM3(18));
- (4) production capacity/efficiency (e.g. SCCW(12), SMEF(13));
- (5) cost reduction (e.g. BCRF(09), BIMT(10), SXSW(15));
- (6) corporate culture (e.g. GNFB(08)); and
- (7) business diversification (e.g. SCM2(14)).

The middle management such as the responsibility centre managers are requested to achieve the above strategic themes by some means within the scope of their authorities and responsibilities.

- (B) Observations from the High/Low Chart 5.3.1.
- (a) The 4 department stores and the other 2 consumable product manufacturers in Guangzhou have been allowing more freedom to their department or centre managers to crystallize the strategic themes by their own means and tactics (see p.64 in Volume 3).

(b) The iron and steel plant in Shanghai (i.e. SSW5(01)) has the highest internal planning influence on their 12 production factories (with high interdependencies) in order to attain the strategic themes. It is because in such a large SOE of over 23,000 employees, unification of spirits, policies and procedures is very important for the attainment of strategic themes for the enterprise as a whole especially under the tight economic responsibility contract signed with the municipal government along the years.

### 5.3.2 Thrusts

(A) Evidence reported in Section 5.3.2 of the 20 Case Analyses in Volume 2.

According to Goold and Campbell (1991: 38), compared with strategic theme, strategic thrust is a related, but separate, type of influence or thrusts for particular business units. The holding company or headquarters may develop guidelines for each of its major businesses concerning broad product range goals, market development objectives and competitive position. Although the business units are free to devise plans to achieve these targets and to propose objectives consistent with them, the guidelines provide a framework for their strategic thinking. The importance of these strategic thrusts varies between companies.

As observed in these 20 SOEs, broad guidelines are always coming from the government authorities or agencies for these enterprises to lay down their strategic directions in their long-term plans and to figure out their business decisions via the annual budgeting. This approach of fostering strategic thrust on the SOEs is regarded as a paramount vehicle for the government authorities to ensure the macroeconomic policies are complied with by their operating units. As suggested by Goold and Campbell (1991), the extent of this planning influence is varying between enterprises investigated in this research depending on an enterprise's (1) geographical location; (2) type of ownership; and (3) economic performance.

Internally within an enterprise itself, the top management imposes or provides strategic thrusts for its responsibility centres or units to formulate their short-term plans, budgets and internal responsibility contracts. This happens in each enterprise and varies between one enterprise to another in these 20 SOEs as quantified by using the standardised planning scores.

The followings are some typical strategic thrusts found in these 20 SOEs:

- (1) quality control(e.g.BEEF(05), GNFF(07), BCRF(09), SCCW(12), GLIL(16), BCM3(18));
- (2) customer service (e.g. GFDS(03), GDDS(04), GNFB(08), BFSH(19));
- (3) management/operation control (e.g. SMEF(13), SCM2(14), XLIG(17));
- (4) technology improvement (e.g. BIMT(10), BPMH(20));
- (5) efficiency enhancement (e.g. SSW5(01), SMCW(06));
- (6) products variety (e.g. SDS1(11), SXSW(15)); and
- (7) capacity expansion (e.g. XFLT(02)).
- (B) Observations from the High-Low Chart 5.3.2.
- (a) Distinctively, the 4 department stores (shareholding enterprises) in Guangzhou (i.e. GFDS(03), GDDS(04), GNFB(08)) and Shanghai (i.e. SDS1(11)) have the least planning influences (both external and internal) on their responsibility centres in respect of strategic thrusts. Within the broad strategic themes and thrusts, individual departments (internal profit centres) are allowed to formulate their own tactics and strategies in terms of (see Section 5.3 of Data Analysis 4 in Volume 3 [pp.88-89]):
  - (1) sales promotion;
  - (2) commodity pricing;
  - (3) internal design and decoration;
  - (4) display arrangement; and
  - (5) after sales service.
- (b) Most of the SOEs in Beijing (except the listed BPMH(20)) and 2 manufacturing SOEs in Shanghai (i.e. SSW5(01), SCCW(12)) have higher internal planning influences from the top managements on their responsibility centres in respect of strategic thrusts because of their locations closer to the central government (or subject to tighter macro-economic controls), larger scale of operation and unsatisfactory financial performance in some cases. Furthermore, all of them are wholly SOEs.

(c) The fork lift truck manufacturing plant (i.e. XFLT(02)) in Xiamen is subject to the highest internal planning influence on the strategic thrusts because it has been undertaking a substantial joint-venture business with a German counterpart in the same industry during the last few years. Coping with many technology, capacity, market and human resource changes, the top management has to combine the different strategic thrusts into a unified and balanced direction.

### 5.3.3 Suggestions

(A) Evidence reported in Section 5.3.3 of the 20 Case Analyses in Volume 2.

Goold and Campbell (1991: 38) vividly describe that other than strategic themes and thrusts, another way for the headquarters to influence plans is by making specific suggestions. The degree to which headquarters or top management refrain from intervening with specific suggestions reflects their commitment to decentralisation. But even in companies that profess a high degree of decentralisation, top management will still from time to time make suggestions (e.g. the pricing of a major contract, pack size and design for a particular brand, factory layout, etc.). These may arise from regular budget or plan discussions, from formal reviews by head office 'experts', or from much less formal conversations. The suggestions may be based on wider central perspectives, external contracts, personal beliefs, detailed knowledge and even pure prejudice. Whatever the basis, they are unlikely to be ignored, and they form part of the top-down influence process.

From the many interviews of the senior managements in these 20 SOEs and some documents obtained from these personnel, Goold and Campbell's propositions reflect similar situations in the Chinese business environment. Firstly, from the government-enterprise perspective, due to the speeding up of economic reform and delegation of autonomy, the central and local governments have changed their roles from dictatorship to giving suggestions to the SOEs in respect of planning and control. The parameters of "organisation structure" and "review process" reported in Section 5.1 and 5.2 above have provided facts and observations to evidence this environment already.

Secondly, looking into the internal planning influences of these 20 SOEs, in most of the cases, the

top managements from time to time made suggestions on specific issues relating to the planning review process such as selling prices, marketing strategies and production quantities and mixes. Most of the top managements of these 20 SOEs follow the financial indicators and performance closely on monthly and quarterly basis and were quick to make suggestions if they do not match the overall long- and short-term plans. This sort of closer planning influence is typical in most of the wholly SOEs, especially in Beijing (government policies and regulations are closely monitored), and the under-performed enterprises in this study.

On the other hand, those enterprises located in the southern provinces (i.e. Xiamen and Guangzhou), in particular the shareholding enterprises, have gradually left more freedom to their responsibility centres or units to adjust their plans and operations as long as they do not deviate much from the long-term plan and the annual budget in aggregate.

Specific suggestions may not only arise from the annual planning and review processes, but also from the monthly and quarterly performance evaluations and some ad hoc management meetings. The suggestions may be based on local government policies (e.g. macroeconomic policies), economic responsibility contracts agreed with the government authorities, personal beliefs, business knowledge<sup>5</sup> and even bias and prejudice of the top management.

- (B) Observations from the High-Low Chart 5.3.3.
- (a) Among the 20 SOEs, 60%(12) of them have changed from high internal planning influence (scores 1.0-1.5) to medium planning influence (score at 2.5) since 1992. This indicates that in general the specific suggestions given to the responsibility centres or units are still common although some relaxations have happened.
- (b) Less specific suggestions are provided in the 3 department stores in Guangzhou (i.e. GFDS(03), GDDS(04), GNFB(08)) which are all shareholding enterprises. This reflects higher commitment to decentralisation and delegation in strategic planning assuming the centre or department managers know better how to manoeuvre their businesses under certain strategic themes and thrusts (see p.79 of Volume 2).

<sup>&</sup>lt;sup>5</sup> Seniority is a very important factor to become chief executive(s) in the SOEs in China.

#### 5.4 LONG-TERM PLANS

Just four years after the inception of the PRC, the central government of China started its first 5-year national plan in 1953 but actually implemented since 1956. Then the second 5-year national plan covered the years from 1961 to 1965 and the third one from 1966 to 1970 and so on. The present 5-year national plan is the ninth one running across the period from 1996 to 2000 which signifies the turning point of China's rapid economic development into the next century.

In each 5-year national plan, it used to set down many macroeconomic targets such as GDP, industrial output, agricultural output, inflation, balance of payment, capital expenditure, standard of living, etc. which affect the operation of almost 400,000 SOEs and the well being of millions of employees working in these SOEs. Therefore, since the first national plan adopted in the mid-1950s, each governmental department or authority has been formulating a 5-year long-term plan coinciding with the national plan for each SOE under its supervision.

For example, in line with the formation of each national plan, the Ministry of Textile (replaced by the China National Textile Industry Council in July 1993) has to compile the 5-year long-term plans for all the cotton mills, spinning and weaving machine manufacturing plants, and other related units (e.g. textiles import/export enterprises) which are under the same governmental ministry. The national macroeconomic targets act as the overall guidelines for the 5-year long-term plan in each SOE. The summation of all the 5-year long-term plans in all the SOEs of a certain industry should achieve closely some of the national macroeconomic targets.

Before the economic reform took effect in early 1980s, most of the 5-year long-term plans in the SOEs were dictated by their respective government authorities. The SOEs acted just like cost centres to carry out the pre-determined plans, mainly production levels and costs, year after year. To further open the door of economic reform and introduce the concept of free market, the top managements of the SOEs have been invited to sit down with their supervisory bodies to formulate their individual long-term plans, but sometimes the enterprise managements were consulted only without much participation (see Section 5.4 of Data Analysis 5 in Volume [pp.117-120]).

Under the promulgations of operation mechanisms transformation and socialist market economy since 1992, most of the SOEs have been required to initiate and compile their own long-term plans, but subject to various extents of planning influence from their corresponding local government authorities. Internally, the top managements of these SOEs have involved, to various extents, their responsibility centres or units in formulating their respective long-term plans.

The planning influences in respect of "long-term planning" from (1) the government on the enterprises (external dimension); and (2) the enterprise management on the different responsibility centres (internal dimension) are measured on the following 4 criteria:

- 5.4.1 Central Planning;
- 5.4.2 Operation;
- 5.4.3 Participation; and
- 5.4.4 Review and Communication.

The results of these 4 yardsticks measured on the 20 SOEs are described in the next 4 sections (i.e. 5.4.1-4) which can firstly be summarized in the High-Low Chart 5.4.

- (a) In terms of the planning influence scores, there are little differences among the 20 SOEs and 15 of them have been subject to moderate external influences (2.3-2.6) from their local government authorities since 1992.
- (b) Among these 20 SOEs, the government authorities have exerted less planning influences (scores 2.9-3.0) on the following 4 SOEs:
  - (1) GNFF(07) flour manufacturing;
  - (2) SDS1(11) department stores;
  - (3) GLIL(16) cleaning consumables manufacturing; and
  - (4) XLIG(17) beverage manufacturing.

They have the following common characteristics:

- (1) further away form the central government in Beijing;
- (2) shareholding enterprises (SDS1(11) is listed);
- (3) retailing and consumable product industries; and

- (4) good financial performance and steady growth.
- (c) Among the 20 SOEs, the steel works, SSW5(01) in Shanghai, is still facing higher central planning influence although there has been substantial improvement since 1992. The major reasons can be found in the Sections 5.4.2(B)(b) and 5.4.4(B)(b) below.

## 5.4.1 Central Planning

(A) Evidence reported in Section 5.4.1 of the 20 Case Analyses in Volume 2.

The relationships between the government authorities and SOEs in respect of long-term planning is briefly narrated in Section 5.2.1 above. Before the economic reform started in 1979, the enterprise long-term plans (usually 5 years in duration) focused on the production capacities and volumes dictated by the government under the central planning system. Since the 1980s, some of the enterprise managements participated in the long-term planning discussions with the government authorities or supervisory bodies in terms of production facility, volume and mix, right to export, product and market development.

Both the operation mechanisms transformation and market economy promulgated by the government since 1992 have empowered higher autonomy in and enlarged the scope of long-term planning in the SOEs. The top managements of these 20 SOEs have to initiate their own long-term plans and compromise with the government authorities who may insist on certain macrotargets such as output volume and mix, turnover, profit before tax, sales and income tax some of which are usually incorporated in the ERC (see Section 5.4 of Case Analysis 2 in Volume 2).

- (B) Observations from the High-Low Chart 5.4.1.
- (a) The central planning influence on XLIG(17) is the least among the 20 SOEs mainly because of two reasons as follows:
  - (1) XLIG(17) is located in Xiamen which is one of the five special economic zones in China enjoying more favourable economic policies (see Section 5.4 of Data Analysis 17 in Volume 3 [pp. 545-549]; and

- (2) XLIG(17) has entered into a joint-venture with US Coca-Cola/Hong Kong Swire Group to expand the softdrinks business in China.
- (b) Two listed enterprises (i.e. SDS1(11), BPMH(20)) and another shareholding enterprise GNFF(07) show less central planning influences or higher planning scores compared with the other SOEs except XLIG(17). It is assumed that their boards of directors should have higher autonomy in formulating their long-term plans.
- (c) The hotel in Beijing, BFSH(19), indicates the highest central planning influence. This SOE is directly under close supervision of the China National Tourism Administration Bureau (see Chapter 5, Section 5.0, Notes 7) and its operation is simpler than the other manufacturing or retailing industries.

## 5.4.2 Operation

(A) Evidence reported in Section 5.4.2 of the 20 Case Analyses in Volume 2.

Among the 20 SOEs, their degrees of involvement with the government authorities/departments to formulate, evaluate, implement, monitor and review the long-term plans are varying. On one extreme, a government authority may still decide the strategic plans without much discussion with the enterprise management such as the case before the economic reform started in early 1980s. On the other extreme, an enterprise's top management has to initiate and compile the long-term plans on its own.

For some enterprises (e.g. XFLT(02), BEEF(05), BCRF(09), BCM3(18), etc.) whose freedom to decide their long-term plans are in between the two extremes, negotiations and compromises have to be made in order to determine feasible strategic plans acceptable to both the enterprises and their government authorities (see Section 5.4 of Case Analysis 5 in Volume 2 [pp.102-103]).

For some enterprises (e.g. GNFF(07), SDS1(11), GLIL(16), XLIG(19), etc.) whose planning autonomies are biased to the latter extreme, there are formal planning committees and procedures in existence to get middle management (e.g. responsibility centre managers) involved in the planning process. It is a way for the top management to allocate limited resources to different

divisions and departments according to the market demand, product profitability and government suggestions (see Section 5.5 of Data Analysis 11 in Volume 3 [pp.344-345]).

Common long-term plans found in these 20 SOEs are listed below (with SOE's numbers shown only):

- (1) market penetration/diversification (01,02,05,06,07,08,09,10,11,12,13,14,15,16,17,18,20)
- (2) product differentiation/diversification (01,02,05,06,07,09,10,12,13,14,15,16,18,19,20)
- (3) joint-venture business (01,03,04,06,07,08,11,12,13,14,16,17,18,19,20)
- (4) production capacity expansion (01,02,04,06,07,08,11,15,16,17,20)
- (5) competitive edge/quality (01,05,06,09,10,12,13,14,18,20)
- (6) sources of capital (07,08,09,11,12,13,15,16,20)
- (7) business space expansion (03,04,08,09,11,13,15,19)
- (8) business diversification (03,04,08,11,14,16,18,20)
- (9) capital expenditure (06,07,12,13,15,18,20)
- (10) research & development (05,06,09,10,20)
- (11) manpower & training (01,02,07,08,15,18)
- (12) enterprise class promotion (01,03,07,16)

The product/market strategies and joint-venture business (a means of raising capital for maintenance and growth)<sup>6</sup> are the most important long-term plans as viewed by the 20 SOEs. More details of the above long-term plans and their operations are described under Section 5.4 of the 20 Data Analyses in Volume 3 (especially the appendix from pp.208-220).

- (B) Observations from the High-Low Chart 5.4.2.
- (a) Lower central planning influence affects the listed department store SDS1(11), the listed cleaning consumable manufacturer GLIL(16), the flour manufacturer (shareholding) GNFF(07) and the beverage manufacturer XLIG(17). They belong to the retailing and consumable product industries having better financial performance than the other SOEs

<sup>&</sup>lt;sup>6</sup> These 3 strategies plus the competitive edge/quality(5) are the four most important economic plans promulgated by the State Commission for Economics and Trade in the 9th National Plan (1996-2000). (See Hong Kong *Wen Wei Po* Newspaper on 26 October 1996.)

in this study (see Section 5.4 of Data Analysis 3 in Volume 3 [pp.65-68]).

- (b) Among the 20 SOEs, the iron and steel manufacturer SSW5(01) has been subject to the highest central or external influence on long-term planning mainly because the government authority, Ministry of Metallurgical Industry, of this industry keeps tight macroeconomic controls in order to balance the production volumes and mixes, products import and export, buying and selling prices, and competition with the foreign counterparts<sup>7</sup> during the 1990s (see Section 1 of Data Analysis 1 in Volume 3 [pp.2-3]).
- (c) Apart from (a) and (b) above, the other 15 SOEs have been under moderate governmental influences on their long-term planning operation since 1992.

## 5.4.3 Participation

(A) Evidence reported in Section 5.4.3 of the 20 Case Analyses in Volume 2.

The governmental influences (external dimension) on the long-term planning in the 20 SOEs and the degrees of participation by their top managements have been briefly mentioned in Section 5.4.2 above (see Section 5.4 of Case Analysis 15 in Volume 2 [pp.359-360]).

As far as the internal dimension is concerned, the involvement from middle management (e.g. responsibility centre managers) in formulating the long-term plans was limited to consultation only in most of the SOEs before 1992. In recent years, some SOEs (e.g. SSW5(01), GNFB(08), SDS1(11), etc.) have established formal planning committees and invited the centre managers to participate in the formation, evaluation, monitor and review of the long-term plans although they seldom initiated changes but mainly concerned the impact on their annual budgets and internal responsibility contracts which they are measured on.

Two contrasting examples of internal participation in long-term planning can be seen in Section 5.4 of Data Analyses 2 and 16 respectively in Volume 3 [pp.37-40 & pp.520-523].

<sup>&</sup>lt;sup>7</sup> See Wen Wei Po (Hong Kong Newspaper) on 22 October 1996.

- (B) Observations from the High-Low Chart 5.4.3.
- (a) Similar to 5.4.2(B)(a) above, the two consumable product manufacturers (i.e. GLIL(16), XLIG(17)) have the least internal influences on long-term planning.
- (b) Contrary, a department store GDDS(04) is using a top-down approach in long-term planning with little involvement from the store managers or they are just limited to consultation only. The senior management group assumes the middle and lower management only care about the internal responsibility contracts because the incentive scheme is directly related to some financial and service targets. That is why its long-term internal planning influence is the highest.
- (c) The long-term planning influences (internal dimension) on the other 17 SOEs are in the middle of the road with medium planning scores (i.e. 2.0-2.5).

# 5.4.4 Review & Communication

(A) Evidence reported in Section 5.4.4 of the 20 Case Analyses in Volume 2.

Before 1992, in most of the 20 SOEs, the 5-year long-term plans were reviewed annually by the government authorities with the top management of the SOEs and changes made were notified to the various levels of management during the Annual Employees Congress in which all the employees could attend.

After 1992, in some of the 20 SOEs, the senior management groups or the planning committees in some cases, review the long-term plans every year before the annual planning cycle started and significant changes are reported to the government authorities for endorsement, and sometimes assistance such as seeking a long-term bank loan is required (see Section 5.5 of Data Analysis 1 in Volume 3 [pp.13-14]). A summary of long-term plans is reported to the Annual Employees Congress for wholly SOEs and the AGM for shareholding enterprises. Some enterprises (e.g. SSW5(01), XLFT(02), BEEF(05), GNFB(08), SDS1(11)) prefer to describe their long-term plans in documents and booklets for limited circulation. Because of the fast changing market conditions and technology advancement, most of the enterprises review their long-term plans

twice every year (e.g. SMCW(06), GNFF(07), BCRF(09), SCCW(12), SMEF(13), SCM2(14), GLIL(16), XLIG(17), BCM3(18), BFSH(19), BPMH(20)).

Again see Section 5.4 of Data Analyses 2 and 16 in Volume 3 [pp.37-40 & pp.520-523] for two different examples due to different types of business and ownership.

- (B) Observations from the High-Low Chart 5.4.4.
- (a) The planning influence (both external and internal) is the least for the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) and the flour manufacturer GNFF(07) for similar reasons as explained before.
- (b) The machinery and equipment manufacturing enterprises (i.e. XFLT(02), BEEF(05), BCRF(09), BIMT(10), SCCW(12)) and the iron and steel manufacturing enterprises (i.e. SSW5(01), SXSW(15)) are subject to the highest planning influences mainly because of their downturn economic performance and specific macroeconomic control policies.

### 5.5 SHORT-TERM PLANS/BUDGETS

As explained in the above four sections (5.1-5.4) in this chapter, the government has been fostering less planning influence on the SOEs since the 1990s especially from 1992 after the promulgations of operation mechanisms transformation and socialist market economy which are supposed to delegate higher autonomy to the enterprise management and make the SOEs to be (1) self-operated; (2) self-financed; (3) self-developed; and (4) self-regulated. To achieve these objectives, the government departments or authorities have relied on the SOEs to formulate, control, evaluate and review their short-term plans or budgets.

With less and less government influences on the short-term planning, some SOEs' top managements have invited higher budget participation from the middle management or responsibility centre managers including their subordinates (lower management). The extent of participation depends on many factors some of which are mentioned as follows:

(1) intensity of macroeconomic control -- lower participation by middle/unit managers in Beijing because of tighter government control;

- (2) form of ownership -- higher participation in shareholding enterprises because of almost full autonomy delegated to the board of directors;
- (3) type of industry -- higher participation in retailing business because of fierce competition and frontline interactions with customers;
- (4) market conditions -- lower participation in iron and steel works because of fluctuation in marketing factors such as price, supply and demand;
- (5) financial performance -- lower participation in downturn industry such as machine and equipment manufacturing;
- (6) relationship between budgets and internal responsibility contracts -- lower participation when high correlation between the two;
- (7) management knowledge in budgeting -- higher participation with better education and training; and
- (8) use of computers -- higher participation with better usage of computers.

Superficially, the budgeting process practised currently by these 20 SOEs is similar to the conventional steps described in the management accounting textbooks and equivalent to practice in the western countries (a master budget example is described from pp.287-294 in Volume 3). But when probing into the substance of this process, the roles of budgeting in terms of authorization, coordination, communication and accuracy are different from the western concepts because of the impacts from the external and internal factors as listed before this paragraph.

During an interview with the chief accountant of a steel work in Shanghai in September 1994, he demonstrated to the researcher how to estimate the profit and loss budget for the whole enterprise for the next year in about 20 minutes! It is no doubt that "budgeting" has tremendous potential for management accounting research in China.

The planning influences in respect of "short-term planning" from (1) the government on the enterprises (external dimension); and (2) the enterprise management on the different responsibility centres (internal dimension) are measured on the following 4 criteria:

### 5.5.1 Central Planning;

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- 5.5.2 Operation;
- 5.5.3 Participation; and
- 5.5.4 Review and Communication.

The results of these 4 yardsticks measured on the 20 SOEs are described in the next 4 sections (i.e. 5.5.1-4) which can firstly be summarized in the High-Low Chart 5.5.

- (a) For most of the 20 SOEs, the planning influences have been changing from high/medium (scores 1.6-2.5) to medium/low (scores 2.6-3.5) since 1992 indicating that the top managements are really responsible for the short-term planning or budgeting process which also involve the participation from various lower levels of management in the enterprises see Section 5.5 of Case Analysis 1 in Volume 2 [pp.13-14]).
- (b) Just 4 SOEs (i.e. BEEF(05), SCCW(12), SXSW(15), BFSH(19)) are subject to higher planning influences from the government authorities and in turn they are reluctant to allow higher participation from the middle and lower management. Possible reasons are explained in the following sections.

#### 5.5.1 <u>Central Planning</u>

(A) Evidence reported in Section 5.5.1 of the 20 Case Analyses in Volume 2.

During the first ten years of economic reform started in the late 1970s, the government used various means (e.g. legislations, policies, direct control and involvement, etc.) to achieve the 5-year national planning goals and maintain an overall stable economic growth in the country. Inevitably, the government authorities were still involved in the short-term planning or budgeting process in the SOEs by providing guidelines or major targets derived from the 5-year long-term plans. Under these circumstances, the annual plans or budgets submitted by the enterprise managements were subject to negotiation and compromise with the respective government authorities.

As mentioned in Section 5.5 above, the government authorities have devolved much greater autonomy to the SOEs in their short-term planning or budgeting process in order to actualize the

mechanisms transformation legislation implemented since July 1992. However, to cool down the overheated economic expansion since the beginning of 1990s, the central government has instituted 16 macroeconomic control measures some of which have important or critical bearings on the SOE's budgets (e.g. interest rate, bank credits, capital investment, foreign exchange, etc.). To this end, some government authorities (e.g. textiles, iron and steel, machine and equipment, etc.) have to provide specific suggestions (i.e. production volume and mix, inventory level, sales and profit level, etc.) to their SOEs in order to ensure the control measures can take effect.

With less governmental planning influence on a SOE, the possible involvement and participation from the middle and lower management in the short-term planning or budgeting process would be higher as shown in Section 5.5.3.

- (B) Observations form the High-Low Chart 5.5.1.
- (a) The Shanghai municipal government has delegated full autonomy to the board of directors of the department store, SDS1(11), which has demonstrated substantial sales and profit growth since listing in 1992 and entered some potential and promising projects such as establishing the largest department store in Asia in collaboration with Japanese Yohan Department Store (opened in Pudong, Shanghai in December 1995).
- (b) Moderate planning influence (score 3.0) can be seen in most of the SOEs in Beijing (i.e. BEEF(05), BCRF(09), BIMT(10), BFSH(19)) and a few SOEs in Shanghai (i.e. SSW5(01), SCCW(12), SXSW(15)) which have some typical characteristics as suggested in Section 5.3(B)(b).

## 5.5.2 Operation

(A) Evidence reported in Section 5.5.2 of the 20 Case Analyses in Volume 2.

Under a more open market situation, most of the SOEs in this study adopt a general short term planning policy called "production determined by sales" which means sales is the initial driving force of all the activities (see Section 5.5 of Data Analysis 1 in Volume 3 [pp.15-16]). Sales forecast is the primary budgeting or limiting factor as described by many management accounting textbooks.

Section 5.2.2 above has briefly described the annual planning or budgeting process adopted in most of the 20 SOEs. For more details and specific examples, see Section 5.5 of Data Analyses 2,3,12 & 14 in Volume 3 [pp.41-42, pp.69-71, pp.372-378 & pp.463-464].

## (B) Observations from the High-Low Chart 5.5.2.

All the 20 SOEs have experienced less and less central planning influences on their budgeting operation since 1992, and in turn they have formalised and standardised their annual planning or budgeting exercise as far as possible. Listed below are some factors affecting the sophistication of short-term planning in these 20 SOEs:

- (1) importance and priority perceived by top management;
- (2) timing and duration allowed for this exercise;
- (3) existence of formal and informal planning committee;
- (4) involvement of accounting personnel and their expertise;
- (5) information and data base available; and
- (6) application of computer.

It is interesting to note that those large SOEs (e.g. SSW5(01), SMEF(13), SCM2(14), SXSW(15), BCM3(18), BFSH(19), BPMH(20)) which have higher top management influence on the annual planning or budgeting process, perhaps this is due to their sheer size of organisation and functional structure and workforce, and complexity in operation and management (see Sections 3 & 5.5 of Case Analysis 18 in Volume 2 [pp.431-432 & 440-441]).

## 5.5.3 Participation

## (A) Evidence reported in Section 5.5.3 of the 20 Case Analyses in Volume 2.

Since the mid-1980s when the top managements of the 20 SOEs have assumed higher autonomy in formulating their annual plans or budgets, a top-down approach has been used internally. The middle management or responsibility centre managers were asked to discuss and compromise the budgets provided by the top management without much room for negotiation and effective communication.

Turning into the 1990s, the implementation of internal responsibility contracts (which will be discussed in Section 5.6 below) and the mechanisms transformation legislation have changed the budgeting style by getting the divisional or centre managers' active involvement in compiling the annual plans or budgets. Usually guidelines in terms of production volume and mix, sales volume and mix, inventory and expense levels, etc. are provided by the top management for the centre managers to formulate their own budgets and get the lower management involved in working out the details. Then iterative discussions and negotiations are carried out until all types of budgets are determined and finally approved by the Annual Employees Congress or AGM (see Section 5.5 of Data Analysis 2 in Volume 3 [pp.41-42]).

This change of budgeting style maintains better understandings between the different levels of management at least to work out a set of more realistic budgets which are acceptable by the divisions or departments to be measured against.

As observed in the department stores of this research (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)), the selling units are treated as profit centres with higher independence. More formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans or budgets between the headquarters and store (centre) managers (see pp.69-70 of Volume 3). In such a competitive and dynamic retailing market having the largest population in the world, the top management has to rely on the profit centres to interact with and sell to the customers. Within the broad strategic themes and thrusts, the store managers are allowed to employ some short-term tactics, such as sales promotion, price cutting, special customer services, to attain the ultimate financial targets (e.g. turnover and internal profit).

- (B) Observations from the High-Low Chart 5.5.3.
- (a) High internal participation (score 3.5) from the middle/lower management in the budgeting process has been observed in 16 SOEs since 1992.
- (b) The other 4 SOEs (i.e. BEEF(05), SCCW(12), SXSW(15), BFSH(19)) are in between the medium and low internal planning influence (score 3.0) because of the following reasons:

- (1) BEEF (05) -- small workforce and loss-making need closer budgetary control;
- (2) SCCW(12) -- keen competition and tight ERC terms;
- (3) SXSW(15) -- specific directions to increase turnover and cut costs with significant redundant employees; and
- (4) BFSH(19) -- simple service operations, tight ERC terms and have redundant employees.
- (c) SSW5(01) has shown significant increase in budget participation in recent years due to:
  - (1) changing the production factories into profit centres;
  - (2) fierce competition and fast changing market conditions;
  - (3) flexible terms in the ERC; and
  - (4) promotion of management training.

#### 5.5.4 Review & Communication

(A) Evidence reported in Section 5.5.4 of the 20 Case Analyses in Volume 2.

The budgeting cycles practised in these 20 SOEs, especially the large enterprises, are relatively short compared with companies of similar sizes in the western countries. A typical annual planning cycle is less than five months starting from the last quarter of a year to approving in the first quarter of next calendar year. The general insufficient management training and application of computers for various levels of managers have resulted in less sophistication in the budgeting exercise. For examples, inadequate support to key budgeting factors, lack of coordination between the budgets and inability to employ flexible budgets are frequently discovered in these 20 SOEs.

Before 1992, the annual plans or budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes such as inflation and drop in sales. The budgets were translated into terms and conditions of the internal responsibility contracts which must be documented and communicated to almost every employee concerned (see Section 5.5 of Case Analysis 15 in Volume 2 [pp.361-362]).

To increase the budget participation and cope with the dynamic market changes since 1992, the annual plans and budgets are reviewed at least quarterly or even monthly and amendments are made due to unavoidable internal and external factors (see Section 5.5 of Case Analysis 16 in Volume 2 [pp.389-390]). Fixed budget concept is still the main thrust but flexible budgeting is accepted by some SOEs which have been using computers more extensively. More formal budget meetings or committees and budget books have been deployed by some SOEs (e.g. SSW5(01), XFLT(02), SDS1(11), GLIL(16), BPMH(20)). The Annual Employees Congress or AGM is the usual occasion to explain the key budget areas to the employees.

- (B) Observations from the High-Low Chart 5.5.4.
- (a) Similar to 5.5.3(B)(a) above, since 1992 high participation (score 3.5) in budget review and communication from the middle/lower management has been observed in 12 SOEs which include all the SOEs in Guangzhou and Xiamen indicating that they have higher planning autonomy on the one hand but are facing more volatile market conditions in these special economic zones on the other hand.
- (b) The other 8 SOEs are in between the medium and low internal planning influence (score 3.0). They are located in Beijing and Shanghai and subject to some constraints such as tighter macroeconomic control measures and economic downturn in their industries (see Section 1 of Data Analysis 14 in Volume 3 [pp.445-447 & special notes pp.467-469]).

## 5.6 INTERNAL RESPONSIBILITY CONTRACTS (IRC)

In practice, Internal Responsibility Contract (IRC) is an extension of the Economic Responsibility Contract (ERC) of which the latter is an agreement between the government authority and a SOE as mentioned in Section 2.15.1 of Chapter 2. The major financial targets (i.e. production volume/mix, turnover, profit, etc.) determined in the ERC will usually be segregated down the organisational hierarchy to the responsibility centres such as production workshops, sales and purchasing departments, tertiary enterprises (businesses other than the core business), etc. This approach of sharing the overall economic targets of a SOE is reflected in the IRCs agreed and

signed between the top management and the respective centre managers.

In parallel with the promulgation of ERC since the mid-1980s, all the 20 SOEs in this study have implemented their IRCs in the following years:

SOE Code	Year						
SSW5(01)	1985	SMCW(06)	1991	SDS1(11)	1985	GLIL(16)	1986
XFLT(02)	1987	GNFF(07)	1989	SCCW(12)	1989	XLIG(17)	1994
GFDS(03)	1984	GNFB(08)	1989	SMEF(13)	1989	BCM3(18)	1988
GDDS(04)	1987	BCRF(09)	1991	SCM2(14)	1993	BFSH(19)	1988
BEEF(05)	1993	BIMT(10)	1992	SXSW(15)	1988	BPMH(20)	1993

GFDS(03) was one of the first few pilot SOEs in Guangzhou testing the usefulness of the IRC application. Subsequently, it was found that this kind of internal delegation of responsibilities as well as authorities was particularly effective in the retailing industry such as department stores (e.g. GFDS(03)).

Going hand in hand with the annual planning and budgeting process, higher participation from the responsibility centres in formulating their IRCs can be observed in recent years. Perhaps the greater the linkage between the performance (both financial and non-financial) and remuneration (wages and bonus), the higher will be the participation in IRC design and negotiation, but of course this proposition is subject to future research in the Chinese enterprises.

The planning influence in respect of IRC from the enterprise top management on the different responsibility centres (internal dimension only) is measured on the following 4 criteria:

- 5.6.1 Target Bias;
- 5.6.2 Participation;
- 5.6.3 Review & Communication; and
- 5.6.4 Incentive.

The results of these 4 yardsticks measured on the 20 SOEs are described in the next 4 sections (i.e. 5.6.1-4) which can firstly be summarized in the High-Low Chart 5.6.

- (a) Planning influence is significantly less on the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) because greater reliance on the selling units, who are interacting with the customers directly all the times, to promote the sales and control the costs to achieve the profit targets. These unit managers should feel comfortable with the targets agreed in the IRC. On the other hand, the top management uses the linkage between the performance and bonus as leverage to motivate the unit managers.
- (b) SSW5(01) and SXSW(15) are the two large iron and steel works who have given more freedom to their production and servicing units to formulate their own IRCs mainly because of minimizing the goal congruent disputes and keeping a steady operation in order to cope with the environmental uncertainties affecting this industry in recent years.
- (c) Since Xiamen is a special economic zone, more favourable and open economic policies, in particular after 1992, have been granted to the SOEs operating there. Therefore, the two SOEs (i.e. XFLT(02), XLIG(17)) are subject to less planning influence from the municipal government, and in turn they are able to give a free hand for their responsibility centres to set the terms and conditions in the IRCs.

### 5.6.1 Target Bias

(A) Evidence reported in Section 5.6.1 of the 20 Case Analyses in Volume 2.

Before 1992, the major quantitative targets in the IRCs of these 20 SOEs were production volume and mix, and standard costs while qualitative targets such as safety and quality, which had veto effects on the bonus determination, were also defined (see Section 5.6 of Data Analysis 5 in Volume 3 [pp.123-124]). The IRC system was largely applied to the production units.

For the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)), the key targets set in their IRCs were sales, profit and foreign exchange created (see Section 5.6 of Data Analyses 3 & 4 in Volume 3 [pp.71-72 & pp.96-99]).

Since 1992, many responsibility centres of the 20 SOEs have been changed into profit centres, then internal profit has become the key financial target in the IRCs (see Section 5.6 of Data Analysis 7 in Volume 3 [pp.193-199]). The following quantitative targets are also found in these IRCs (see Section 5.6 of Data Analyses 6 & 12 in Volume 3 [pp.156-160 & pp.379-387]):

- (1) production value;
- (2) input/output ratio;
- (3) energy consumption;
- (4) working capital;
- (5) inventory level;
- (6) accounts receivable; and
- (7) gross wages.

In addition, the following qualitative targets are also common to many of these 20 SOEs (see Section 5.6 of Data Analyses 15 & 18 in Volume 3 [pp.493-495 & pp.577-579]):

- (1) production technology;
- (2) product quality;
- (3) new product development;
- (4) facility and equipment condition;
- (5) repair and maintenance;
- (6) management technique; and
- (7) human resource management.

Detailed terms and conditions, such as the authorities and responsibilities of both the contractor and contractee, are also explicitly written down in the IRC (see Section 5.6 of Data Analyses 10, 13 & 19 in Volume 3 [pp.316-320, pp.423-429 & 602-607]). In some SOEs the IRC system has been extended to the service departments such as technical support, sales and purchasing (see Section 5.6 of Data Analysis 2 in Volume 3 [pp.42-45]).

By converting the production workshops back to cost centres in 1993, SCCW(12) has been using equivalent standard hour of output, material usage, product quality, operation management and production facility as the quantitative targets in their IRCs (see Section 5.6 of Data Analysis 12 in Volume 3 [pp.379-387]). BCRF(09) has set some unique qualitative targets like environmental protection, standard compliance, employee training and family planning.

The 4 department stores have put more emphasis on some customer oriented targets such as service quality, discipline, decoration, display, sanity, daily operation, security, free delivery and after sales service. This is in response to the strategic theme of "customer is number one"!

- (B) Observations from the High/Low Chart 5.6.1.
- (a) For those 9 SOEs (in particular the 4 department stores) having a higher score of 3.0, they have simpler financial target(s) such as internal profit, and use more flexible qualitative targets like customer services, product quality, new product development and quality of management (see Section 5.6 of Case Analysis 4 in Volume 2 [pp.83-84]).
- (b) While the other 11 SOEs (in particular the 5 SOEs in Beijing) are still using more traditional economic targets such as production volume, value, mix and cost. They also stress the minimum requirements on quality and safety.

### 5.6.2 Participation

(A) Evidence reported in Section 5.6.2 of the 20 Case Analyses in Volume 2.

As a motivation factor in the IRC, the implementation of its targets is usually linked with the gross wages and bonus to be awarded to the corresponding workshop or department measured on a monthly, quarterly and yearly basis (see Section 5.6 of Data Analysis 16 in Volume 3 [pp.525-527]). According to the Expectancy Theory, the existence of this reward valence would induce the centre or unit managers to participate in negotiating the IRC targets with the top management.

Before the promulgation of operation mechanisms transformation in 1992, the ERC was rather rigid in a sense that the top management or contractee of each SOE would strive to attain the major targets (e.g. turnover and profit) by all means. Further, the total remuneration to employees in every year and even the reappointment of the top management (e.g. factory manager or general manager) at the end of the contract period are also tied up with the achievement of the targets stipulated in the ERC. Therefore, in addition to the strategic themes and thrusts promulgated in the whole enterprise, specific suggestions to the responsibility centres during the annual planning or budgeting process are given as mentioned in Sections 5.3.3 and 5.5.3 above.

The internal planning influence from the top management to the responsibility centres on the annual planning or budgeting process would affect the targets set in the IRC because the latter is a subset of the former. Under the guidelines provided by the top management, the centre managers had to negotiate and compromise the IRC targets during the annual planning cycle.

The accelerated shareholding transformation process since 1992 and the new taxation system implemented in January 1994 have blurred the unique features of the ERC which is being phased out in some well-performing SOEs (e.g. retailing and consumable manufacturing industries) as noted in Tables 1A-E and explained in Section 4.4.3 in Chapter 4. By playing down or reducing the rigidity of the targets stipulated in the ERC, the top management of a wholly SOE can leave greater flexibility in setting the budget and IRC with the responsibility centres.

Speaking to the top management and senior managers in these 20 SOEs, it was indicated that in some cases, the centre managers have to initiate the major IRC targets before negotiating with the top management. More goal congruence arguments will occur when the performance-based wages and incentive scheme are discussed in setting the IRC.

All in all, as cited by a few interviewees in this study, the responsibility centres have been more proactive or sometime over-reactive in setting the terms and conditions in their IRCs. To maintain a holistic view of an enterprise, top management may exercise the overriding right to fix some key targets in the IRCs. But looking from the perspective of behavioural theory in budgeting, setting "aggressive" goals can harm the initiation and motivation of the centre managers. This concept may be more applicable in the planning and budgeting topics for the

SOEs in China in view of the "slack" or "big rice pot" convention adopted for decades. Of course, the verification of this proposition is subject to intensive empirical research in the future.

- (B) Observations from High-Low Chart 5.6.2.
- (a) Reasons for 7 SOEs having higher participation from the middle management in setting IRCs are suggested as follows:
  - (1) SSW5(01) Stability is important to manage such a huge enterprise having over 23,000 employees. Top management has to balance the diverse goals of various groups through compromises in the IRCs.
  - (2) XFLT(02) Xiamen is a special economic zone enjoying more favourable and open economic policies. Terms and conditions in the ERC are flexible and exert less pressure on the XFLT(02) which in turn exerts less internal planning influence in setting the IRCs.
  - (3) GDDS(04) The rapid growth in turnover and business expansion require higher participation in setting the IRCs in order to enhance greater commitment from the department stores.
  - (4) GNFB(08) Similar to GDDS(04) and in addition, the diversified tertiary enterprises (e.g. hotel, cargo store, restaurant) should be monitored by the IRC better.
  - (5) SDS1(11) Similar to GNFB(08) and subject to higher financial pressure since listed.
  - (6) SXSW(15) Substantial redundant employees reveals the entrenched power of the labour force who concern very much on the terms and conditions in the IRC.
  - (7) XLIG(17) This enterprise is a merger of 5 SOEs manufacturing consumable products. IRC is an acceptable means to balance the needs and resource allocations of different divisions.

- (b) Reasons for 3 SOEs having lower participation from the middle management in setting IRCs are suggested as follows:
  - (1) BEEF(05) Loss-making for a couple of years has led a "life or death" problem in this SOE which needs tighter directives and cooperation in setting the IRC.
  - (2) BCRF(09) Similar to BEEF(05) and in addition the chief executive has changed hands three times in four years.
  - (3) BIMT(10) A typical traditional wholly SOE under close government supervision, party secretary influence and enterprise politics.

### 5.6.3 Review & Communication

(A) Evidence reported in Section 5.6.3 of the 20 Case Analyses in Volume 2.

The frequency of reviewing the IRCs in these 20 SOEs depends on the following factors:

- (1) changes in government legislations, policies and procedures;
- (2) review and amendment to the annual plans or budgets;
- (3) volatility of external economic conditions (e.g. market demand and supply);
- (4) changes of internal limiting factors (e.g. production facilities); and
- (5) changes in organisation structure and manpower planning.

Usually the IRCs are reviewed in the middle of the year and amendments can be made when mutually agreed by the top management and factory managers. Due to the variability of the 5 factors above, some SOEs review their IRCs quarterly and amendments are made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets.

Second-tier IRCs are signed between the factory manager and production line supervisors in some large SOEs (e.g. SSW5(01)) in order to delegate further the planning and control responsibilities to the lower levels of management.

All the IRCs are expressed in the form of a written document which is usually in a standard format containing the following sections:

- (1) Department and Duration
- (2) Introduction and Guideline
- (3) Responsibility Targets
  - 3.1 Financial Targets
  - 3.2 Production Targets
  - 3.3 Management Targets
- (4) Incentive Scheme
- (5) Performance Evaluation
- (6) Duties and Rights of Contractor (Top Management)
- (7) Duties and Rights of Contractee (Centre Manager)
- (8) Other Terms & Conditions (i.e. review and arbitration)
- (9) Sign and Seal by Contractor and Contractee

Copies of these IRCs are distributed to respective departments for evaluation, reference and recording purposes. It is the responsibility of the centre/workshop/department managers to inform and explain the IRC's terms and conditions to their subordinates.

Some interviewees in this study agree with the evidence that IRC is an effective way to achieve the short-term targets on the one hand and improve the budget communication between the different levels of management on the other hand. Furthermore, IRC can link performance with incentive scheme as a pre-determined means for resource (e.g. bonus, working capital, workforce, etc.) distribution among the responsibility centres within an enterprise.

However, the chief accountant of BCM3(19) in Beijing has reservation on this IRC system. He contends that the major drawback from the IRC model is "protectionism" in a sense that for a division or responsibility centre to ensure the accomplishment of its IRC targets and the monetary benefits for its employees, the divisional management or centre manager will act for his territory (or kingdom in his words) at the expense of the other division(s) or centre(s). In other words, the concept of "holistic" is lost and opportunistic behaviour or parochialism may occur. This is

similar to the term "dysfunctional effect" explained in the management accounting literature (e.g. Merchant 1990; Jaworski & Young 1992).

- (B) Observations from High-Low Chart 5.6.3.
- (a) Because of the rapid changing and keen competition in the retailing market, the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) have to review their IRCs frequently and amend the key targets if necessary.
- (b) The 2 iron and steel works (i.e. SSW5(01), SXSW(15)) also review their IRCs frequently due to fast changing external factors (i.e. prices, demand, supply, import and export of steel products) during recent years.
- (c) The dynamic and open economic policies adopted in Xiamen require the SOEs there to be more flexible in operation, so that the IRCs have to be adjusted more often to cater for the internal and external environmental changes.
- (d) The businesses of the 3 machine and equipment manufacturers in Beijing (i.e. BEEF(05), BCRF(09), BIMT(10)) are declining. Caution has to be paid in settling and reviewing the IRCs in order to maintain a stable operation.

### 5.6.4 Incentive

(A) Evidence reported in Section 5.6.4 of the 20 Case Analyses in Volume 2.

Incentive schemes are almost an indispensable part in the IRCs of these 20 SOEs. In fact, the philosophy of the Chinese IRC is to mingle responsibility with remuneration together to form a mechanism for achieving various functional targets (i.e. production value, sales, standard cost, internal profit, etc.) and the summation of which will fulfil the budgeted goals of the whole enterprise.

The gross wages and/or group bonus of a production workshop may depend on the accomplishment of the production volume and cost and/or internal profit as specified in the IRC on a monthly or quarterly basis. Similarly, the wages and bonus of a sales department are

calculated according to the levels of sales and/or accounts receivable as stipulated in the IRC.

Before 1992, a responsibility centre might fail to achieve the IRC targets because of some reasons such as:

- (1) the centre managers did not participate much in setting the targets;
- (2) some external factors (e.g. inflation, shortage of input materials, changes of product demand, etc.);
- (3) unforeseen internal changes (e.g. production facility and technology, new product development, personnel turnover, etc.); and
- (4) targets could not be amended to reflect the impacts from (2) and (3).

The increase in participation from the responsibility centres in formulating, reviewing and amending the IRCs since 1992 has encouraged the centre managers to initiate their own IRC targets in order to increase their remuneration under attainable standards. Other than the financial targets, some qualitative targets (i.e. production, operation, quality and safety management, education and training, family planning, repair and maintenance, customer service, etc.) are also linked with the bonus determination (see pp.243-246 in Volume 3).

- (B) Observations from the High-Low Chart 5.6.4.
- (a) The qualitative targets (e.g. customer service levels) usually account for 30% of the bonus assessment in the four department stores of this study, therefore, less planning influence is exerted from the top management on the IRCs in order to make them flexible.
- (b) The heavy emphasis on "product quality" to determine the wages and bonus in some SOEs (i.e. SSW5(01), XFLT(02), BEEF(05)) also leads to less planning influence in respect of IRC formulation.
- (c) Higher planning influence exerted on or more rigid economic targets set in the IRCs still exist in some rather traditional, tighter control and under-performing SOEs (i.e. SCCW(12), SMEF(13), SCM2(14), BCM3(18), BFSH(19), BPMH(20)).

### 5.7 MANAGEMENT OF INTERDEPENDENCIES (TRANSFER PRICING)

According to Goold and Campbell (1991: 39), central influence in the form of broad thrusts or specific suggestions is exercised particularly where overlaps, links or relationships between businesses or divisions need to be managed. The coordination of functional strategies; cross-supply and transfer pricing between units in a vertically integrated chain; sharing or transfer of expertise; exploitation of a shared resource lead to opportunities for intervention. The extent of overlaps is determined largely by decisions on the divisional and business structure of the company. The degree of influence which the central exerts, however, is a function of how active headquarters' managers want to be in resolving the overlap issues.

Planning influence in respect of "management of interdependencies" in 10 SOEs (including the 4 department stores and the hotel) of this study is not measured because of the following reasons:

	Enterprise Code	Reasons	
1.	XFLT(02)	Internal transfers are determined by top management and the production workshops are measured against production volume and cost without any mark-up.	
2.	GFDS(03)	All department stores are independent with very minimal interactions and interdependencies.	
3.	GDDS(04)	Same as GFDS(03).	
4.	GNFF(07)	Each flour production workshop is independent in manufacturing its own products without any transfer to other factories.	
5.	GNFB(08)	Same as GFDS(03).	
6.	SDS1(11)	Same as GFDS(03).	
7.	SCCW(12)	The production workshops are manufacturing their own products without any interactions with the other workshops.	
8.	GLIL(16)	Same as SCCW(12).	
9.	XLIG(17)	Same as SCCW(12).	
10	BFSH(19)	All the departments are independent with very minimal interactions with other departments.	

For the other 10 SOEs, the planning influence in respect of "management of interdependencies" from the enterprise top management on the different responsibility centres (internal dimension only) is measured on the following 3 criteria:

- 5.7.1 Characteristics;
- 5.7.2 Participation; and
- 5.7.3 Review.

The results of these 3 yardsticks measured on the 10 SOEs are described in the next 3 sections (i.e. 5.7.1-3) which can firstly be summarized in the High-Low Chart 5.7.

- (a) The printing machines manufacturer BPMH(20) has the least central planning influence mainly because some internal transfers (i.e. sales commission, repair and maintenance, research and development, trademark using right, etc.) between BPMH(20) and its holding company BGC have to be discussed and negotiated at arms-length.
- (b) The reasons for less central planning influence on the textile industry (i.e. SCM2(14), BCM3(18)) and machinery and equipment industry (i.e. BIMT(10), BCM3(18)) will be explained in Section 5.7.3(B) below.
- (c) The main reasons for higher central planning influence in SMCW(06) will be explained in Section 5.7.2(B)(c) below.

### 5.7.1 Characteristics

(A) Evidence reported in Section 5.7.1 of the 20 Case Analyses in Volume 2.

To assess the planning influences on the "interdependencies" in the 10 SOEs (all manufacturing concerns), seven characteristics (or parameters) have been used and are summarised as follow:

# (1) Interactions

SOE Code	Before 1992	After 1992
SSW5(01)	All 16 production factories involved	All 16 production factories involved
BEEF(05)	Production & service workshops involved	Production & service workshops involved
SMCW(06)	Production & service workshops involved	Production & service workshops involved
BCRF(09)	Production workshop involved only	Production workshops involved only
BIMT(10)	Production & service departments involved	Production & service departments involved
SMEF(13)	Production & service departments involved	Production & service departments involved
SCM2(14)	Production & service departments involved	Production & service departments involved
SXSW(15)	All 7 production factories involved	All 7 production factories involved
BCM3(18)	Production & service departments involved	Production & service departments involved
BPMH(20)	Production & service departments involved	Production/service departments & Holding Company involved

# (2) Transfer Price Basis

SOE Code	Before 1992	After 1992	
SSW5(01)	Standard cost plus profit margin	Adjusted market price	
BEEF(05)	Standard cost (historical + inflation)	Standard cost + fixed profit margin	
SMCW(06)	Standard cost (historical + inflation)	Market price less internal discount	
BCRF(09)	Actual cost of production	Historical cost plus 16% as standard cost	
BIMT(10)	Standard cost of production	Standard cost plus & adjusted market price	
SMEF(13)	Standard cost and standard cost plus	Market price less internal discount	

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SOE Code	Before 1992	After 1992	
SCM2(14) Standard cost and standard cost plus		Market price less internal discount	
SXSW(15) Standard cost		Standard cost	
BCM3(18) Standard cost		Standard cost	
BPMH(20) Standard cost plus		Standard cost plus & % of sales or profit	

# (3) Transfer Price Negotiation

SOE Code	Before 1992	After 1992	
SSW5(01)	A little between the buyer and seller	Some negotiations are allowed	
BEEF(05)	Very little between buyer and seller	Some negotiations are allowed	
SMCW(06)	Very little between buyer and seller	Some negotiations are allowed	
BCRF(09)	All determined by the top mgt.	Little negotiations are allowed	
BIMT(10)	Some negotiations for buyer/seller	More negotiations for buyer/seller	
SMEF(13)	Very little between buyer and seller	Some negotiations are allowed	
SCM2(14)	Very little between buyer and seller	Some negotiations are allowed	
SXSW(15)	A little between the buyer and seller	Some negotiations are allowed	
BCM3(18)	All determined by the top mgt.	Very little between buyer and seller	
BPMH(20)	Mainly determined by the top mgt.	Largely between buyer and seller	

# (4) Intermediate Product

SOE Code	Before 1992	After 1992	
SSW5(01) Buy & sell were available in the market		Buy & sell are available in the market*	
BEEF(05)	Some buy & sell were available in the market	Some buy & sell are available in the market*	
SMCW(06)	Some buy & sell were available in the market	Some buy & sell are available in the market*	

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SOE Code	Before 1992	After 1992	
BCRF(09)	Buy & sell were not available in the market	Buy & sell are not available in the market	
BIMT(10)	Some buy & sell were available in the market	Some buy & sell are available in the market*	
SMEF(13)	Some buy & sell were available in the market	Some buy & sell are available in the market*	
SCM2(14)	Some buy & sell were available in the market	Some buy & sell are available in the market*	
SXSW(15)	Buy & sell were available in the market	Buy & sell are available in the market*	
BCM3(18)	Little buy & sell were available in the market	Some buy & sell are available in the market*	
BPMH(20)	Some buy & sell were available in the market	Some buy & sell are available in the market*	

<sup>\*</sup> First of all, the internal transfers must satisfy the needs of the manufacturing factories, and then any excess production can be sold to the external customers. Sometimes insufficient internal supplies are made up by purchasing from outside but approval is required from the purchasing department or top management in the headquarters.

# (5) Transfer Quantity

SOE Code	Before 1992	After 1992	
SSW5(01)	All determined by the headquarters	Excess output can be sold externally	
BEEF(05)	All determined by the top mgt.	Excess service can be sold externally	
SMCW(06)	All determined by the top mgt.	Excess service can be sold externally	
BCRF(09)	RF(09) All determined by the top mgt. All sold internally		
BIMT(10)	Mainly determined by the top mgt.	Internal demands must be satisfied	
SMEF(13)	Mostly determined by the top mgt.	Excess service can be sold externally	
SCM2(14)	Mostly determined by the top mgt. Excess output can be sold extended		
SXSW(15)	All determined by the headquarters	Excess output can be sold externally	
BCM3(18)	All determined by the top mgt.	Mostly determined by the top mgt.	
BPMH(20)	Mainly determined by the top mgt.	Majority determined by the top mgt.	

# (6) Arbitration

SOE Code	Before 1992	After 1992	
SSW5(01)	Prices & quantities all determined by headquarters (HQ)	Mainly determined by HQ although negotiations are allowed	
BEEF(05)	Prices & quantities all determined by the top management (mgt.)	Mainly determined by top mgt. but negotiations are allowed	
SMCW(06)	Same as BEEF(05).	Same as BEEF(05)	
BCRF(09)	Prices & quantities all determined by the top mgt.	Determined by the top mgt. with very limited negotiations	
BIMT(10)	Prices & quantities mainly determined by the top mgt.	Decisions required by top mgt. to settle unresolved negotiations	
SMEF(13)	Prices & quantities mainly determined by the top mgt.	Mainly determined by the top mgt. although negotiations are allowed	
SCM2(14)	Same as SMEF(13).	Same as SMEF(13)	
SXSW(15)	Prices and quantities all determined by the top mgt.	Mainly determined by the top mgt. although negotiations are allowed	
BCM3(18)	Prices and quantities all determined by the top mgt.	Mainly determined by the top mgt. with little negotiations	
BPMH(20)	Prices & quantities mainly determined by the top mgt.	Top mgt. made decisions on unresolved negotiations	

# (7) Government Influence

SOE Code Before 1992		After 1992
BPMH(20)	No, only suggested output volumes and selling prices of products	Not at all, concern overall profit of the whole enterprise
All the other SOEs are the same	No, except the output volumes & selling prices of the final products	No, only suggest volumes and prices of the final products

- (B) Observations from the High-Low Chart 5.7.1.
- (a) There are many internal transfer of products and services between the BPMH(20) (a listed enterprise) and its holding company BGC (a wholly SOE) transacted at arm's-length according to mutually agreed contracts signed between the two entities. Therefore, open discussions and negotiations on the terms of the internal transfer are carried out by the two parties at least once every year during the planning process. (For details, see Section 5.7 of Data Analysis 20 in Volume 3 [pp.640-642]). Internally, BPMH(20) allows certain degree of freedom for its production factories to determine the transfer quantities and prices, and selling intermediate products externally.
- (b) As shown in the above 7 parameters, SSW5(01), BEEF(05), SMCW(06), BCRF(09) and SXSW(15) have higher internal planning influences on the responsibility centres from the top managements. The 2 iron and steel works (i.e. SSW5(01), SXSW(15)) are subject to volatile market conditions (e.g. inflation, product demand and supply, product import and export, etc.), and the other 3 wholly SOEs are affected by past poor financial performance. These are some reasons leading to tighter control on the internal transfer issues (see Section 5.7 of Case Analyses 1 in Volume 2 [pp.17-18]).

### 5.7.2 Participation

(A) Evidence reported in Section 5.7.2 of the 20 Case Analyses in Volume 2.

Looking into the 7 characteristics or parameters as summarised in Section 5.7.1 above, it is noted that before 1992, in most of these 10 SOEs, nearly all the transfer prices and quantities were determined by the headquarters or top management and the responsibility centres were consulted sometimes. Any conflicts were arbitrated by the top management. For those centres which were not measured in terms of internal profit, they would not care much about the internal transfer issues since they were mainly accounted for on production volume and cost (see Section 5.7 of Case Analyses 1 & 5 in Volume 2 [pp.17-18 & pp.108-109]).

The conversion into profit centres and promotion of operation mechanisms transformation since 1992 have allowed the centre managers to discuss and negotiate the internal transfer quantities and prices although interference from and arbitration by the headquarters happens from time to time. For example, the senior accountant in SSW5(01) has mentioned that because of the demand and supply of steel products in the market which has been quite volatile in the 1990s, so the headquarters, having more market information, could make better decisions on the internal transfer issues

Another important reason for this higher internal planning influence in general is that the internal transfer quantities and prices would affect the attainment of the targets in the IRC as well as the extrinsic rewards which are linked with the IRC's performance. Therefore, the top management has to balance the internal transfer issues carefully in order to maintain acceptable performance evaluation for all responsibility centres and motivate their efforts.

- (B) Observations from High-Low Chart 5.7.2.
- (a) As explained in Section 5.7.1(B)(a), the printing machine manufacturer, BPMH(20), which is a listed enterprise, has higher participation in determining the transfer quantities and prices with its holding company (BGC) in terms of sales commission, maintenance fees, research and development charges, etc. Internally, the nature of production flow involves a lot of arguments on intermediate product transfers which must be settled down by both the buyers and sellers mutually. As a result, almost equal negotiation power has been delegated to each production centre although, sometimes, arbitration from the headquarters is necessary and unavoidable.
- (b) Similar to (a) above, the nature of production flows in BIMT(10), SMEF(13), SCM2(14) are interrelated among the production units which necessitates higher participation in setting the internal transfer quantities and prices. However, the production units of these 3 wholly SOEs have long been subject to top managements' interference on the transfer issues without much room for negotiation among the units (see Section 5.7 of Data Analysis 13 in Volume 3 [pp.429-432]).

(c) In SMCW(06), the internal transfers related to the repair and maintenance, material preparation, heat treatment and electroplating services which quantities (satisfy internal demand first) and prices (market price less discount) are determined by the top management with little participation from the production workshops. As long as the transfer-in costs are below the market prices, the workshops will not care much about the transfer prices which account for just a small portion of their total costs.

### 5.7.3 Review

(A) Evidence reported in Section 5.7.3 of the 20 Case Analyses in Volume 2.

The second characteristic or parameter (i.e. transfer price basis) as tabled in Section 5.7.1 above shows that before 1992, the "standard cost" and "standard cost plus" were the most common bases adopted by these 10 SOEs. The standard costs used to set the transfer prices were determined during the annual planning exercise without getting much inputs from the middle management. They were usually calculated as historical cost plus inflation and profit margin. These standard costs were reviewed and amended, if necessary, twice every year. The transfer quantities would be adjusted more frequently due to the changes in production schedules.

From the same table, after 1992, market prices have been employed by some SOEs as references in setting the internal transfer prices. Some market prices are volatile such as the steel products manufactured by SSW5(01) and have to be reviewed more frequently. In SSW5(01), market prices are reviewed monthly and for any changes of plus or minus 5%, transfer prices will be adjusted by the headquarters in consultation with the production factories. But in some industries (e.g. machine and equipment manufacturing), where the market price information is insufficient and inaccurate to reflect reasonable transfer prices, then the standard cost basis is preferred.

- (B) Observations from the High-Low Chart 5.7.3.
- (a) The purchase price changes of raw materials (e.g. cotton) and fluctuations of textile products supply and demand since the early 1990s have pushed the two textile mills (i.e. SCM2 and BCM3) to review their transfer prices and quantities more frequently and negotiations between the internal buyers and sellers have become more intensive.

(b) Concerning the two machinery and equipment manufacturers, one (i.e. SMEF(13)) is facing sales decline and the other (i.e. BPMH(20)) is accountable to more shareholders. They both have to adjust their internal transfer prices and quantities regularly in order to meet the IRC targets on the one hand and to accomplish the goals committed in the ERC or AGM on the other hand.

#### 5.8 SUMMARY

### 5.8.0 Corporate Planning Influence

- (1) All the 20 wholly and shareholding SOEs investigated in this study are subject to the supervision of their respective ministries, bureaus and councils under the State Council of the central government in Beijing as tabled in Section 5.0. They are also under the direction and administration of the local governments where they are located. (see 5.0)
- (2) Since the economic reforms started in 1979, the enterprise management has been consulted by the government authorities in formulating the strategic or long-term plans. (see 5.0)
- (3) The promulgation of market economy and SOE operation mechanisms transformation since 1992, and the significant restructuring of the State Council organisations in 1993 have encouraged the initiation and involvement of the enterprise managements to formulate both their long- and short-term plans. (see 5.0)
- (4) The 6 planning influence variables used by Goold and Campbell and 1 additional variable called "internal responsibility contract" are employed as variables to measure the overall planning influence from the government to enterprises (external dimension) and from enterprise managements to divisions or responsibility centres (internal dimension) of all the 20 SOEs in this study. (see 5.0)

### 5.8.1 Organisation Structure

- The planning influences (external and internal combined) on the organisation structures in the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) in Guangzhou and Shanghai and 3 consumable product manufacturers (i.e. GNFF(07), GLIL(16), XLIG(17)) are relatively less than the other enterprises. Except XLIG(17), which is an equity joint-venture, the other 6 SOEs are shareholding enterprises. They are located further away from the central government in Beijing. (see 5.1)
- (6) The planning influences (external and internal combined) on the organisation structures in the other manufacturing enterprises, mainly wholly SOEs and located in Beijing and Shanghai, are comparatively higher than the retailing enterprises and consumable manufacturing enterprises as indicated in (5) above. (see 5.1)
- (7) The overall increases in planning scores among these 20 SOEs, indicate that higher autonomy of internal organisational planning and control has been delegated to the responsibility centres since 1992. (see 5.1)
- (8) Most of the 20 SOEs have converted their responsibility centres from cost centres to profit centres whose managers have been delegated higher autonomy in terms of setting transfer prices, cost management and production control. Most of the non-production functions and service departments are usually treated as "expense centres" under tight expense budgets which are either given by or agreed with the top management without extensive negotiation. (see 5.1.1)
- (9) The selling departments or units of the 4 department stores have been treated as "profit centres" before and after 1992. They are held accountable for their bottom lines (i.e. internal profit) which are directly linked with the amount of group bonus. (see 5.1.1)
- (10) Under the increasing delegation of planning, control and management autonomies from the government to the top management, and then to the operating units down through the organisational hierarchy, the economic responsibility lies with the top management who initiates and negotiates the terms and conditions of the ERC with the government

authority. In turn, the internal operating units (e.g. factories and workshops) are responsible to fulfil their economic, financial and qualitative targets as agreed in their IRCs. (see 5.1.2)

- (11) In addition to the turnover and profit targets as agreed in the IRCs, most of the store managers in the 4 department stores have been delegated certain strategic decisions in purchasing, selling, marketing, cost control and personnel. (see 5.1.2)
- (12) The appointments of the "communist party secretary" and "enterprise chief executive" in these 20 SOEs are still decided or influenced by the government. The party secretary is the representative from the government to ensure some macro-economic and political policies are under control. In some wholly SOEs, the party secretaries are involved in the planning, control and decision making processes. After 1992, most of the top managements can appoint their senior management staff and the centre managers can decide their own organisation structures and personnel affairs but important changes should be approved by headquarters. (see 5.1.3)
- (13) Before the operation mechanisms reform started in 1992, the quantities and costs of internal cross-supplies were largely determined by the top management after the centre managers had been consulted. However, in realising the autonomy delegation after 1992, most of the responsibility centres or operating units are allowed to negotiate the internal cross-supply transactions but interference and arbitration by the top management are involved. (See 5.1.4)

#### 5.8.2 Review Process

(14) In parallel with the open-door policy and economic reform started in 1979, every manufacturing and servicing industry has to adopt a more rigorous, dynamic and flexible planning process in order to keep abreast with the fast changing technologies and markets. As a result, the enterprise management has been involved in the planning and review process with the government authorities since the 6th national plan (1981-1985). (see 5.2)

- (15) The promulgations of SOE operation mechanisms transformation and market economy since 1992 have further opened the door of planning participation for the enterprise management who can initiate their strategic or tactical plans on the one hand and have to formulate their own annual budgets on the other hand. (see 5.2)
- (16) Before 1992, the enterprise long-term planning coincided with the national 5-year plan. For most of the 12 wholly SOEs in this research, their long-term plans were initiated, monitored, reviewed and modified by the government authorities while the enterprise managements were only consulted. (see 5.2.1)
- (17) With regard to the shareholding enterprises, the governmental influence on the long-term planning is less than the wholly SOEs because the board of directors has assumed this responsibility although the government's representative (e.g. communist party secretary appointed by the State Assets Administration Bureau) is usually sitting on the board and a certain external planning influence can still be exerted. (See 5.2.1)
- (18) As observed in these 20 case studies, it seems that the government authorities have delegated the annual planning or budgeting exercise to the enterprise managements since 1992 irrespective of the form of ownership these SOEs are. (see 5.2.1)
- (19) Before 1992, the annual planning or budgeting process did not involve much participation from the middle or lower management in most of the 12 wholly SOEs in this study. In some cases, the top managements gave directions to the responsibility centres for them to comply with. Since 1992, under the operation mechanisms reform and market economy promulgation, these SOEs have been encouraged to participate in the planning process and may extend their planning horizon beyond one year. Therefore, the top managements may exert less interference in divisional or departmental planning decisions, but without reducing the tight financial or budgetary control. (see 5.2.2)

- (20) Since 1992, many enterprises visited in this research have implemented a regular formal planning process for reviewing, discussing and sanctioning the annual plans or budgets and the internal responsibility contract (IRC). This budgeting process starts during the last quarter of the year and ends in February of the next calendar year. Based on some guidelines provided by the top management, each division or department initiates an annual plan or budget in which some key criteria are used as the measurement yardsticks of the IRC. Iterative discussions and negotiations are carried out between the top management and the responsibility centres until compromises result and budgets are settled. (see 5.2.2)
- In general, as from 1992, the top management of a SOE has been fully responsible for the short-term planning review process although its supervisory body might provide an overall financial target (i.e. profit before tax) for the top management to achieve. The degree of budget participation by an enterprise would seem to depend very much on its (1) type of industry; (2) form of ownership; and (3) geographical location which are the hypotheses to be tested. (see 5.2.3)
- Although the long-term planning process in most of these 20 SOEs was a rather top-down process before 1992, the 5-year plans were still reviewed annually between the government authorities and the enterprise managements. Significant changes must be approved by the government authorities, while minor changes could be initiated and sometimes determined by the enterprise managements. The major contents of the long-term plan were usually reported during the Annual Employees Congress (for wholly SOEs) or AGM (for shareholding SOEs), but details would not be explained. (see 5.2.4)
- (23) As from 1992, the enterprise managements are quite eager to review their own-formulated long-term plans at least twice every year or even on a quarterly basis. Most of the wholly SOEs' supervisory bodies participate in this review process and sometimes suggestions or even directions are made. For the shareholding SOEs, their boards of directors usually have the full autonomy to review and amend their long-term strategies, although in some

situations they need the assistance from the government authorities such as approval or recommendation for applying bank loans for capital investment. (see 5.2.4)

Before 1992, the annual plans or budgets were reviewed between the top and middle management at least twice every year but amendments were made only due to significant changes which would be reflected in the revised budgets and internal responsibility contracts. In view of the dynamic market economy and higher budget participation since 1992, the annual plans, budgets and IRCs are reviewed at least quarterly or even monthly and amendments can be made more frequently by using computers. (see 5.2.4)

### 5.8.3 Strategic Themes, Thrusts & Suggestions

- (25) Operation mechanisms transformation (1993), economic effectiveness (1992), quality control (1991) and economic responsibility contract (1990) were the specific strategic themes promulgated by the central government. They were the core spirits and supreme guidelines for the nationwide SOEs to observe and attain when planning, implementing and evaluating their activities. (see 5.3)
- (26) To accommodate the changing external environments and internal expectations, the enterprise management reinforces the strategic themes by more specific strategic thrusts which are given to and agreed with the responsibility centres. Typical strategic thrusts discovered in these 20 SOEs are quality control, customer service, management control, technology improvement, etc. They are usually translated into concrete strategic, tactical and operational plans. (see 5.3)
- (27) From time to time, the top management of an enterprise has to provide specific suggestions in the planning, review and control processes in every responsibility centre or unit so that not only the strategic themes and thrusts can be recognised, but the final financial targets can be achieved as well. (see 5.3)

(28) As observed in these 20 SOEs, the ways and extents of conveying the specific suggestions to the business centres and units varies from one enterprise to another depending on many factors such as (1) government influence; (2) form of ownership; (3) type of industry; (4) financial performance; and (5) management style. (see 5.3)

### 5.8.4 Long-Term Plans

- (29) Both the operation mechanisms transformation and market economy promulgated by the government since 1992 have empowered higher autonomy and enlarged the scope of long-term planning in the SOEs. The top management of these 20 SOEs have to initiate their own long-term plans and compromise with the government authorities who may insist on certain macro-targets such as output volume and mix, turnover, profit before tax, sales and income tax some of which are usually incorporated in the ERC. (see 5.4.1)
- (30) In some of these 20 SOEs, there are formal planning committees and procedures in existence to get middle management (e.g. responsibility centre managers) involved whose planning, control and evaluation aspects are affected. It is a way for the top management to allocate limited resources to different divisions and departments according to the market demand, product profitability and government suggestions. (see 5.4.2)
- (31) The involvement from middle management (e.g. responsibility centre managers) in formulating the long-term plans was limited to consultation only in most of the SOEs before 1992. In recent years, some SOEs in this research have established formal planning committees and invited the centre managers to participate in the formation, evaluation, monitor and review of the long-term plans although the responsibility centre managers seldom initiated changes but mainly concerned the impact on their annual budgets and internal responsibility contracts which they are measured on. (see 5.4.3)
- (32) Before 1992, in most of the 20 SOEs, the 5-year long-term plans were reviewed annually by the government authorities with the top managements of the SOEs and changes made were notified to the various levels of management during the Annual Employees Congress in which all the employees could attend. (see 5.4.4)

(33) After 1992, in some of the 20 SOEs, the senior management groups or the planning committees in some cases, review the long-term plans every year before the annual planning cycle started and significant changes are reported to the government authorities for endorsement and sometimes assistance such as seeking a long-term bank loan is required. A summary of long-term plans is reported to the Annual Employees Congress for wholly SOEs and the AGM for shareholding enterprises. Some enterprises prefer to describe their long-term plans in documents and booklets for limited circulation. Because of the fast changing market conditions and technology advancement, most of the enterprises review their long-term plans twice every year. (see 5.4.4)

### 5.8.5 Short-Term Plans/Budgets

- (34) Superficially, the budgeting process practised currently by these 20 SOEs is similar to the conventional steps described in the management accounting textbooks and equivalent to practice in the western countries. But when probing into the substance of this process, the roles of budgeting in terms of authorization, coordination, communication and accuracy are different from the western concepts because of the impacts from the external and internal factors as listed in Section 5.5. (see 5.5)
- (35) Under a more open market situation, most of the SOEs in this study adopt a general short term planning policy called "production determined by sales" which means sales is the initial driving force of all the activities. Sales forecast is the primary budgeting or limiting factor as described by many management accounting textbooks. (see 5.5.2)
- (36) To increase the budget participation and cope with the dynamic market changes since 1992, the annual plans and budgets are reviewed at least quarterly or even monthly and amendments are made due to unavoidable internal and external factors. Fixed budget concept is still the main thrust but flexible budgeting is accepted by some SOEs which have been using computers more extensively. (see 5.5.4)

- 5.8.6 Internal Responsibility Contracts (IRC)
- (37) In parallel with the more open annual planning and budgeting process, higher participation from the responsibility centres in formulating their IRCs can be observed in recent years. Perhaps the greater the linkage between the performance (both financial and non-financial) and remuneration (wages and bonus), the higher will be the participation in IRC design and negotiation, but of course this proposition is subject to future research in the Chinese enterprises. (see 5.6)
- (38) Before 1992, the major quantitative targets in the IRCs of these 20 SOEs were production volume and mix, and standard costs while qualitative targets such as safety and quality, which had veto effects on the bonus determination, were also defined. The IRC system was largely applied to the production units. Since 1992, many responsibility centres of the 20 SOEs have been changed into profit centres, then internal profit has become the key financial target in the IRCs. (see 5.6.1)
- (39) As a motivation factor in the IRC, the implementation of its targets is usually linked with the gross wages and bonus to be awarded to the corresponding workshop or department measured on a monthly, quarterly and yearly basis. (see 5.6.2)
- (40) The accelerated shareholding transformation process since 1992 and the new taxation system implemented in January 1994 has blurred the unique features of the ERC which is being phased out in some well-performed SOEs. By playing down or reducing the rigidity of the targets stipulated in the ERC, the top management of a wholly SOE can leave greater flexibility in setting the budget and IRC with the responsibility centres although the overall financial targets have to be achieved as far as possible. (see 5.6.2)
- (41) Speaking to the top management and senior managers in these 20 SOEs, in some cases, the centre managers have to initiate the major IRC targets before negotiating with the top management. More goal congruence arguments will occur when the performance-based wages and incentive scheme are discussed in setting the IRC. (see 5.6.2)

- (42) Usually the IRCs are reviewed in the middle of the year and amendments can be made when mutually agreed by the top management and factory managers. Some SOEs review their IRCs quarterly and amendments are made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. (see 5.6.3)
- (43) Second-tier IRCs are signed between the factory manager and production line supervisors in some large SOEs in order to further delegate the planning and control responsibilities to the lower levels of management. (see 5.6.3)
- (44) Some interviewees in this study agree with evidence that the IRC is an effective way to achieve the short-term targets on the one hand and improve the budget communication between the different levels of management on the other hand. Furthermore, IRC can link performance with incentive scheme as a pre-determined means for resources distribution among the responsibility centres within an enterprise. (see 5.6.3)
- (45) Contrary to (44), a chief accountant in Beijing contends that the major drawback from the IRC system is "protectionism" in a sense that for a division or responsibility centre to ensure the accomplishment of its targets and the monetary benefits for its employees, the divisional management or centre manager may act for his unit at the expense of the other responsibility centres (dysfunctional effect). (see 5.6.3)
- 5.8.7 Management of Interdependencies
- (46) Reasons for not measuring the "interdependencies" of 10 SOEs in this study are tabled in Section 5.7. (see 5.7)
- (47) The 7 characteristics or parameters to assess the management of interdependencies of the 10 manufacturing SOEs are tabled in Section 5.7.1. (see 5.7.1)

- (48) In these 10 SOEs before 1992, nearly all the transfer prices and quantities were determined by the headquarters or top management and the responsibility centres were consulted sometimes. Any conflicts were arbitrated by the top management. For those centres which were not measured in terms of internal profit, they would not care much about the internal transfer issues since they are mainly accounted for by production volume and cost. (see 5.7.2)
- (49) The conversion into profit centres and promotion of operation mechanisms transformation since 1992 have allowed the centre managers to discuss and negotiate the internal transfer quantities and prices although interference from and arbitration by the headquarters happens on a monthly or quarterly basis. (see 5.7.2)
- (50) The internal transfer quantities and prices would affect the attainment of the targets in the IRC as well as the extrinsic rewards which are linked with the IRC performance. Therefore, the top management has to interfere and balance the internal transfer issues carefully in order to maintain acceptable performance evaluation for all responsibility centres and motivate their efforts. (see 5.7.2)
- (51) Before 1992, the standard costs used to set the transfer prices were determined during the annual planning exercise without getting much inputs from the middle management. They were usually calculated as historical cost plus inflation and profit margin. These standard costs were reviewed and amended, if necessary, twice every year. The transfer quantities would be adjusted more frequently due to the changes in production schedules. (see 5.7.3)
- (52) After 1992, market prices have been employed by some of these 20 SOEs as references in setting the internal transfer prices. The market prices need to be reviewed frequently if they are fluctuating. (see 5.7.3)
- (53) The following table shows the overall changes of planning influence (in terms of scores and degrees [in brackets]) of all the 20 SOEs by averaging the 7 variables (6 used by Goold and Campbell) before and after 1992:

Ch.5: Analysis of Data II

	Enterprise	Planning Influence	Planning Influence	Planning Influence
	No. & Code	Before 1992	After 1992	Score Increase@
01	SSW5	1.1 (High)	2.5 (Medium)	1.4
02	XFLT	1.6 (High-Medium)	2.8 (Medium-Low)	1.2
03	GFDS*#	2.1 (Medium)	3.1 (Low)	1.0
04	GDDS*#	2.0 (High-Medium)	3.1 (Low)	1.1
05	BEEF	1.2 (High)	2.3 (Medium)	1.1
06	SMCW	1.3 (High)	2.4 (Medium)	1.1
07	GNFF*	1.8 (High-Medium)	2.8 (Medium-Low)	1.0
08	GNFB*#	2.1 (Medium)	3.2 (Low)	1.1
09	BCRF	1.2 (High)	2.3 (Medium)	1.1
10	BIMT	1.3 (High)	2.5 (Medium)	1.2
11	SDS1*#	2.2 (Medium)	3.3 (Low)	1.1
12	SCCW	1.4 (High)	2.3 (Medium)	0.9
13	SMEF	1.5 (High)	2.6 (Medium-Low)	1.1
14	SCM2*	1.6 (High-Medium)	2.7 (Medium-Low)	1.1
15	SXSW	1.3 (High)	2.5 (Medium)	1.2
16	GLIL*	1.9 (High-Medium)	2.9 (Medium-Low)	1.0
17	XLIG	1.9 (High-Medium)	3.0 (Medium-Low)	1.1
18	ВСМ3	1.4 (High)	2.4 (Medium)	1.0
19	BFSH	1.5 (High)	2.4 (Medium)	0.9
20	BPMH*	1.7 (High-Medium)	2.7 (Medium-Low)	1.0

<sup>\*</sup> Shareholding enterprises are subject to less planning influence than the other wholly stateowned enterprises after 1992. This general observation is statistically tested in Chapter 7.

<sup>#</sup> Department stores are subject to the least planning influence among all the 20 SOEs after 1992. This observation is statistically tested in Chapter 7.

<sup>@</sup> Increase in planning scores denotes less planning influence.

# CHAPTER 6: ANALYSIS OF DATA III -- CONTROL INFLUENCE

#### 6.0 INTRODUCTION

According to Goold & Campbell (1991: 40), "Control Influence" concerns the way in which the headquarters reacts to results achieved. Whereas planning influence is about the 'inputs' to decisions, control influence is about the results of decisions -- the 'outputs' such as profit or market share. Control influence arises from the headquarters reaction to poor performance, and the frequency with which the headquarters monitors results<sup>1</sup>.

Control influence has its most immediate impact on day-to-day actions -- how strategy is implemented. But it can also indirectly influence thinking and choices about future strategies. For example, a manager who follows a risky strategy that fails is likely to interpret his experience very differently depending on whether he receives a bonus that year or not. And his interpretation will affect the choices he makes about strategy in the future. The budget process, the capital appropriation system, and the strategic planning system provide the formal framework for control, which is essentially a linked process of agreeing objectives, monitoring results and applying pressure and incentives.

The management principles applied to the central and local governments in China are similar to the concepts and tools employed in the SOEs. *Planning and Control* are the two facets of the "coin of administration" adopted by the government in China. The National 5-Year Plan and its influence on the SOE's strategic or long-term plans via the ERC have been described in Section 5.4 of Chapter 5. And in turn how the SOE's top management exerts planning influence on the responsibility centres in formulating their annual plans, budgets and IRCs have also been discussed in Sections 5.5 & 5.6 of Chapter 5.

<sup>&</sup>lt;sup>1</sup> 'Control' in Goold & Campbell's book relates to the sort of functions discharged by the headquarters or top management. They do not use the term control in the sense of having the power to decide or dispose of events.

A plan without subsequent monitoring or control is like sailing a ship to a predetermined destination without a good and experienced captain. The captain of the "economic boat" in China is the State Council whose executive committee and various ministries are responsible to implement and control the legislation, plans and policies as laid down by the People's Congress and the Communist Party. The economic reforms started in 1979 have changed the business practices of every industry in China and also imported tremendous amounts of investment and technology from different parts of the world. During the past 18 years of rapid economic development in China, ample wealth creating opportunities have induced many economic problems such as inflation, speculation, unemployment, commercial crime, etc., which cannot be solved by legislation alone. A well-structured control mechanism is needed.

An important economic weapon used by the government is the so called "macro-economic control" used to curb the overheated economy at the peak and boost the economic downturn at the trough of the average 5-year cycle as has happened in China. The present macroeconomic control measures (16 control mechanisms) have been implemented since July 1993 and have taken effect to cool down the overheated economy in 1995, such as to bring down the inflation rate from 21.7% (yearly average) in 1994 to 14.7% (yearly average) in 1995, and further, down to 4%-6% (yearly average) in 1996<sup>2</sup>. Gradual relaxations of these control mechanisms (e.g. bank credits, investment control, domestic market sales, etc.) have been allowed since early 1996 in order to speed up the retarded economic growth in a steady and healthy manner as stated in the current 9th National 5-Year Plan (1996-2000).

Taking a micro point of view, the many different government authorities have to monitor the economic performance of all the SOEs which are under their respective administration as described in the Introductory Section (5.0) of Chapter 5. Therefore, different industries may be subject to various degrees of macroeconomic control influence from their government authorities according to the specific circumstances of individual industries. This kind of "control influence" is passed down from the top management of the SOE to the responsibility centres, and then to the

<sup>&</sup>lt;sup>2</sup> It was expected that the yearly average inflation rate in 1997 would be around 4% (reported by *Wen Wei Po* (Hong Kong Newspaper) on 26 July 1997).

various departments, sections and finally individuals through the organisational hierarchy.

As highlighted in the first two paragraphs in this chapter, the measuring parameters used by Goold and Campbell (1991) are adopted in this study to gauge the extent of control influence (as an external dimension) on each of the selected 20 SOEs from its respective government authority. The degree of control influence on each SOE will in turn affect the control influence (as an internal dimension) on the responsibility centres within the enterprise from the top management (e.g. general manager, board of directors, etc.).

To measure the control influences on the 20 SOEs and their responsibility centres (both external and internal dimensions) in this study, the following 4 variables are employed:

- 6.1 Decentralisation & Control#;
- 6.2 Agreeing Objectives\*;
- 6.3 Monitoring Results\*; and
- 6.4 Rewards & Incentives\*.
- \* All the 3 control influence variables used by Goold and Campbell are employed in this study.

  # This is the additional variable which is a typical element of control in the responsibility accounting system adopted in the SOEs in China.

Except for "agreeing objectives" (which does not have any sub-variables) under each of the above 3 variables, there are 3 to 4 sub-variables or parameters to measure and analyse the extent of control influences before and after 1992. In each variable or parameter, the measurement is on a 5-point scale ranging from Tight Financial Control (0) to Tight Strategic Control (4). The detailed ranges are as follows:

Tight Financial	(0.0 - 1.0)
Financial	(1.1 - 1.5)
Moderate Financial	(1.6 - 2.0)
Moderate Strategic	(2.1 - 2.5)
Strategic	(2.6 - 3.0)
Tight Strategic	(3.1 - 4.0)

For each SOE, sub-variable scores are combined to give an average measure for a variable e.g. decentralisation & control. Each sub-variable has equal weighting and the scores pre- and post-1992 are calculated in this way. Similar procedures are used to determine the control scores of the other 3 variables pre- and post-1992. The higher the score, the lower control influences on financial controls for the external and internal dimensions, and also the more the tendency towards the strategic control style in the responsibility accounting system of a SOE.

Then the 2 weighted-averages of all the 4 variables in each SOE are equal to the overall control influences (external and internal dimensions) before and after 1992 (for comparison and hypothesis testing purposes). By going through Sections 6.1-6.4 of any one of the Case Analyses in Volume 2, the quantification process of this study is demonstrated. The justification and elaboration of the sub-variables are also provided at Volume 2.

Tables 3A-C in Appendix 1 summarizes all the control parameter scores before and after 1992 for all the 20 SOEs. For better visual pictures of these control scores and their changes before and after 1992, each variable and their corresponding parameters are depicted in the following High-Low Charts (see Appendix 2):

01 / 1	T .	1.	•	~ · ·
Chart 6.1	I lecenti	ralisation	Xr I	Control
Chart O. i	Decenin	ansanon	œ	Common

Chart 6.1.1 Organisational Design

Chart 6.1.2 Personnel

Chart 6.1.3 Control Mechanism

Chart 6.2 Agreeing Objectives

Chart 6.3 Monitoring Results

Chart 6.3.1 Reporting Requirements

Chart 6.3.2 Performance Measurement

Chart 6.3.3 Review & Communication

Chart 6.4 Rewards & Incentives

Chart 6.4.1 Incentives

Chart 6.4.2 Performance Orientation

Chart 6.4.3 Participation

Chart 6.4.4 Review & Communication

High-Low Chart 6.0 is the overall weighted-average control scores of all the 20 SOEs in this study. Looking into this chart, it is noted that the 4 department stores (i.e.GFDS(03), GDDS(04), GNFB(08), SDS1(11)) have the higher control scores of 2.6-2.8 after 1992 and are subject to lower control influence (external and internal combined) compared with the other 16 SOEs. They are moving towards the "strategic control" style as defined by Goold and Campbell (1991).

On the other hand, the other manufacturing SOEs have the lower control scores at or below 2.0 after 1992 and are subject to higher control influences. They remain in the domain of "financial control" as defined by Goold and Campbell (1991).

The explicit and implicit reasons behind the control scores and influences of each variable or parameter are explained in the following 14 sections (6.1-6.4) of this chapter. In each of the following 14 sections, firstly, some facts and changes relating to the specific variable or parameter are narrated, and secondly, some observations from the corresponding High-Low Chart are explained.

Finally, a summary of major facts and findings will be listed in the last section (6.5) of this chapter.

## 6.1 DECENTRALISATION & CONTROL

Besides involving participation from various levels of management in planning, another major purpose of organisational decentralisation in a SOE is to monitor and control the performance and progress of different functions, divisions and departments which are classified as responsibility centres in this study.

As discussed in Section 5.1.2 in Chapter 5, under the increasing delegation of planning, control and management autonomy from the government to the top management of a SOE, and then to the responsibility centres down through the organisational hierarchy (usually in functional structure type), the economic responsibility lies with the chief executive who initiates and negotiates the terms and conditions of the ERC with the government authorities.

In turn, the internal responsibility centres within a SOE have to fulfil their economic and qualitative targets as agreed in their IRCs. In view of this decentralisation process, all the 20 SOEs in this study have become investment or profit centres and many of their responsibility centres have been converted into profit centres as well. Therefore, from an internal control perspective, these responsibility centres are accountable to their top management for whatever types of targets set in the budget or IRC.

Furthermore, the extent of decentralisation affects the way to design the organisational structure, the setting of personnel policies and the types of control mechanism to monitor the performance. Therefore, the control influence in respect of "decentralisation" from the enterprise management on the different responsibility centres (internal dimension only) are measured on the following 3 criteria:

- 6.1.1 Organisational Design;
- 6.1.2 Personnel; and
- 6.1.3 Control Mechanism.

The results of these 3 yardsticks measured on the 20 SOEs are described in the next 3 sections (i.e. 6.1.1-3) which can firstly be summarized in the High-Low Chart 6.1.

(a) The 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) are subject to less macro-economic control measures from their local government authorities, and therefore they are given more freedom or discretion to responsibility centre managers (i.e. more decentralization). Their management style is moving towards a "strategic control" type. The control process is an important influence mechanism for the top management. Targets are set for strategic objectives (such as customer satisfaction) as well as financial performance (such as sales), and store managers are expected to meet the targets. Budgets or IRCs can only be missed when important strategic objectives are at stake (e.g. keen market competition) (Goold & Campbell 1991: 43).

(b) The responsibility centres of the other 16 SOEs are subject to higher control influence from the top management. Their control style is biased to the type of "financial control" under which the headquarters' influence is exercised mainly through the budget process. The centre manager's role in developing strategies is limited, and long-term plans are not formally reviewed by the headquarters. Instead, the top management focuses on a close review of annual budget and IRC. Profit targets are set when the budget is approved, and careers are at stake if budgets are missed (Goold & Campbell 1991: 42).

# 6.1.1 Organisational Design

(A) Evidence reported in Section 6.1.1 of the 20 Case Analyses in Volume 2.

As far as the organisational design is concerned, the 12 wholly SOEs in this study used to have the following three distinct levels of management hierarchy:

(1) Top Management (General Manager, Deputy-GM, Party Secretary)

(2) Middle Management (Factory/Workshop Managers, Chief Engineer, Chief Economist,

Chief Accountant, Department Managers, Tertiary Enterprise

Managers)

(3) Lower Management (Factory/Workshop Foremen, Deputies of the (2) above,

Supervisors, Officers)

For the 8 shareholding SOEs, their "Boards of Directors (BOD)" are supposed to be the top policy and decision makers (according to Company Law 1993) despite the fact that the government authorities may still exert different extents of planning and control influences on them. In the case of GFDS(03), the BOD consists of the following members:

Chairman : General Manager (GM)

Deputy Chairman : Deputy-GM (Finance)

Deputy Chairman : Communist Party Secretary

Director : Deputy-GM (Sales)

Director : Deputy-GM (Purchasing)

Director : Labour Union Leader

Except the Communist Party Secretary, who is appointed by the government (i.e. First Commerce Bureau of Guangzhou), the other board members are the top management (or employees) of the enterprise. Similar constitutions of BODs exist in 4 other shareholding enterprises (i.e. GDDS(04), GNFF(07), GNFB(08), GLIL(16)) in Guangzhou. Only 3 listed enterprises (i.e. SDS1(11), SCM2(14), BPMH(20)) have a few non-executive directors or outsiders sitting on their BODs. The Company Law of China implemented in January 1994 did not define the qualifications to be a director, nor forbid any enterprise employees to be directors.

According to the principles of management and company legislations practised in the western countries, the functions and personnel of the BOD are usually separated from the management and operation of the company in order to maintain the effects of supervision, moderation and independence (Chow et al 1993). However, during the early stage of this shareholding or privatization process in China, the government authorities and enterprise managers believe that if the board members are also the top management of an enterprise, they know the operation better and can make more appropriate decisions.

Although there are overlaps between the BOD and the top management such as in GFDS(03) who are playing dual roles in both levels, nevertheless, the segregation of duties are clearly defined. The general manager (also chairman of the BOD) is acting as an arbitrator to harmonize any role conflicts which happen among the members in the BOD (see pp.347-348 of Volume 3).

- (B) Observations from the High-Low Chart 6.1.1.
- (a) The 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) have the highest control scores or the least organisational influences exerted from the headquarters or top management. The store managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units or sections. In addition, since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important modifications should be discussed with the headquarters before implementation.

(b) The 5 wholly SOEs in Beijing and all the manufacturing SOEs in Shanghai are subject to higher control on organisational design from their head offices or top managements (i.e. high-medium scores 2.1-2.2). In these rather traditional enterprises (mainly wholly SOEs), some top managements are reluctant to change the organisation structures which may involve a "power struggle" and affect the benefits of different interest groups. They prefer to maintain a stable organisation structure with clear-cut lines of authority and responsibility which is an important prerequisite for implementing the IRC system.

## 6.1.2 Personnel

(A) Evidence reported in Section 6.1.2 of the 20 Case Analyses in Volume 2.

In the 12 wholly SOEs in this study, the factory, workshop and department managers are responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (i.e. distribution of bonus). However, termination of employment of workers and staff is a difficult task which need approvals from the top management and party secretary. It is because the strategic theme to abolish the "Three Iron Bowls" (iron employment, iron position and iron wages) or "Life-Long Employment" has not been effectively implemented in most of these SOEs.

Suppose by cutting, say, 10%-20% of the employees in a SOE, it will create many social problems in light of the current insufficient employment social welfare and benefits existing in China. One way to tackle this headache, the "Big Rice Pot" problem, is to transfer the excess workers and employees to some "tertiary enterprises (businesses)" (i.e. restaurant, taxi fleet, grocery shop, etc.) established by the SOE. These tertiary businesses are self-financed under some assistance given by the host enterprise (Liu & Zhang 1996: 131).

Concerning the 4 department stores, their store managers are responsible for certain personnel functions such as recruitment, assignment, training, evaluation, remuneration and even termination of employment. Unlike Beijing, the labour markets in Shanghai and Guangzhou, in particular the latter city, are relatively free (or subject to less macro-economic control from the local government) which means employees can choose new jobs and resign from the old ones at their

own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice or compensation according to the terms of the employment contracts and the Labour Law enacted in January 1995. Furthermore, these shareholding department stores have implemented the "Employment Contract System" since 1992. To a great extent, the "big rice pot" or "three iron bowls" concept has almost been abolished (Liu 1995).

- (B) Observations from the High-Low Chart 6.1.2.
- (a) Again, the headquarters or top management of the 4 department stores have given higher autonomy to or exerted less control influence on the store managers to manage their personnel affairs. The Assistant General Manager of GNFB(08) mentioned that their store managers should know better who to hire, who to fire and how to arrange their subordinates in groups or teams so that both turnover and service levels can be enhanced. In addition, less influence (although enterprisewide policies, strategic themes and thrusts still have to be observed) has been exerted on the IRC formulation, implementation and review by the top management, then a free hand should be given to each store manager to handle his/her people in order to achieve the targets agreed in the IRC (see Section 5.1 of Data Analysis 11 in Volume 3 [p.336]). These shareholding enterprises are moving towards the "Strategic Control Style" as suggested by Goold and Campbell (1991: 43).
- (b) The 2 textile mills (i.e. SCM2(14), BCM3(18)), the metallurgical equipment factory in Shanghai (i.e. SMEF(13)) and the hotel in Beijing (i.e. BFSH(19)) indicate the highest personnel control influence (or lowest control scores) exercised by the top management on their responsibility centres. Because of the fast expansion in the textile industry during the past few decades<sup>3</sup>, SCM2(14) and BCM3(18), in particular the latter mill having 7,000 people, have created substantial redundant employees and subject to some macroeconomic control measures from the local government in terms of labour policy.

<sup>&</sup>lt;sup>3</sup> Textile mills belong to the "secondary industry" in manufacturing input materials for making clothes which are consumed by over 1.2 billion people in China. The extremely high demand of cheap, durable and plain quality clothing in the 1950s, 1960s and 1970s has changed to expensive, fashionable and colourful clothing but quantity demanded was reduced in the 1980s and 1990s.

SCM2(14) is transferring more and more employees to its own "tertiary enterprises" (i.e. motel, restaurant, supermarket, trading company, etc.), while BCM3(18) is trying to enforce or encourage its employees to take early retirement and has stopped recruiting new employees. Therefore, both textile mills keep a tight control on the personnel affairs through top management with a long-term objective to cut the workforce.

Similarly, the Beijing hotel BFSH(19) has a significant proportion of redundant employees because it is the government central planning policy to appropriate a group of hotel and tourism training school graduates to this hotel every year. This began especially during the 1980s when the open-door policy and economic reform attracted millions of tourists. In recent years, the top management of BFSH(19) has not replaced many employees who have retired or resigned in order to reduce the size of the workforce naturally. Therefore, some elements of central planning and control of personnel linger on.

## 6.1.3 Control Mechanism

# (A) Evidence reported in Section 6.1.3 of the 20 Case Analyses in Volume 2.

The major control mechanisms employed by the top management of these 20 SOEs to monitor the performance of their production functions and service departments are annual budgets and IRCs. As described in Section 5.6.1 in Chapter 5, the most important measurement criteria are financial targets (e.g. sales, profit, foreign exchange, etc.), quantitative targets (e.g. production volume, mix and value, etc.) and qualitative targets (e.g. product quality, production safety, customer service, etc.) as set in the budget and IRC. In general, the economic targets (i.e. both financial and quantitative types) account for much higher weightings in determining the performance-based group bonus under the IRC (Liu & Zhang 1996: 130-131).

The control mechanisms are clearly communicated to the responsibility centres through the annual plans, IRCs and other enterprise policies, rules and regulations. Many interviewees in this study have mentioned that the control style has not changed so much before and after 1992 mainly because of the continuous government's macroeconomic controls and many uncertainties existing in the market during the rapid economic reform in the last decade.

- (B) Observations from the High-Low Chart 6.1.3.
- (a) The control scores of the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) are exceptionally higher than all the other SOEs since 1992. Within each department store, as long as the store managers can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility of tactical and strategic development, such as how to attract the customers to buy, to the managers without much interference (see Section 6.1 of Case Analysis 8 in Volume 2 [pp.185-186]).
- (b) The relatively tighter control influences exerted on 4 machine and equipment manufacturing SOEs (i.e. XFLT(02), BEEF(05), BCRF(09), BIMT(10)) have not been changed much before and after 1992 (see Section 6.1 of Case Analysis 9 in Volume 2).
- (c) The printing machine manufacturer BPMH(20) has shown a significant change in control influence on their responsibility centres after listing on the Shanghai and Hong Kong Stock Exchanges in 1993. The reduced planning influence exerted on the more decentralised responsibility centres and the increase in planning participation have resulted in lower financial control (see Section 6.1 of Case Analysis 20 in Volume 2 [pp.494-495]).
- (d) The iron and steel work SSW5(01) has the highest control influence among the 20 SOEs. Traditionally, SSW5(01) has been using tight financial, quantitative and qualitative measures to control the performance of each responsibility centre, in particular the production factories, in order to manage the huge and diversified organisation with 23,000 employees effectively and efficiently.

#### 6.2 AGREEING OBJECTIVES

Goold and Campbell (1991: 40) mention that the setting of objectives is the first step of the control process. Companies differ widely in how they establish objectives. The corporate objective of Wimpy is to be the 'Marks & Spencer of the fast food industry' -- quality food for the average person. Some companies rely almost entirely on annual profit numbers when setting objectives (typical situation in the ERC system in China).

There are differences in the precision and detail of targets; the balance between objective and subjective measures; the time frame for achievement; the influence of the headquarters in proposing and agreeing objectives; the degree of 'stretch' built into objectives; and the emphasis on financial versus non-financial targets (Goold & Campbell 1991: 40). These differences are important to the type of control influence adopted by the headquarters, and they are employed to measure this control variable in this study (see Section 6.2 of the 20 Case Analyses in Volume 2).

In most of the 20 SOEs in this research, the top managements set similar objectives for their production functions and service departments -- workshop and department managers must meet their agreed budget figures or IRC targets for the year and an improvement in performance year on year is expected except under adverse market conditions (i.e. high inflation during 1993 to 1995, short supply of incoming materials, etc.). The critical occasion, therefore, is the annual budget review. For the profitable and competitive enterprises (i.e. XFLT(02), GFDS(03), GDDS(04), GNFB(08), SDS1(11), GLIL(16), XLIG(17), BPMH(20)), their government authorities and top managements are trying to set more demanding standards of performance year after year for the responsibility centres to achieve (see Section 5.6 of Case Analysis 4 in Volume 3 [pp.96-99] for a typical example).

Two kinds of pressure are put on the responsibility centre managers at the annual or quarterly review -- (1) to submit a budget that they can achieve; and (2) to aim for results that are, most likely, better than the previous year's. The centre managers fully understand that their group bonuses are tied with the budget or IRC. Therefore, the top management does not tell the centre managers what their targets (e.g. production, sales, profit, expenses, etc.) should be, but tries to "energize" the ambition of the middle management teams to do better year by year. But in terms of costs and expenses, control is tighter and specific suggestions sometimes will be given by the top management (especially in the manufacturing industries).

In addition to the formal annual or quarterly review process, many ad hoc meetings and informal communication are made between the top and middle management, and also among the responsibility centres themselves.

- (B) Observations from the High-Low Chart 6.2.
- (a) Distinctively, the control influences on "agreeing objectives" between the top managements and responsibility centres of the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) is much lower than all the other 16 SOEs before and after 1992. Objectives in these department stores emerge from the detailed discussion of the annual plans or budgets with the store managers. The financial objectives stem from the sales forecast, rather than vice versa. This is not to suggest that the objective-setting process is wholly bottom-up. The initiative lies in the first instance with the store managers, who formulate the plans, rather than with the headquarters, but top management in the headquarters can and do push and suggest for alternative targets as they see fit (see Section 6.2 of Case Analysis 8 in Volume 2 [p.186]).

With long years of experience and information (financial and marketing) gathered by the chief executive (e.g. general manager) of GFDS(03) for example, he can give suggestions to individual store managers to amend the financial objectives both in the short- or long-term. Furthermore, the general manager at headquarters has a holistic view to achieve the overall financial objectives year after year according to the long-term plan. Finally, the end-result is usually a compromise that both headquarters and department can live with.

(b) For BEEF(05) and SMCW(06), in view of the fierce competition within this machine and equipment manufacturing industry, the production workshops feel passive in setting their objectives or targets in the budgets and IRCs because their activities are dependent on the sales demand. In terms of expenses, control is tighter and a system of standard costing has been implemented after 1992. There is an argument for greater decentralisation in terms of setting objectives and targets. Although the other service departments do not have the IRCs, they have agreed specific objectives and targets with the general manager, for example, marketing and selling expenses as a percentage of sales, purchase material price variances, tasks set by the accounting and finance department, etc. The promotion, salary and bonus of these functional staff are correlated with these quantitative and non-financial targets (for a detailed example of bonus evaluation and distribution policy, see Section 6.4 of Data Analysis 12 in Volume 3 [pp.391-398]). Therefore, the responsibility centres are subject to higher control influence in setting objectives.

#### 6.3 MONITORING RESULTS

One of the most worrying problems anticipated by the central government of China under the rapid economic reform and development since the early 1990s is the overheated economy which has resulted in many adverse national effects such as high inflation, capital fund misappropriation, unbalanced growth within various industries, unemployment, etc. To alleviate the impact or to prevent these unfavourable economic defects, the central government has imposed 16 macroeconomic control policies (such as bank credit and capital investment controls) since July 1993 and they are still in force, although with some relaxations such as bank credits, during the 9th National 5-year Plan (i.e. 1996-2000).

Over half of the medium- and small-sized SOEs in China made financial losses at the end of 1996. How to revive the financial positions of these ailing SOEs has become and will be the top priority in the economic agenda of the State Council in the current 5-year government working plan (i.e. 1996-2000). Therefore, it is understandable that those government authorities always keep tight control on the loss-making SOEs under their administration. For some well-performing industries, such as retailing and consumable goods manufacturing as shown in this research, the government authorities would adopt a "strategic control" style as defined by Goold and Campbell (1991: 43). Contrary, for some under-performing industries, such as machine and equipment manufacturing, textiles, iron and steel as indicated in this research, a "financial control" style is preferred as also defined by Goold and Campbell (1991: 43). The latter style tends to ensure that the financial targets (e.g. turnover and profit) as stipulated in the ERC can be achieved year by year. Hence, different industries may be subject to varying degrees of macro-economic control measures from their respective government authorities.

As evidenced in many of the case studies in this research, how the government authorities monitor the results of their SOEs will affect the ways and extents these SOEs exert control on the performance of their responsibility centres (e.g. production factories or workshops).

As suggested by Goold and Campbell's (1991: 40-41) that most of the SOEs in this research ask their business units or responsibility centres to report results monthly, and for some there are weekly reports, ad hoc questions and many informal ways for the headquarters to check up on

how well each responsibility centres are performing. The way in which the headquarters seeks out performance information, the type of information it asks for, and the arrangement it has for discussing the results with managers are all part of the control process. Some SOEs have half-aday meetings every month between the top management and responsibility centre managers to review detailed figures on performance versus plan. Others are satisfied with weekly reports that are always discussed or commented on by the headquarters.

The control influence in respect of "monitoring results" from the enterprise management on the different responsibility centres (internal dimension only) are measured on the following 3 criteria:

- 6.3.1 Reporting Requirements;
- 6.3.2 Performance Measurement; and
- 6.3.3 Review and Communication.

The results of these 3 yardsticks measured on the 20 SOEs are described in the next 3 sections (i.e. 6.3.1-3) which can firstly be summarized in the High-Low Chart 6.3.

- (a) The 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) exert less control influences in respect of monitoring results such as turnover, stock levels and profit margins on their responsibility centres (e.g. store managers). They belong to the more dynamic and volatile retailing industry with high growth prospects. Other explanations of this phenomenon are described in 6.3.1(B)(a) and 6.3.3(B)(a) below. As a result, they have been turning from the financial control style to strategic control style since 1992.
- (b) On the other end, the two iron and steel works (i.e. SSW5(01), SXSW(15)) retain high control influences in terms of monitoring results on their responsibility centres (e.g. production managers). In recent years, the iron and steel industry has been facing many uncertainties relating to demand, supply, pricing, import, export, competition, etc. Other contributing factors are mentioned in Section 6.3.1(B)(b) below. Therefore, they remain in the domain of tighter financial control style in Goold and Campbell's Style of Management Grid (see Section 6.3 of Data Analysis 15 in Volume 3 [pp.498-502]).

# 6.3.1 Reporting Requirements

# (A) Evidence reported in Section 6.3.1 of the 20 Case Analyses in Volume 2.

The reporting requirements are similar in these 20 SOEs in the sense that it is essential to investigate the variances from budget or IRC before they have gone too far. To this end the top management monitor results on monthly and quarterly bases. The responsibility centre managers submit monthly results on standard forms to their respective divisional heads and also to the chief finance officer (i.e. chief accountant) for vetting and comparison with budgets and IRCs. For the production units, submission of production figures may be required on a weekly or even daily basis (see Section 6.3 of Data Analyses 19 & 20 in Volume 3 [pp.609-611 & 644-646]).

The monthly report format is unique for each factory or department. The contents correspond to the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the fixed budgets (see Section 6.3 of Data Analysis 13 in Volume 3 [pp.434-436]). However, in many manufacturing concerns the qualitative targets set in the budgets or IRCs (especially non-production departments) are not measured in the monthly reports. Contrary, the 4 department stores and the hotel in this study are concerned with and evaluate objectively as far as possible the non-financial targets such as customer satisfaction and service attitude on a monthly basis.

Many of these monthly reports are compiled, some by using computer, by the accounting staff who may be seconded into the individual production factories or responsibility centres. Significant variances (usually without specifying tolerance limits) are highlighted in order to bring the attention to the top management.

For example, in SSW5(01), the monthly condensed report format is unique for each factory. The actuals are compared with the budgets or IRCs. Any variances plus or minus 5% will be highlighted in order to focus the attention of the factory managers and the headquarters. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform an investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible (see pp.22-23 of Volume 3).

Ten management control factors are used to measure the headquarters' control on "reporting requirements" -- (1) policy; (2) frequency; (3) contents; (4) compilation; (5) review; (6) evaluation; (7) authorization; (8) feedback; (9) follow-up; and (10) computerization (see Section 6.3.1 of the 20 Case Analyses in Volume 2).

- (B) Observations from the High-Low Chart 6.3.1.
- (a) The control influences on the reporting requirements in the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) are the least among the 20 SOEs before and after 1992. The contents of their monthly reports are simpler than the manufacturing industries. The key financial results such as sales and expenditures are the major concerns of the headquarters.

The non-financial measurement yardsticks (see Section 5.6 of Data Analysis 3 in Volume 3 [pp.71-72] for an example) are assessed by the service evaluation department (e.g. enterprise management office) through continuous inspections. The comments and ratings of the service evaluation are written on the same monthly reports. Significant variances, both financial and non-financial, are highlighted in order to bring to the attention of top management. It is expected that remedial actions can be taken to handle the short-term problems as soon as possible (such as a sudden sales promotion by another department store). Whereas, strategic steps may be considered and implemented to solve some medium-term problems (such as the effect of advertising).

- (b) The two iron and steel works (i.e. SSW5(01), SXSW(15)) exhibit the highest control influences on the reporting requirements of their responsibility centres in particular the production factories because of the following reasons:
  - (1) to monitor properly the operation and performance of the decentralised organisation structure in view of the huge working populations of 23,000 and 7,000 in SSW5(01) and SXSW(15) respectively;
  - (2) to ensure the ultimate targets in the ERC and its components or IRCs can be met (see Section 6.3 of Case Analysis 15 in Volume 2 [pp.369-370]); and

(3) to standardize and formalize the 10 reporting factors, as listed at the end of Section 6.3.1(A) above, for different and diversified responsibility centres.

## 6.3.2 Performance Measurement

(A) Evidence reported in Section 6.3.2 of the 20 Case Analyses in Volume 2.

Before 1992, most of these 20 SOEs, in particular the manufacturing concerns, the responsibility centres were mainly measured on production volume, mix and cost, but other quantitative and qualitative targets<sup>4</sup> were also accounted for but usually contributed less than 30% of the performance measurement weightings (see Section 6.3 of Data Analysis 6 in Volume 3 [pp.163-167]).

After 1992, with more responsibility centres changing to profit centres, internal profit has become the major measurement criterion but similar quantitative and qualitative targets are still used to measure the overall performance of these units. Profit growth, profit margin (e.g. profit as a percentage of sales) and profit/sales/production per employee are also employed to measure the financial efficiency in some SOEs (e.g. SSW5(01)). Some interviewees in this research have mentioned that financial indicators have become more important in the last few years in order to meet the overall economic targets as expected by the enterprise managements and their government authorities. Details of the performance measurement can be found in the IRC Sections (5.6) of the 20 Data Analyses in Volume 3.

- (B) Observations from the High-Low Chart 6.3.2.
- (a) Most of the SOEs in this study remain with high to medium control influences on measuring the performance of their responsibility centres because of the following possible reasons:

<sup>&</sup>lt;sup>4</sup> For examples, quality management, new product development, energy consumption, facility maintenance, production safety, production technology, management style, use of computer, environmental control, family planning, etc., could be commonly found in the annual plans and IRCs (Cai 1992).

- (1) to ensure the major IRC targets can be met;
- (2) to fulfil the ultimate ERC targets, especially the financial ones, as agreed with the government authorities;
- (3) to maintain a stable economic growth for the whole enterprise;
- (4) to strive for survival for those deteriorating SOEs; and
- (5) to motivate the employees through management by targets.
- (b) The control influence exerted on the responsibility centres in the two iron and steel works (i.e. SSW5(01), SXSW(15)) is tighter than the other SOEs due to the same reasons as stated in Section 6.3.1(B)(b). Some contemporary issues related to this industry were described in the China Daily on 16 January 1998.

## 6.3.3 Review & Communication

(A) Evidence reported in Section 6.3.3 of the 20 Case Analyses in Volume 2.

Most of the 20 SOEs in this study hold a monthly management meeting to discuss and review the important operational issues, including the performance measurement, within the enterprise. For example, in XFLT(02), during the monthly meeting of the senior management committee, the general manager will put forward the monthly results for open discussion. The production workshop managers and department heads may be asked to explain briefly the significant variances. The unsatisfactory results sometimes will make the workshop managers and department heads feel embarrassed if the poor performance are due to management fault. Consistent failure in meeting the targets which are controllable by a manager, probably means he will be replaced by somebody else. It is very common in a SOE to see a workshop manager step down from his office and go back to the shop floor and become a technician or worker again (Liu 1995). On the other hand, the favourable results are openly praised by the top management. After the monthly meeting, all the approved results are passed back to the accounting department for calculating the group bonus of each workshop and department for last month. Adjustments to the group bonus awarded will be made on a quarterly or annual basis according to the achievement of overall IRC and ERC targets (see Section 6.3 of Data Analysis 2 in Volume 3 [pp.47-49]).

In general, these 20 SOEs make use of the monthly management meeting to review the performance reports, to ask the responsibility centre managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are communicated to the lower management via individual factory or departmental meetings. Responsibility centre managers have been involved in determining the measurement criteria during the annual planning process.

These SOEs view a budget or IRC as a contract between the top management and the responsibility centre. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no responsibility centre goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget and IRC.

To a certain extent, the performance review and communication in these 20 SOEs are affected by their usage and application of computers which in general are not widely employed in the medium- and small-sized SOEs because of insufficient funds to invest in computer hardware, software, education and training. But XFLT(02) in Xiamen is an exceptional example among the 20 SOEs in this research.

To facilitate the planning and control mechanisms, XFLT(02) has invested substantially since the early 1990s in installing a centralised mini-computer and tailor-made software packages. Furthermore, a post-graduate in computer science was recruited in 1989 from the Fudan University (one of the top universities in Shanghai) to head the computer centre. His staff relationship to the chief accountant reveals the emphasis of management accounting control system in the finance division. It is amazing that in a few years' time, a Local Area Network System (LANS) has been built up to integrate the sales, purchasing, inventory, production, accounting (financial and management reporting), wages, fundflow (cash flow) systems.

Different levels of access to the LANS have been assigned to various levels of management. For example, the factory manager can access to all the systems in the network, whereas, the sales and marketing manager cannot access to the accounting information through his terminal. Passwords have been assigned to each system in the network and also every employee who is authorized to

access to the LANS.

- (B) Observations from the High-Low Chart 6.3.3.
- (a) The control influences on monitoring the responsibility centres' performance in the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) are less than all the other 16 SOEs. The senior management of these 4 department stores review the performance reports monthly. Infrequent adverse variances can be tolerated if store managers can take remedial tactics or strategies to correct the unfavourable conditions and meet the budget at the year end.
- (b) Similar to the situations and reasons described in Section 6.3.1(B)(b) above, the two iron and steel works (i.e. SSW5(01), SXSW(15)) exert higher control influences on their responsibility centres in terms of monitoring their results.

#### 6.4 REWARDS & INCENTIVES

Again, Goold and Campbell (1991: 41) describe that the follow through on performance achieved is also important for determining rewards and incentives. Where bonuses are linked to performance targets, or where careers are at risk, the pressure of the control process is enhanced. Many western companies link promotion prospects to the achievement of planned targets or balanced scorecard measures (Kaplan & Norton 1996). But there are also successful firms that believe in a more flexible interpretation of objectives, and do not tie careers or bonuses to specific performance targets. The reaction of the headquarters to poor performance varies among companies and is an important influence both on the sorts of strategies that business managers are likely to propose and on the actions they take during the year.

In a developing country such as China, extrinsic rewards in terms of take-home pay for the employees in the SOEs is extremely important as a means to motivate their contribution to their working environment. Since the economic reforms started in the rural districts or agricultural industry in the late 1970s and then the SOEs in the urban cities in the early 1980s, concrete and substantial experience has been gained to support the "more work, more pay" philosophy.

Further, "annual income per peasant/employee" is a very common and important economic indicator to measure the share of value-added created by the workforce in China.

The "Responsibility Accounting System" adopted in China since 1985 and widely applied in the majority of SOEs since the late 1980s has provided that it is a good management tool to distribute the profit and monetary rewards among the government, enterprises and individuals (or employees) (Yan & Long 1987; Yan & Chen 1988; Maschmeyer & Yang 1990). In the Chinese responsibility accounting system, an incentive scheme is an indispensible element which is incorporated into both the ERC and IRC systems as presented in Section 4.4 of Chapter 4 and Section 5.6 of Chapter 5 respectively (also see Section 6.4 of Data Analysis 7 in Volume 3 [pp.202-203]).

The rest of this section is dedicated to assess the control influence in respect of "rewards and incentives" from the enterprise management on the different responsibility centres (internal dimension only) by using 4 criteria, inter alia:

- 6.4.1 Incentives;
- 6.4.2 Performance Orientation;
- 6.4.3 Participation; and
- 6.4.4 Review & Communication.

The results of these 4 yardsticks measured on the 20 SOEs are described in the next 4 sections (i.e. 6.4.1-4) which can firstly be summarised in the High-Low Chart 6.4.

- (a) The overall control influences on the responsibility centres in the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) are the lowest among the 20 SOEs. Reasons can be found in Section 6.4.1(B)(a) and Section 6.4.2(B)(a).
- (b) Contrary to (a), most of the other manufacturing SOEs exhibit higher control influences on their responsibility centres relating to the wages, incentives and benefits. Possible explanations are mentioned in Section 6.4.1(B)(b).

## 6.4.1 Incentives

(A) Evidence reported in Section 6.4.1 of the 20 Case Analyses in Volume 2.

Despite different types of business, forms of ownership and geographical locations, the wages<sup>5</sup> and incentive systems of these 20 SOEs are very similar and they are usually linked with the economic performance of the enterprise as a whole<sup>6</sup>. For example, there is a nationwide policy (or macro-economic control measure) to govern the annual gross wages (including bonus) growth rate of all the SOEs in China. The annual remuneration growth rate for individual SOEs cannot exceed either one of the following limits (Liu & Zhang 1996: 130):

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, a SOE is allowed to increase the wages and bonus payable to its employees. Firstly, this rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. Secondly, these limitations can help to control one of the factors contributing to high inflation rate in recent years. If approved by the municipal government, a SOE (e.g. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) is allowed to exceed the above two wages limits or ceilings but the excess portion (wages and bonus paid) should be subject to enterprise income tax (standard rate 33%).

Eight factors are used to assess the control influences on the remuneration system applied to the responsibility centres of these 20 SOEs. They are (1) basic wages; (2) allowances; (3) monthly bonus; (4) annual bonus; (5) other benefits; (6) pension; (7) intangible recognition; and (8) redundancy. These 8 factors are briefly described as follows (for an example, see Section 6.4 of Data Analysis 1 in Volume 3 [pp.23-26]):

<sup>&</sup>lt;sup>5</sup> The term "wages" in China includes "salaries" paid to the white collars.

<sup>&</sup>lt;sup>6</sup> Over 70% of all the SOEs in China had adopted this performance and remuneration linkage at the end of 1992 according to State Statistics Bureau. 1992. *Economic reform after 14 year*. China Statistics Press: 31.

- The annual review of "Basic Wages" is based on grade and seniority without paying much regard to qualification and technical skill. The increments are not substantial (e.g. RMB10-30 per month) and are not in line with inflation (see Section 6.4 of Data Analysis 5 in Volume 3 [pp.129-131] for an example). Another name for basic wages is called "File Wages" which means that any change of the basic wages for an employee will be recorded in his/her personal file. When he/she applies for a new job, his/her personal file will be transferred from the outgoing enterprise to the new employing enterprise.
- (2) There are two portions for the "Allowances". The first part is determined by the Manpower and Wages Bureau of the local or municipal government at least once in each year to combat inflation. The second part is decided by the enterprise itself which may include housing, meals, transportation, child care, attendance, overtime, hair-dressing, festival gift, etc.
- The calculation of "Monthly Bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the factory or workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates according to individual performance (see Section 6.4 of Data Analyses 6 & 16 in Volume 3 [pp.167-169 & pp.531-533]). The bonus for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well (see Section 6.4 of Data Analysis 2 in Volume 3 [pp.49-51] for an example). Some SOEs retain a certain portion (i.e. 10%-30%) of the bonus payable in a reserve in order to make up the low or zero bonus awarded during the months with poor performance.
- (4) For those SOEs which have entered into ERCs, they can transfer a certain percentage of the annual profit after tax (or retained earnings) to an "Employee Bonus Reserve Fund" which can be distributed as a "Year-End Bonus" to the employees according to the overall financial performance and the level of this reserve.

- (5) "Other Benefits" may include the housing provided by a SOE. Under the ERC system, a SOE can transfer a certain percentage of the profit after tax or retained earnings to an "employees welfare reserve fund" out of which the enterprise can build and purchase quarters and apartments for their employees but the persistence of retained earnings and cash availability are the limiting factors. The demand for this kind of housing benefit is much greater than the limited supply (long waiting queue indeed). Therefore, this most important employee's benefit has always created a lot of arguments and debates among the employees within an enterprise and sometimes affects the morale.
- (6) In addition to the wages and salaries paid to the present employees, a SOE has to pay pension and other allowances (e.g. medical) to the retired employees. In an old SOE having a great proportion of retired employees (e.g. in SCM2(14) the number of retired employees is equal to the number of in-service employees), the total payment of pension and benefits is a significant financial burden added to the profit and loss account. This is a kind of "social welfare policy" mandated by the government to be implemented in all the SOEs including the shareholding enterprises (see pp.476-477 of Volume 3).

After some years of debate and preparation, a retirement fund legislation was implemented in late 1993. Each SOE has to contribute 25.5% of the total monthly wages paid to the government's central pension fund. The government is ultimately responsible for the pension payments to the present and future retirees. In other words, this heavy burden of pension payments is being shared by the government who is acting in a capacity similar to an insurance underwriter. Since late 1995, the government has been promulgating and implementing, province by province and city by city, a similar central fund for unemployment allowances, medical benefits, employment injury and disability compensations, home purchasing, etc. This scheme is similar to the central pension fund by asking the SOEs to contribute 16%-18% of their gross wages paid on a monthly basis. The employees have to contribute 4% to 8% of their monthly salary or wages to this central welfare fund as well. It is planned that this second "social welfare scheme" will be fully implemented by all the SOEs in China before the end of 1998.

- of "Intangible Recognition" (or intrinsic rewards) to motivate the employees. For example, some SOEs in this study (e.g. SSW5(01), GDDS(04), SCCW(12), SCM2(14), BCM3(18)) make use of the large notice boards near the entrance gate to publicise the outstanding employees of the month or year. These employees' stories, good deeds and photos are posted on the boards for open reading by all the employees and outsiders. Certificates, trophies, plaques, flags, free tours are usually presented to these "winners" to commemorate their outstanding contributions.
- (8) One of the 54 clauses in the "SOE Mechanisms Transformation Regulations" enacted in July 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of "Redundant Employees" (both production workers and supporting staff) may cause many social problems in light of the current insufficient employment social welfare and benefits existing in China. Therefore, the changing to employment contract system may not really create a threat to the employees nor motivate their own initiatives. Furthermore, if managers at SOE face redundancy, usually the workers will be made redundant first.

In addition to the "employment contracts", many SOEs have signed other "in-post contracts" with their employees for periods from one to five years since 1994. The latter contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages, allowances and bonus. Without such a contract, that employee is out of a job but he or she is treated as a retired employee of the enterprise and is allowed to receive a basic monthly subsidy of about RMB150-200. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better.

Another way to alleviate this problem is to transfer a portion of these redundant employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading, etc. and unrelated to the core business (Liu 1995).

The Labour Law implemented in January 1995 further refined the terms and conditions of this employment contract system and made it mandatory for all the SOEs before the end of 1997. Furthermore, the open-door policy of the labour market and the huge influx of foreign enterprises (about 300,000 entities estimated in 1997) in recent years have created more opportunities for the SOE's employees to change their occupations and jobs.

- (B) Observations from the High-Low Chart 6.4.1.
- (a) Compared with the manufacturing concerns in these 20 SOEs, the top management in the 4 department stores exert less control influences on their responsibility centres in relation to rewards and incentives. Higher autonomy has been delegated to the responsibility centres (e.g. store managers) to distribute the monthly and annual bonuses, to determine some specific allowances, to decide the form of intangible recognition and to handle the redundant employees (see Section 6.4 of Case Analysis 4 in Volume 2 [pp.88-90]).
- (b) Most of the manufacturing SOEs in this research, in particular the machine and equipment manufacturing enterprises, indicate higher remuneration control influences on their responsibility centres. The significant proportion of redundant and retired employees in these SOEs incurred a heavy payroll and bill for allowances (or benefits). Further, in view of many economic and business uncertainties confronting the manufacturing industry during the recent years, how to reduce the impact of this big chunk of fixed cost is crucial in order to maintain a low profit margin or break-even point instead of loss-making. Therefore, the top managements of these SOEs are very cautious in paying out every item of personnel expenses. After listing in the Shenzhen Stock Exchange in 1993, GLIL(16) has been free from any ERC terms and conditions, and enjoyed higher autonomy in terms of rewards and incentives. SXSW(15) has significantly increased its remuneration to

employees in recent years because of improved profit margin and cost control, and also high inflation rate in Shanghai.

# 6.4.2 Performance Orientation

(A) Evidence reported in Section 6.4.2 of the 20 Case Analyses in Volume 2.

The monthly bonus is mainly determined according to the accomplishment of the IRC and accounts for about 40% of the total wages. Some SOEs install their own detailed rules and regulations for calculating and distributing the bonuses among the employees in different responsibility centres and departments (see Section 6.4 of Data Analysis 6 in Volume 3 [pp.167-172] for an example).

In recent years, the brackets in the wages scale have been widened and increments take skills, knowledge and competence into account instead of depending on seniority only. Some SOEs (e.g. XFLT(02), GNFF(07), GLIL(16)) have been increasing the proportion (60%-70% of gross wages) of the basic wages in which some allowances and benefits have been merged. Laying off redundant employees is possible but still difficult in Beijing and Shanghai.

- (B) Observations from the High-Low Chart 6.4.2.
- (a) The control influences exert on the responsibility centres in the 4 department stores (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) are less than all the other SOEs in this study. Provided the cost of operation is under control, the more a department store can sell, the higher will be the contribution and ultimately, the profit before tax as the bottom line. Therefore, the most important financial target in the IRCs adopted in the 4 department stores is sales or turnover which is linked with the total remuneration (wages and bonus) of a responsibility centre or sales unit. The responsibility centres know the amount of bonus relates to actual sales exceeding the IRC targets (Merchant 1982; Taylor & Liu 1992).
- (b) Compared with (a) above, the other manufacturing SOEs are more rigid in controlling and measuring the performance indicators relating to the determination of wages, bonus and other benefits. The reasons are similar to Section 6.4.1(B)(b) above.

# 6.4.3 Participation

(A) Evidence reported in Section 6.4.3 of the 20 Case Analyses in Volume 2.

The responsibility centres participate in determining the *remuneration* when setting the *targets* in the IRCs in which the two issues are closely related. The basic wages, allowances and pension are subject to the policies laid down by the local or municipal government without much participation except some involvement by the labour union in the planning process. The other benefits in kind provided mainly depend on the short-term economic performance and long-term prospect of the enterprise as a whole.

- (B) Observations from the High-Low Chart 6.4.3.
- As explained in (A) above, there is no much room for the responsibility centres to participate in determining the 8 factors relating to their remuneration system. Therefore, all the 20 SOEs remain high to medium control influences on the personnel expenses in the responsibility centres. The control influence was relatively lower in XLIG(17) before 1992 because it has been located in a special economic zone with more favourable policies and incentives.

### 6.4.4 Review & Communication

(A) Evidence reported in Section 6.4.4 of the 20 Case Analyses in Volume 2.

The incentive scheme (mainly bonus) is reviewed at the same time as the IRC which is held at least once every year. Since the IRC is usually expressed in a formal and written format and available to every responsibility centre concerned, so different levels of management and most of the employees within a responsibility centre should know the details and they are eager to understand the methods in calculating the bonus. The basic wages structure, allowances and other benefits are reviewed during the annual planning exercise and employees are informed of the changes of decisions and policies. The monthly performance and reward of a responsibility centre will be made known to employees via the centre manager after the review and approval by the top management.

- (B) Observations from the High-Low Chart 6.4.4.
- (a) Similar to Section 6.4.3, the review and communication concerning the reward and incentive issues are mainly determined by the top management or sometime affected by the local government policies. Therefore, the control influence on this parameter falls in between the high to medium scores.

### 6.5 SUMMARY

#### 6.5.0 Introduction

- (1) Following the proposition of Goold and Campbell (1991), the budget process, the internal responsibility contract system, and the strategic planning system provide the formal framework for control, which is essentially a linked process of agreeing objectives, monitoring results and applying pressure and incentives. (see 6.0)
- The measuring parameters used by Goold and Campbell (1991) (i.e. agreeing objectives, monitoring results and incentives) plus an additional one (i.e. decentralisation and control) are adopted in this study to gauge the extent of control influence (as an external dimension) on each of the selected 20 SOEs from their respective government authorities. The degree of control influence on each SOE will in turn affect the control influence (as an internal dimension) on the responsibility centres within the enterprise from the top management (e.g. general manager, board of directors, etc.) (see 6.0)
- (3) For each control variable or parameter, the measurement of control influence is on a 5-point scale ranging from Tight Financial Control (0) to Tight Strategic Control (4). (see 6.0)
- (4) Looking into the overall weighted-average control scores of all the 20 SOEs in this study, it is noted that the 4 department stores have higher control scores after 1992 and are subject to lower control influence (external and internal combined) compared with the other 16 SOEs. They are moving towards the "strategic control" style as defined by Goold and Campbell (1991).

(5) On the other hand, the other manufacturing SOEs have the lower control scores after 1992 and are subject to higher control influences. They can be differentiated and are more towards the "financial control" domain as defined by Goold and Campbell (1991) as well. (see 6.0)

## 6.5.1 Decentralisation & Control

- (6) Under the increasing delegation of planning, control and management autonomy from the government to the top management of a SOE, and then to the responsibility centres down through the organisational hierarchy, the economic responsibility lies with the top management which initiates and negotiates the terms and conditions of the ERC with the government authorities. In turn, the internal responsibility centres within a SOE have to fulfil their economic and qualitative targets as agreed in their IRCs. Therefore, from an internal control perspective, these responsibility centres are accountable to their top management for whatever types of targets are set in the budget or IRC. (see 6.1)
- (7) Furthermore, the extent of decentralisation affects the ways to design the organisation structure, the setting of personnel policies and the types of control mechanism to monitor the performance. The control variable/influence of "decentralisation & control" is measured on 3 criteria -- (1) organisational design; (2) personnel; and (3) control mechanism. (see 6.1)
- (8) In 5 shareholding SOEs out of the 8 in this study, most of the members in their "board of directors" are senior management or employees of the enterprises. According to the principles of management and company legislations practised in the western countries, the functions and personnel of the board of directors are usually separated from the management and operation of the company in order to maintain the effects of supervision, moderation and independence (Chow et al 1993). However, during the early stage of this shareholding or privatization process in China, the government authorities and enterprise managers believe that if the board members are also the top management of an enterprise, they know the operation better and can make more appropriate decisions. (see 6.1.1)

- (9) Most SOEs in this study have allowed the middle management (e.g. factory, workshop and department managers) to be responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration. However, termination of employment of workers and staff is a difficult task which need approvals from the top management and party secretary. (see 6.1.2)
- (10) Cutting a significant portion of the employees in a SOE may create many social problems in light of the current insufficient employment social welfare and benefits existing in China. One way to tackle this "Big Rice Pot" problem is to transfer the excess workers and employees to some "tertiary enterprises (businesses)" (i.e. restaurant, taxi fleet, grocery shop, etc.) established and assisted by the host enterprise (Liu & Zhang 1996: 131). Another means is to enforce or encourage some employees to take early retirement. Furthermore, some SOEs do not replace employees who have retired or resigned in order to reduce the size of the workforce naturally. (see 6.1.2)
- (11) The major control mechanisms employed by the top management of these 20 SOEs to monitor the performance of their production functions and service departments are annual budgets and IRCs. The most important measurement criteria are financial targets (e.g. sales, profit, foreign exchange, etc.), quantitative targets (e.g. production volume, mix, and value, etc.) and qualitative targets (e.g. product quality, production safety, customer service, etc.) as set in the budget and IRC. In general, the economic targets (i.e. both financial and quantitative types) account for much higher weightings in determining the performance-based group bonus under the IRC (Liu & Zhang 1996: 130-131). (see 6.1.3)

# 6.5.2 Agreeing Objectives

(12) Goold and Campbell (1991) mention that the setting of objectives is the first step of the control process. There are differences in the precision and detail of targets; the balance between objective and subjective measures; the time frame for achievement; the influence of the headquarters in proposing and agreeing objectives; the degree of 'stretch' built into objectives; and the emphasis on financial versus non-financial targets. These differences

- are important to the type of control influence adopted by the headquarters, and they are employed to measure this independent control variable in this study. (see 6.2)
- (13) In most of the 20 SOEs in this research, the top managements set similar objectives for their production functions and service departments. Workshop and department managers must meet their agreed budget figures or IRC targets for the year and an improvement in performance year on year is expected except under adverse market conditions. (see 6.2)
- (14) Two kinds of pressure are put on the responsibility centre managers at the annual or quarterly review -- (1) to submit a budget that they can achieve; and (2) to aim for results that are, most likely, better than the previous year's. The centre managers fully understand that their group bonuses are tied in with the budget or IRC. (see 6.2)

## 6.5.3 Monitoring Results

- (15) As suggested by Goold and Campbell's (1991) that most of the SOEs in this research ask their business units or responsibility centres to report results monthly, and for some there are weekly reports, ad hoc questions and many informal ways for the headquarters to check on how well each responsibility centre is performing. The way in which the headquarters seeks out performance information, the type of information it asks for, and the arrangement it has for discussing the results with managers are all part of the control process. (see 6.3)
- (16) The control influence in respect of "monitoring results" from the enterprise management on the different responsibility centres (internal dimension only) are measured on 3 criteria -- (1) reporting requirements; (2) performance measurement; and (3) review and communication. (see 6.3)
- (17) The reporting requirements are similar in these 20 SOEs in the sense that it is essential to investigate the variances from budget or IRC before they have gone too far. To this end the top management monitors results on monthly and quarterly bases. The monthly report format is unique for each factory or department. The contents are corresponding to the

- budgeted line items and all the targets stipulated in the IRC can be extracted from this report. (see 6.3.1)
- (18) Many of these monthly reports are compiled, some by using computer, by the accounting staff who may be seconded to the individual production factories or responsibility centres. Significant variances (usually without specifying tolerance limits) are highlighted in order to bring to the attention to the top management. (see 6.3.1)
- (19) Ten management control factors are used to measure the headquarters' control on "reporting requirements" -- (1) policy; (2) frequency; (3) contents; (4) compilation; (5) review; (6) evaluation; (7) authorization; (8) feedback; (9) follow-up; and (10) computerization. (see 6.3.1)
- After 1992, with more responsibility centres changing into profit centres, internal profit has become the major measurement criterion but similar quantitative and qualitative targets (see paragraph (11) above) are still used to measure the overall performance of these units. Profit growth, profit margin (e.g. profit as a percentage of sales) and profit/sales/production per employee are also employed to measure the financial efficiency in some SOEs. Some interviewees in this research have mentioned that financial indicators have become more important in the last few years in order to meet the overall economic targets as expected by the enterprise managements and their government authorities. (see 6.3.2)
- Most of the 20 SOEs in this study hold a monthly management meeting to review the performance reports, to ask the responsibility centre managers for explanations, to decide corrective actions, and to determine penalties and incentives. After the monthly meeting, all the approved results are passed back to the accounting department for calculating the group bonus of each workshop and department for last month. Adjustments to the group bonus awarded will be made on a quarterly or annual basis according to the achievement of overall IRC and ERC targets. Evaluation results are informed to the lower management via individual factory or department meetings. Responsibility centre

managers have been involved in determining the measurement criteria during the annual planning process. (see 6.3.3)

(22) The 20 SOEs view a budget or IRC as a contract between the top management and the responsibility centre. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no responsibility centre goes too far astray before remedial action is taken. It also gives the top management an understanding of the reasons for variances from budget and IRC. (see 6.3.3)

### 6.5.4 Rewards & Incentives

- (23) Goold and Campbell's (1991) proposition is really applicable in the Chinese SOEs in the sense that the follow through on performance achieved is important especially when bonuses are linked to performance targets, or where careers are at risk and hence the pressure of control process is enhanced. In the Chinese responsibility accounting system, the incentive scheme is an indispensible element which is incorporated into both the ERC and IRC systems. (see 6.4)
- (24) To assess the control influence in respect of "rewards and incentives" from the enterprise management on the different responsibility centres (internal dimension only), 4 criteria or parameters are used -- (1) incentives; (2) performance orientation; (3) participation; and (4) review & communication. (see 6.4)
- Despite different types of business, forms of ownership and geographical locations, the wages and incentive systems of these 20 SOEs are very similar. Eight factors are used to assess the control influence on the remuneration system applied to the responsibility centres of these 20 SOEs. They are (1) basic wages; (2) allowances; (3) monthly bonus; (4) annual bonus; (5) other benefits; (6) pension; (7) intangible recognition; and (8) redundancy. (see 6.4)

- The monthly bonus is mainly determined according to the accomplishment of the IRC and accounts for usually about 40% of the total wages. Some SOEs install their own detailed rules and regulations for calculating and distributing the bonuses among the employees in different responsibility centres and departments. In recent years, the brackets in the wages scale have been widened and increments take skills, knowledge, competence into account instead of depending on seniority only. Some SOEs have been increasing the proportion (60%-70% of gross wages) of the basic wages in which some allowances and benefits have been merged. Laying off redundant employees is possible but still difficult in Beijing and Shanghai. (see 6.4.2)
- (27) The responsibility centres participate in determining the remuneration when setting the targets in the IRCs. The basic wages, allowances and pension are subject to the policies laid down by the local or municipal government without much participation except some involvement by the labour union in the planning process. The other benefits in kind provided mainly depend on the short-term economic performance and long-term prospect of the enterprise as a whole. (see 6.4.3)
- Once every year. Since the IRC is usually expressed in a formal and written format and available to every responsibility centre concerned, different levels of management and most of the employees within a responsibility centre should know the details and they are eager to understand the methods in calculating the bonus. The basic wages structure, allowances and other benefits are reviewed during the annual planning exercise and employees are informed of the changes of decisions and policies. The monthly performance and reward of a responsibility centre will be made known to employees via the centre manager after the review and approval by the top management. (see 6.4.4)
- (29) The following table shows the overall changes of control influence (in terms of scores and degrees [in brackets]) of all the 20 SOEs by averaging the 4 variables (3 used by Goold and Campbell) before and after 1992:

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	Enterprise	Control Influence	Control Influence	Control Influence
	No. & Code	Before 1992	After 1992	Score Increase@
01	SSW5	1.0 (Tight Financial)	1.6 (Moderate Fin.)	0.6
02	XFLT	1.2 (Financial)	2.0 (Moderate Fin.)	0.8
03	GFDS*#	1.8 (Moderate Fin.)	2.8 (Strategic)	1.0
04	GDDS*#	1.8 (Moderate Fin.)	2.6 (Strategic)	0.8
05	BEEF	1.2 (Financial)	1.8 (Moderate Fin.)	0.6
06	SMCW	1.1 (Financial)	1.8 (Moderate Fin.)	0.7
07	GNFF*	1.2 (Financial)	1.9 (Moderate Fin.)	0.7
08	GNFB*#	1.9 (Moderate Fin.)	2.8 (Strategic)	0.9
09	BCRF	1.3 (Financial)	1.9 (Moderate Fin.)	0.6
10	BIMT	1.2 (Financial)	1.9 (Moderate Fin.)	0.7
11	SDS1*#	1.8 (Moderate Fin.)	2.8 (Strategic)	1.0
12	SCCW	1.2 (Financial)	1.9 (Moderate Fin.)	0.7
13	SMEF	1.1 (Financial)	1.9 (Moderate Fin.)	0.8
14	SCM2*	1.1 (Financial)	1.9 (Moderate Fin.)	0.8
15	SXSW	1.1 (Financial)	1.8 (Moderate Fin.)	0.7
16	GLIL*	1.2 (Financial)	2.0 (Moderate Fin.)	0.8
17	XLIG	1.3 (Financial)	2.0 (Moderate Fin.)	0.7
18	всм3	1.1 (Financial)	1.9 (Moderate Fin.)	0.8
19	BFSH	1.2 (Financial)	1.9 (Moderate Fin.)	0.7
20	ВРМН*	1.3 (Financial)	2.1 (Moderate Stra.)	0.8

<sup>\*</sup> Shareholding enterprises are subject to less control influence than the other wholly stateowned enterprises after 1992. This general observation is statistically tested in Chapter 7.

<sup>#</sup> Department stores are subject to the least control influence among all the 20 SOEs after 1992. This observation is statistically tested in Chapter 7.

<sup>@</sup> Increase in control scores denotes less control influence.

# **CHAPTER 7: FINDINGS -- CASE STUDY RESULTS**

## 7.1 INTRODUCTION

Following the data analysis in Chapters 4, 5 and 6, firstly this chapter summarizes the "planning" and "control" influences in terms of the overall scores before and after 1992 in all the 20 SOEs investigated in this research (Section 7.2). These 2 sets of planning and control scores are then mapped into a 2-dimensional grid called "Responsibility Accounting Style" which is a modified version of the Goold and Campbell Management Strategies and Styles (Section 7.3).

Secondly, the "5 null hypotheses" (defined in Section 1.5 of Chapter 1) claiming no change in responsibility accounting and the associated planning and control influences of these 20 SOEs before and after 1992 are tested in the following comparisons:

- (1) All 20 SOEs Primary Hypothesis (Section 7.4.1)
- (2) Wholly SOEs to Wholly SOEs Secondary Hypothesis 1 (Section 7.4.2)
- (3) Wholly SOEs to Shareholding SOEs Secondary Hypothesis 2 (Section 7.4.3)
- (4) Geographical Locations Secondary Hypothesis 3 (Section 7.4.4)
- (5) Industrial Differences Secondary Hypothesis 4 (Section 7.4.5)

Descriptive, parametric and non-parametric statistics are employed to test the above 5 null hypotheses which are believed to be affected by 2 general factors/variables (i.e. legislation and market economy) and 3 specific factors/variables (i.e. ownership, location and industry) as defined in Section 1.5 of Chapter 1.

Section 7.5 expands the previous analysis performed in Section 7.4 in order to combine the specific factors/variables (i.e. ownership, location and industry) and identify the underlying reasons for the changes in planning and control influences.

In conclusion, a summary of the key findings in this chapter is provided in Section 7.6.

#### 7.2 SUMMARY OF PLANNING & CONTROL INFLUENCES

The following 3 sections (i.e. 7.2.1-3) are summaries of the planning and control measurements and scores as described in detail in Chapter 5 and 6. Then these scores are mapped into a 2-dimensional grid called "Responsibility Accounting Style" as shown in Section 7.3.

# 7.2.1 Planning Influences

As described in Section 5.0 of Chapter 5, to measure the planning influences on the 20 SOEs and their responsibility centres (both external and internal dimensions) in this study, the following 7 variables are employed:

- (1) Organisation Structure\*;
- (2) Review Process\*;
- (3) Strategic Themes, Thrusts and Suggestions:\*;
- (4) Long-Term Planning (Resource Allocation)\*;
- (5) Short-Term Planning/Budgeting\*;
- (6) Internal Responsibility Contracts#; and
- (7) Management of Interdependencies (Transfer Pricing)\*.
- \* All the 6 planning influence variables used by Goold and Campbell are employed in this study.

  # This is the additional variable which is the core of the responsibility accounting system adopted in the SOEs in China.

Under each of the above 7 variables, there are 3 to 4 sub-variables or parameters to further measure and analyse the extent of planning influences before and after 1992. In each variable or parameter, the measurement is on a 5-point scale ranging from Greatest Planning Influence (0) to Least Planning Influence (4).

For each SOE, sub-variable scores are combined to give an average measure for a variable e.g. organisation structure. Each sub-variable has equal weighting and the scores pre- and post-1992 are calculated in this way. Similar procedures are used to determine the planning scores of the other 6 variables pre- and post-1992. The higher the score, the lower planning influences for the external and internal dimensions on the responsibility accounting system of a SOE. Then the 2 weighted-averages of all the 7 variables in each SOE are equal to the overall planning influences (external and internal dimensions combined) before and after 1992. Tables 2A-G (see Appendix 1) summarizes all the planning parameter scores before and after 1992 for all the 20 SOEs.

## 7.2.2 Control Influences

As described in Section 6.0 of Chapter 6, to measure the control influences on the 20 SOEs and their responsibility centres (both external and internal dimensions) in this study, the following 4 independent variables are employed:

- (1) Decentralisation & Control#;
- (2) Agreeing Objectives\*;
- (3) Monitoring Results\*; and
- (4) Rewards & Incentives\*.
- \* All the 3 control influence variables used by Goold and Campbell are employed in this study.

  # This is the additional variable which is a typical element of control in the responsibility
- accounting system adopted in the SOEs in China.

Except "agreeing objectives", under each of the above 3 variables, there are 3 to 4 sub-variables or parameters to further measure and analyse the extent of control influences before and after 1992. In each variable and parameter, the measurement is on a 5-point scale ranging from Tight Financial Control (0) to Tight Strategic Control (4).

For each SOE, sub-variable scores are combined to give an average measure for a variable e.g. decentralisation & control. Each sub-variable has equal weighting and the scores pre- and post-1992 are calculated in this way. Similar procedures are used to determine the control scores of the other 3 variables pre- and post-1992. The higher the score, the lower control influences on financial controls for the external and internal dimensions, and also the more the tendency towards the strategic control style in the responsibility accounting system of a SOE. Then the 2 weighted-averages of all the 4 variables in each SOE are equal to the overall control influences (external and internal dimensions combined) before and after 1992. Tables 3A-C (see Appendix 1) summarizes all the control parameter scores before and after 1992 for all the 20 SOEs.

# 7.2.3 Planning & Control Scores Summary

The final weighted-averages (or scores) in respect to the planning and control influences in these 20 SOEs are summarized in the following table (refer to Tables 2A & 3A).

	Enterprises	Planning Influence		Control	Influence
		Before 1992	After 1992	Before 1992	After 1992
01	SSW5	1.1	2.5	1.0	1.6
02	XFLT	1.6	2.8	1.2	2.0
03	GFDS	2.1	3.1	1.8	2.8
04	GDDS	2.0	3.1	1.8	2.6
05	BEEF	1.2	2.3	1.2	1.8
06	SMCW	1.3	2.4	1.1	1.8
07	GNFF	1.8	2.8	1.2	1.9
08	GNFB	2.1	3.2	1.9	2.8
09	BCRF	1.2	2.3	1.3	1.9
10	BIMT	1.3	2.5	1.2	1.9
11	SDS1	2.2	3.3	1.8	2.8
12	SCCW	1.4	2.3	1.2	1.9

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	Enterprises	Planning Influence		Control Influence	
		Before 1992	After 1992	Before 1992	After 1992
13	SMEF	1.5	2.6	1.1	1.9
14	SCM2	1.6	2.7	1.1	1.9
15	SXSW	1.3	2.5	1.1	1.8
16	GLIL	1.9	2.9	1.2	2.0
17	XLIG	1.9	3.0	1.3	2.0
18	BCM3	1.4	2.4	1.1	1.9
19	BFSH	1.5	2.4	1.2	1.9
20	ВРМН	1.7	2.7	1.3	2.1

#### 7.3 RESPONSIBILITY ACCOUNTING STYLES

The planning and control scores summary as shown in Section 7.2.3 is graphically presented in Figure 1 (see Appendix 3) by mapping the scores into a 2-dimensional grid called "Responsibility Accounting Style" which is a modified version from the Goold and Campbell's (1991: 36) Management Strategies and Styles.

The *vertical-axis* represents the "degree of planning influence" ranging from very high (0) to very low (4). The higher the scores in this dimension, the lower the planning influences from the government on the 20 SOEs (external dimension) and from the enterprise managements on the responsibility centres (internal dimension). The *horizontal-axis* represents the "degree of control influence" ranging from tight financial control (0) to tight strategic control (4). The higher the scores in this dimension, the lower the control influences from the government on the 20 SOEs (external dimension) and from the enterprise managements on the responsibility centres (internal dimension). The lower the control score, the more the tendency towards strategic control.

From the "Responsibility Accounting Style Grid" (Figure 1), basically two types of "Style Changes" can be identified. Firstly, the following 15 enterprises have been moving from the "Financial Programming Style" to the "Financial Control Style" since 1992:

EC*	Location	Industry	Ownership Before 1992	Ownership After 1992
SSW5(01)	Shanghai	Iron & Steel	Wholly SOE	Wholly SOE
XFLT(02)	Xiamen	Machines & Equipment	Wholly SOE	Wholly SOE
BEEF(05)	Beijing	Machines & Equipment	Wholly SOE	Wholly SOE
SMCW(06)	Shanghai	Machines & Equipment	Wholly SOE	Wholly SOE
GNFF(07)	Guangzhou	Consumables (Food)	Wholly SOE	Shareholding
BCRF(09)	Beijing	Machines & Equipment	Wholly SOE	Wholly SOE
BIMT(10)	Beijing	Machines & Equipment	Wholly SOE	Wholly SOE
SCCW(12)	Shanghai	Machines & Equipment	Wholly SOE	Wholly SOE
SMEF(13)	Shanghai	Machines & Equipment	Wholly SOE	Wholly SOE
SCM2(14)	Shanghai	Textiles	Wholly SOE	Shareholding
SXSW(15)	Shanghai	Iron & Steel	Wholly SOE	Wholly SOE
GLIL(16)	Guangzhou	Consumables (Cleaning)	Wholly SOE	Shareholding
XLIG(17)	Xiamen	Consumables (Beverage)	Wholly SOE	Wholly SOE
BCM3(18)	Beijing	Textiles	Wholly SOE	Wholly SOE
BFSH(19)	Beijing	Hotel	Wholly SOE	Wholly SOE

<sup>\*</sup> Enterprise Code and Number.

Some observations from the above table are as follows:

(1) The 5 Beijing Wholly SOEs (i.e. BEEF(05), BCRF(09), BIMT(10), BCM3(18), BFSH(19)) investigated in this research have changed from "high planning influence" and "financial control influence" to "medium planning influence" and "moderate financial control influence"since 1992.

- (2) Similarly, the 5 Shanghai Wholly SOEs<sup>1</sup> (i.e. SSW5(01), SMCW(06), SCCW(12), SMEF(13), SXSW(15)) investigated in this research have changed from "high planning influence" and "financial control influence" to "medium planning influence" and "moderate financial control influence" since 1992.
- (3) The 2 Xiamen Wholly SOEs (i.e. XFLT(02), XLIG(17)) investigated in this research have changed from "high-medium planning influence" and "financial control influence" to "medium-low planning influence" and "moderate financial control influence" since 1992.
- (4) Similar to (3), the 2 Guangzhou Shareholding SOEs (i.e. GNFF(07), GLIL(16)) investigated in this research have changed from "high-medium planning influence" and "financial control influence" to "medium-low planning influence" and "moderate financial control influence" since 1992.
- (5) Comparatively, the planning and control influences in the 2 iron and steel works (i.e. SSW5(01), SXSW(15)) have been reduced by greater extents than the machine and equipment manufacturers (e.g. BEEF(05), SMCW(06), BCRF(09), SCCW(12)) since 1992.
- (6) The 2 consumable manufacturers (i.e. GLIL(16), XLIG(17)) have been moving towards the "moderate financial control" and "moderate strategic control" suggesting that their businesses have better prospects and their operations are more dynamic than the other 13 SOEs.

Secondly, the following 5 enterprises have been moving from either the "Financial Programming Style" or the "Financial Control Style" to the "Strategic Control Style" since 1992:

<sup>&</sup>lt;sup>1</sup> Except SCM2(14) which has been converted into a shareholding enterprise after 1992 but still subject to medium planning and control influences.

EC*	Location	Industry	Ownership Before 1992	Ownership After 1992
GFDS(03)	Guangzhou	Department Store	Wholly SOE	Shareholding
GDDS(04)	Guangzhou	Department Store	Wholly SOE	Shareholding
GNFB(08)	Guangzhou	Department Store	Wholly SOE	Shareholding
SDS1(11)	Shanghai	Department Store	Wholly SOE	Shareholding#
BPMH(20)	Beijing	Printing Machines Manu.	Wholly SOE	Shareholding+

<sup>\*</sup> Enterprise Code and Number.

Some observations from the above table are as follows:

- (1) The 4 department stores in Guangzhou and Shanghai (i.e. GFDS(03), GDDS(04), GNFB(08), SDS1(11)) investigated in this research have changed from "medium planning influence" and "moderate financial control influence" to "low planning influence" and "strategic control influence"since 1992.
- (2) The listed printing machines manufacturer (i.e. BPMH(20)) in Beijing investigated in this research has changed from "high-medium planning influence" and "financial control influence" to "medium-low planning influence" and "moderate strategic control influence"since 1992. Therefore, the style has changed faster from "Financial Programming" to "Strategic control".

<sup>#</sup> SDS1(11) is listed in Shanghai Stock Exchange.

<sup>+</sup> BPMH(20) is listed in Shanghai and Hong Kong Stock Exchanges.

## 7.4 HYPOTHESES TESTING

As described in the "Research Problem and Hypotheses" section in Chapter 1 (see Section 1.5), the "Primary Hypothesis" as derived from the research problem is defined as follow:

H0 -- The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs investigated in this research have not changed before and after 1992.

The "Research Domain" as shown in Section 1.4 in Chapter 1 and Figure 1 in Appendix 3 indicates that the following two general factors/variables are the major contributing factors to reject the above primary null hypothesis:

- (1) Legislation (i.e. SOE Operational Mechanisms Transformation Regulation 1992);
- (2) Socialist Market Economy.

The following four "Secondary Hypotheses" (or Sub-Hypotheses) can also be identified in association with the above primary null hypothesis. They are believed to be affected by the three specific factors/variables, inter alia, ownership changes (for H1 and H2), local government policies and regulations (for H3) and macro-economic control measures (for H4) respectively.

- H1 The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 12 Wholly SOEs, which have remained as Wholly SOEs after 1992, have not changed before and after 1992.

  H2 The Responsibility Accounting Systems (or Styles) and the associated Planning
  - The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 8 Wholly SOEs, which have converted to Shareholding SOEs after 1992, have not changed before and after 1992.
- H3 The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs, which are located in 4 different cities, have not changed before and after 1992.

H4

The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs, which belong to 6 different industries, have not changed before and after 1992.

The major purposes behind testing the above one primary and four secondary null hypotheses are as follow:

- (a) to ascertain the changes of the styles of responsibility accounting adopted by the top management in the 20 SOEs investigated in this research before and after the related legal, ownership, economic and government policy transformations started in the early 1990s (both general and specific factors/variables started in 1992);
- (b) to investigate how far the planning and control systems, which are pertinent to the styles of responsibility accounting, have changed, if at all, under the emergence of these legal, ownership, economic and government policy transformations;
- (c) to identify the underlying reasons for these changes; and
- (d) to understand how these changes are made and are there any external and internal constraints limiting the ways and extents of the changes.

The results of (a) are represented by Figure 2 (see Appendix 3) and explained in Section 7.3 above. The details of (b), (c) and (d) are described in Chapters 5 and 6, and also Section 7.5 of this chapter.

The following 5 sections are dedicated to test the above defined primary null hypothesis and 4 secondary null hypotheses by using both parametric and non-parametric statistical methods. Direct observations from the changes of planning and control influence scores of these 20 SOEs before and after 1992 are also compared to support the rejection of all the hypotheses.

## 7.4.1 All 20 SOEs

This section is testing the "Primary Null Hypothesis: H0" stating that the Responsibility Accounting Styles and the associated Planning and Control Influences of these 20 SOEs investigated in this research have not changed before and after 1992.

Referring to Table 6A (compiled by Microsoft Excel) in the Appendix 1, it is noted that the planning influence scores of these 20 SOEs have increased in the range of 0.9-1.4 since 1992. The overall planning influence score increase is 1.09 which is significant compared with the overall score of 1.61 before 1992. From the same Table 6A, the control influence scores of these 20 SOEs have increased in the range of 0.6-1.0 since 1992. The average control influence score increase is 0.76 which is significant compared with the overall score of 1.31 before 1992.

By mapping the overall planning and control influence scores before 1992 (i.e. [1.61, 1.31]) and after 1992 (i.e. [2.69, 2.07]) of these 20 SOEs into the "Responsibility Accounting Style Grid" as shown in Figure 1 in the Appendix 3, the general trend has been moving from "Financial Programming" (high-medium planning influence and financial control) towards in between "Financial Control" and "Strategic Control" (medium-low planning influence and very moderate strategic control).

To verify the above observations statistically, a non-parametric test called "Wilcoxon Matched-Pairs Signed-Ranks Test" is employed as shown in Workings 1.1A & B (see Appendix 4 run by SPSS and data based on Table 6A). Both the Wilcoxon Z Scores for the planning and control mean differences (before and after 1992) of these 20 SOEs (n=20) are 3.92 and are significant at  $p \le 0.05$ .

In addition, a parametric statistical test called "T-Tests for Paired Samples" is used as shown in *Workings 2.1A & B* (see Appendix 4 run by SPSS and data based on Table 6A) in order to test the hypothesis in a quantitative manner. The *t-values* for the planning and control mean differences (before and after 1992) of these 20 SOEs (n=20) are 42.69 and 29.75 respectively which are both significant at  $p \le 0.05$ .

Therefore, it is concluded that the "Primary Null Hypothesis: H0" can be rejected or the Responsibility Accounting Styles and the associated Planning and Control Influences of these 20 SOEs investigated in this research have changed since 1992. These changes are found to be due to two general factors/variables: (1) legislation; and (2) socialist market economy as described in Section 1.2.1 of Chapter 1.

## 7.4.2 Wholly SOEs to Wholly SOEs

This section is testing the first "Secondary Null Hypothesis: H1" stating that the Responsibility Accounting Styles and the associated Planning and Control Influences of the 12 Wholly SOEs, which have remained as wholly SOEs after 1992, have not changed before and after 1992.

Referring to Table 6B1 in the Appendix 1, it is noted that the planning influence scores of these 12 Wholly SOEs have been increased in the range of 0.9-1.4 since 1992. The overall planning influence score increase is 1.11 which is significant compared with the overall score of 1.39 before 1992. From the same Table 6B1, the control influence scores of these 12 Wholly SOEs have increased in the range of 0.6-0.8 since 1992. The overall control influence score increase is 0.70 which is significant compared with the overall score of 1.17 before 1992.

By mapping the overall planning and control influence scores before 1992 (i.e. [1.39, 1.17]) and after 1992 (i.e. [2.50, 1.87]) of these 12 Wholly SOEs into the "Responsibility Accounting Style Grid" as shown in Figure 1 in the Appendix 3, the general trend is movement from "Financial Programming" (high planning influence and financial control) towards the "Financial Control" (medium planning influence and moderate financial control).

To verify the above observations statistically, a non-parametric test called "Wilcoxon Matched-Pairs Signed-Ranks Test" is employed as shown in Workings 1.2A & B (see Appendix 4 run by SPSS and data based on Table 6B1). Both the Wilcoxon Z Scores for the planning and control mean differences (before and after 1992) of these 12 Wholly SOEs (n=12) are 3.06 and are significant at  $p \le 0.05$ .

In addition, a parametric statistical test called "T-Tests for Paired Samples" is used as shown in Workings 2.2A & B (see Appendix 4 run by SPSS and data based on Table 6B1) in order to test the hypothesis in a statistical manner. The *t-values* for the planning and control mean differences (before and after 1992) of these 12 Wholly SOEs (n=12) are 27.84 and 32.83 respectively which are both significant at  $p \le 0.05$ .

Therefore, it is concluded that the first "Secondary Null Hypothesis: H1" can be rejected or the Responsibility Accounting Styles and the associated Planning and Control Influences of these 12 Wholly SOEs changed although they have remained as Wholly SOEs after 1992.

## 7.4.3 Wholly SOEs to Shareholding SOEs

This section is testing the second "Secondary Null Hypothesis: H2" stating that the Responsibility Accounting Styles and the associated Planning and Control Influences of the 8 Wholly SOEs before 1992, which have converted into Shareholding SOEs after 1992, have not changed before and after 1992.

Referring to Table 6B2 in the Appendix 1, it is noted that the planning influence scores of these 8 Shareholding SOEs have increased in the range of 1.0-1.1 since 1992. The overall planning influence score increase is 1.05 which is significant compared with the overall score of 1.93 before 1992. From the same Table 6B2, the control influence scores of these 8 Shareholding SOEs have increased in the range of 0.7-1.0 since 1992. The overall control influence score increase is 0.85 which is significant compared with the overall score of 1.51 before 1992.

By mapping the overall planning and control influence scores before 1992 (i.e. [1.93, 1.51]) and after 1992 (i.e. [2.98, 2.36]) of these 8 Shareholding SOEs into the "Responsibility Accounting Style Grid" as shown in Figure 1 in the Appendix 3, the general trend has moved from "Financial Programming" (high-medium planning influence and financial control) towards the "Strategic Control" (medium-low planning influence and moderate strategic control).

To verify the above observations statistically, a non-parametric test called "Wilcoxon Matched-Pairs Signed-Ranks Test" is employed as shown in *Workings 1.3A & B* (see Appendix 4 run by SPSS and data based on Table 6B2). Both the *Wilcoxon Z Scores* for the planning and control mean differences (before and after 1992) of these 8 Shareholding SOEs (n=8) are 2.52 and are significant at  $p \le 0.05$ .

In addition, a parametric statistical test called "T-Tests for Paired Samples" is used as shown in Workings 2.3A & B (see Appendix 4 run by SPSS and data based on Table 6B2) in order to test the hypothesis in a statistical manner. The *t-values* for the planning and control mean differences (before and after 1992) of these 8 Shareholding SOEs (n=8) are 55.56 and 22.49 respectively which are both significant at  $p \le 0.05$ .

Therefore, it is concluded that the second "Secondary Null Hypothesis: H2" can be rejected or the Responsibility Accounting Styles and the associated Planning and Control Influences of these 8 Wholly SOEs before 1992, which have converted into Shareholding SOEs after 1992, have changed since 1992. Hence, as described in Section 1.2.2.1 of Chapter 1, the change of ownership affects the planning and control systems of these 8 SOEs.

Are the Shareholding SOEs changing faster than the Wholly SOEs? To compare the changes of the planning and control influences of these 8 Shareholding SOEs with the 12 Wholly SOEs described in Section 7.4.2, a parametric "Independent Samples T-Test" is performed by SPSS as shown in *Workings W3.1A*, *B*, *C* & W3.2A, *B*, *C* (see Appendix 4) and the results are summarized below:

Comparing Samples	Periods	Planning Influence t-values	Control Influence t-values
8 Wholly SOEs (a) Vs	Before 1992	5.46 (p=0.001*)	3.40 (p=0.003*)
12 Shareholding SOEs (b)	After 1992	4.72 (p=0.001*)	3.92 (p=0.001*)
Mean Score Differences	(b)-(a)#	1.13 (p=0.272)	3.73 (p=0.002*)

<sup>\*</sup> Significant at p≤0.05.

<sup>#</sup> The mean differences of planning and control scores before and after 1992 of each SOE in both samples (i.e. 12 Wholly SOEs and 8 Shareholding SOEs).

From the above results, 3 observations are offered.

- (1) Both the planning and control influences (i.e. mean scores) of the 12 Wholly SOEs and 8 Shareholding SOEs are significantly different before and after 1992. In general, the 8 Shareholding SOEs are moving towards the "Strategic Control Style" with lower planning and control influences than the other 12 Wholly SOEs.
- (2) The decreases of planning influences (or increases in mean score differences) before and after 1992 of the 12 Wholly SOEs and 8 Shareholding SOEs are not significantly different which implies that the magnitudes of change in planning influence of the two samples are the same.
- (3) The decreases of control influences (or increases in mean score differences) before and after 1992 of the 12 Wholly SOEs and 8 Shareholding SOEs are <u>significantly different</u> which implies that the magnitude of change in control influence of the latter sample is higher than the former sample.

Therefore, the pace of change is similar regardless of ownership for planning but the 8 Shareholding SOEs are moving more quickly in terms of control changes.

## 7.4.4 Geographical Locations

This section is testing the third "Secondary Null Hypothesis: H3" stating that the Responsibility Accounting Styles and the associated Planning and Control Influences of the 20 SOEs, which are located in 4 different cities (i.e. Beijing, Shanghai, Xiamen, Guangzhou), have not changed before and after 1992.

The changes of planning and control influences of these 20 SOEs categorized by the 4 cities are shown in Table 6C in the Appendix 1. By the same reasoning as described in Sections 7.4.1-3 above, the planning and control influences of all these 20 SOEs have changed significantly before and after 1992 irrespective of their geographical locations. Their "Responsibility Accounting Styles" have changed in the following 3 directions (disregarding their geographical locations):

	RA Style Before 1992	RA Style After 1992	Enterprises
1	Financial Programming	Financial Control	15 SOEs other than (2) and (3) below
2	Financial Control	Strategic Control	GFDS(03), GFDD(04), GNFB(08), SDS1(11)
3	Financial Programming	Strategic Control	BPMH(20)

To test the geographical differences, a non-parametric test called "Wilcoxon Matched-Pairs Signed-Ranks Test" is employed as shown in Workings 1.4A & B, 1.5A & B, 1.6A & B, 1.7A & B (see Appendix 4 run by SPSS and data based on Table 6C). The results are summarized as follows:

Cities		Control Influence (Before & After 1992 Mean Difference) Wilcoxon Z Scores
Beijing	2.20 (n=6; p=0.0277*)	2.20 (n=6; p=0.0277*)
Shanghai	2.37 (n=7; p=0.0180*)	2.37 (n=7; p=0.0180*)
Xiamen	1.34 (n=2; p=0.1797 <sup>2</sup> )	1.34 (n=2; p=0.1797)
Guangzhou	2.02 (n=5; p=0.0431*)	2.02 (n=5; p=0.0431*)

<sup>\*</sup> Significant at p≤0.05.

In addition, a parametric statistical test called "T-Tests for Paired Samples" is used as shown in Workings 2.4A & B, 2.5A & B, 2.6A & B, 2.7A & B (see Appendix 4 run by SPSS and data based on Table 6C) in order to test the hypothesis in a statistical manner. The results are summarized as follows:

<sup>&</sup>lt;sup>2</sup> The Z-scores for the planning and control mean differences are not significant at p=0.05 but since the sample (n=2) is too small, there are insufficient evidence to statistically reject the null hypothesis in respect of the 2 SOEs investigated in Xiamen.

Cities		Control Influence (Before & After 1992 Mean Difference) t-values	
Beijing	24.52 (n=6; df=5; p<0.001*)	19.17 (n=6; df=5; p<0.001*)	
Shanghai	19.96 (n=7; df=6; p<0.001*)	15.74 (n=7; df=6; p<0.001*)	
Xiamen	23.00 (n=2; df=1; p<0.028*3)	15.00 (n=2; df=1; p<0.042*)	
Guangzhou	42.46 (n=5; df=4; p<0.001*)	16.47 (n=5; df=4; p<0.001*)	

<sup>\*</sup> Significant at p≤0.05.

Therefore, it is concluded that the third "Secondary Null Hypothesis: H3" can be rejected or the Responsibility Accounting Styles and the associated Planning and Control Influences of these 20 SOEs, which are located in 4 different cities, have changed since 1992 disregarding their geographical locations. These changes are found to be due to the different local government policies and regulations as described in Section 1.2.2.2 of Chapter 1.

Compared the changes in planning and control influence scores among these 4 cities, a summary is drawn as follow:

	Cities*	Planning Influence	Control Influence	RA Style
1	Beijing	High (1.38) to Medium (2.43)	Financial (1.22) to Moderate Fin. (1.92)	Fin. Programming to Financial Control
2	Shanghai	High (1.49) to Medium-Low (2.61)	Financial (1.20) to Moderate Fin. (1.96)	Fin. Programming to Financial Control
3	Xiamen	High-Medium (1.75) to Medium-Low (2.9)	Financial (1.25) to Moderate Fin. (2.00)	Fin. Programming to Financial Control
4	Guangzhou	High-Medium (1.98) to Low (3.02)	Moderate Fin. (1.58) to Moderate Strategic (2.42)	Fin. Programming or Financial Control to Strategic Control

<sup>\*</sup> The cities are ranked in the order from north to south. The capital is in Beijing.

<sup>&</sup>lt;sup>3</sup> Compared with the insufficient statistical evidence by using Wilcoxon Test as shown above (i.e. footnote 2), this t-test is justified to reject the null hypothesis in respect of the planning and control influences of the 2 SOEs investigated in Xiamen.

To test statistically the changes of the planning and control influences of these 20 SOEs located in 4 different cities, a parametric "One-Way ANOVA Test" is performed by SPSS as shown in Workings W3.3A, B, C & W3.4A, B, C (see Appendix 4) and the results are summarized below:

Comparing Locations	Periods	Planning Influence F-Ratios	Control Influence F-Ratios
Beijing vs Shanghai vs	Before 1992	5.79 (p=0.007*)	2.82 (p=0.072)
Xiamen vs Guangzhou	After 1992	6.40 (p=0.005*)	2.65 (p=0.084)
Mean Score Differences	#	1.01 (p=0.412)	1.48 (p=0.258)

<sup>\*</sup> Significant at p≤0.05.

# The mean differences of planning and control scores before and after 1992 of the SOEs in 4 different geographical locations (i.e. Beijing, Shanghai, Xiamen, Guangzhou).

From the above results, 3 observations are offered.

- (1) The planning influences (i.e. mean scores) of the 20 SOEs located in 4 different cities are significantly different before and after 1992.
- (2) The control influences (i.e. mean scores) of the 20 SOEs located in 4 different cities are not significantly different before and after 1992.
- (3) The decreases of planning and control influences (or increases in the mean score differences) before and after 1992 of the 20 SOEs located in 4 different cities are not significantly different which implies that the magnitudes of change in both planning and control influences of the four samples are the same.

<sup>&</sup>lt;sup>4</sup> One-Way ANOVA Test has to be used because there are 4 sets of sample means (i.e. 4 cities) to compare instead of using Independent Samples T-Tests to compare 2 sets of sample means.

Pursuant to observation (1) above, "Independent Samples T-Tests" are performed to identify that the following paired-comparisons indicate *significant planning differences* before and after 1992 among these 4 cities<sup>5</sup>.

	Planning Influence (Before 1992) t-values	Planning Influence (After 1992) t-values
Beijing vs Xiamen	Not significant	3.83 (p=0.009*)
Beijing vs Guangzhou	5.84 (p=0.001*)	6.18 (p=0.001*)
Shanghai vs Guangzhou	2.95 (p=0.014*)	2.52 (p=0.030*)

<sup>\*</sup> Significant at p≤0.05.

The above observations can suggest that the further away from the central government (i.e. in Beijing), the <u>less planning influences</u> are exerted from the local government on the SOEs (external dimension) and in turn, from the enterprise management on the responsibility centres within these SOEs (internal dimension). Furthermore, the more favourable economic policies granted to Xiamen and Guangzhou have enhanced the management independence of the SOEs located in these two cities.

## 7.4.5 <u>Industrial Differences</u>

This section is testing the fourth "Secondary Null Hypothesis: H4" stating that the Responsibility Accounting Styles and the associated Planning and Control Influences of these 20 SOEs, which belong to 6 different industries, have not changed before and after 1992 disregarding which industries they belong to.

The changes of planning and control influences of these 20 SOEs categorized by the 6 industries are shown in Table 6D in the Appendix 1. By the same reasoning as described in Sections 7.4.1-3 above, the planning and control influences of all these 20 SOEs have changed significantly before and after 1992 irrespective of which industries they belong to.

<sup>&</sup>lt;sup>5</sup> There are 6 combinations to compare 2 sample means among the 4 sample means (i.e. 4 cities) for the planning influence and similarly there are 6 combinations for the control influence. Only those paired-comparisons with significant differences are shown in the table.

To verify the above observations statistically, a non-parametric test called "Wilcoxon Matched-Pairs Signed-Ranks Test" is employed as shown in *Workings 1.8A & B, 1.9A & B, 1.10A & B, 1.11A & B, 1.12A & B* (see Appendix 4 run by SPSS and data based on Table 6D). The results are summarized as follows:

Industries	Planning Influence (Before & After 1992 Mean Difference) Wilcoxon Z Scores	Control Influence (Before & After 1992 Mean Difference) Wilcoxon Z Scores
Iron & Steel	1.34 (n=2; p<0.1797#)	1.34 (n=2; p<0.1797#)
Machines & Equipment	2.52 (n=8; p<0.0117*)	2.52 (n=8; p<0.0117*)
Department Stores	1.83 (n=4; p<0.0679#)	1.83 (n=4; p<0.0679#)
Consumables	1.60 (n=3; p<0.1088#)	1.60 (n=3; p<0.1088#)
Textiles	1.34 (n=2; p<0.1797#)	1.34 (n=2; p<0.1797#)
Hotel	N/A (i.e. n=1)	N/A (i.e. n=1)

<sup>\*</sup> Significant at p≤0.05.

# The Z-scores for the planning and control mean differences are not significant at p=0.05 but since the sample sizes are small (i.e. n<5), there are insufficient evidence to statistically reject the null hypothesis in respect of these 4 industries.

In addition, a parametric statistical test called "T-Tests for Paired Samples" is used as shown in *Workings 2.8A & B, 2.9A & B, 2.10A & B, 2.11A & B, 2.12A & B* (see Appendix 4 run by SPSS and data based on Table 6D) in order to test the hypothesis in a statistical manner. The results are summarized as follows:

Industries	Planning Influence (Before & After 1992 Mean Difference) t-values	Control Influence (Before & After 1992 Mean Difference) t-values
Iron & Steel	13.00 (n=2; df=1; p<0.049*#)	13.00 (n=2; df=1; p<0.049*#)
Machines & Equipment	31.04 (n=8; df=7; p<0.001*)	24.15 (n=8; df=7; p<0.001*)
Department Stores	43.00 (n=4; df=3; p<0.001*#)	19.32 (n=4; df=3; p<0.001*#)
Consumables	31.00 (n=3; df=2; p<0.001*#)	22.00 (n=3; df=2; p<0.002*#)
Textiles	21.00 (n=2; df=1; p<0.030*#)	N/A (data sets are the same)
Hotel	N/A (i.e. df=0)	N/A (i.e. df=0)

<sup>\*</sup> Significant at p≤0.05.

# Compared with the insufficient statistical evidence by using Wilcoxon Test as shown before the T-Tests for Paired Samples (remark per #) on p.291, the above t-test is justified to reject the null hypothesis in respect of the planning and control influences of these 4 industries.

Therefore, it is concluded that the fourth "Secondary Null Hypothesis: H4" can be rejected or the Responsibility Accounting Styles and the associated Planning and Control Influences of these 20 SOEs have changed since 1992 disregarding which industries they belong to. These changes are found to be due to the macro-economic control measures as described in Section 1.2.2.3 of Chapter 1.

Comparing the extents of changes in planning and control influences, and the resultant responsibility accounting styles among these 6 different industries, the following table is compiled:

	Industries*	Planning Influence	Control Influence	RA Style
1	Iron & Steel	High (1.20) to Medium (2.50)	Financial (1.05) to Moderate Fin. (1.70)	Financial Programming to Financial Control
2	Machines & Equip.	High (1.40) to Medium (2.49)	Financial (1.20) to Moderate Fin. (1.91)	Financial Programming to Financial Control

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	Industries* Planning Influence		Control Influence	RA Style	
3	Hotel	High (1.50) to Medium (2.40)	Financial (1.20) to Moderate Fin. (1.90)	Financial Programming to Financial Control	
4	Textiles	High (1.50) to Medium-Low (2.55)	Financial (1.10) to Moderate Fin. (1.90)	Financial Programming to Financial Control	
5	Consuma- bles	High-Medium (1.87) to Medium-Low (2.90)	Financial (1.23) to Moderate Fin. (1.97)/ Moderate Strategic	Financial Programming to Financial Control/ Strategic Control	
6	Depart- ment Store	Medium (2.10) to Low (3.18)	Moderate Fin. (1.83) to Strategic (2.75)	Financial Control to Strategic Control	

<sup>\*</sup> The industries are ranked in order of higher to lower planning and control influences.

Observed from the above table, it indicates that the *responsibility accounting styles* of the first 4 industries (i.e. iron & steel, machines & equipment, hotel and textiles) have been changing from "Moderate Financial Programming Style" before 1992 to "Financial Control Style" after 1992. Whereas, the consumable industry is moving closer to the "Moderate Strategic Control Style" after 1992. Finally, the retailing industry (i.e. department stores) has already been in the "Financial Control Style" before 1992 and has entered into the "Strategic Control Style" after 1992.

To test statistically the changes of the planning and control influences of these 20 SOEs which belong to 6 different industries, a parametric "One-Way ANOVA Test" is performed by SPSS as shown in *Workings W3.5A*, *B*, *C* & *W3.6A*, *B*, *C* (see Appendix 4) and the results are summarized below:

Comparing Industries		Planning Influence F-Ratios	Control Influence F-Ratios
6 Different Industries	Before 1992	17.19 (p=0.001*)	66.74 (p=0.001*)
	After 1992	12.38 (p=0.001*)	54.48 (p=0.001*)
Mean Score Differences	#	3.57 (p=0.027*)	5.10 (p=0.007*)

<sup>\*</sup> Significant at p≤0.05.

<sup>#</sup> The mean differences of planning and control scores before and after 1992 of the SOEs in 6 different industries.

From the above results, 3 observations are offered.

- (1) The planning influences (i.e. mean scores) of the 20 SOEs belonging to 6 different industries are <u>significantly different</u> before and after 1992.
- (2) The control influences (i.e. mean scores) of the 20 SOEs belonging to 6 different industries are <u>significantly different</u> before and after 1992.
- (3) The decreases of planning and control influences (or increases in the mean score differences) before and after 1992 of the 20 SOEs belonging to 6 different industries are significantly different which implies that the magnitudes of change in both planning and control influences of the six industries are different.

Pursuant to observation (1) and (2) above, "Independent Samples T-Tests" are performed to identify that the following paired-comparisons indicate significant planning and control differences before and after 1992 among these 6 industries.

Comparing	Planning Influence (t-values)		Control Influence (t-values)		
Industries#	Before 1992 After 1992		Before 1992	After 1992	
(A) vs (B)	Not Significant	Not Significant	2.53 (p=0.035*)	2.55 (p=0.034*)	
(A) vs (C)	10.4 (p=0.001*)	9.40 (p=0.001*)	16.01 (p=0.001*)	10.84 (p=0.001*)	
(A) vs (D)	7.75 (p=0.004*)	5.37 (p=0.013*)	3.22 (p=0.049*)	Not Significant	
(B) vs (C)	7.09 (p=0.001*)	6.52 (p=0.001*)	14.81 (p=0.001*)	13.76 (p=0.001*)	
(B) vs (D)	4.16 (p=0.002*)	3.40 (p=0.008*)	Not Significant	Not Significant	
(C) vs (D)	4.18 (p=0.009*)	3.69 (p=0.014*)	14.55 (p=0.001*)	11.98 (p=0.001*)	
(C) vs (E)	6.93 (p=0.002*)	5.36 (p=0.006*)	19.33 (p=0.001*)	11.33 (p=0.001*)	
(D) vs (E)	4.26 (p=0.024*)	Not Significant	Not Significant	Not Significant	

<sup>\*</sup> Significant at p≤0.05.

# A = Iron & Steel

D = Consumables

B = Machines & Equipment

E = Textiles

C = Department Stores

F = Hotel

The above paired-comparisons support the previous observations in this section that the changes of planning and control influences of the Department Stores (C) and Consumables (D) industries are higher than the other four industries (i.e. Iron & Steel (A), Machines & Equipment (B), Textiles (E) and Hotel (F)) which are mainly Wholly SOEs and located closer to the central government in Beijing.

Finally, pursuant to observation (3) on p.294, "Independent Samples T-Tests" are performed to identify that the following paired-comparisons indicate significant planning and control mean score (increase in magnitude) differences before and after 1992 among these 6 industries.

Comparing Industries#	Planning Influence t-values	Control Influence t-values
(A) vs (B)	2.55 (p=0.034*)	3.52 (p=0.024*)
(A) vs (C)	3.13 (p=0.035*)	Not Significant
(B) vs (C)	Not Significant	3.97 (p=0.003*)
(C) vs (D)	Not Significant	3.04 (p=0.029*)

<sup>\*</sup> Significant at p≤0.05.

The above figures further reveal the phenomenon that the magnitudes of changes of planning and control influences in the Department Stores (C) and Consumables (D) industries are higher than the other four industries (i.e. Iron & Steel (A), Machines & Equipment (B), Textiles (E) and Hotel (F)) which are mainly Wholly SOEs and located closer to the central government in Beijing.

## 7.5 MATRIX ANALYSIS

Under the "legislation" and "market economy" changes (or general factors/variables) since 1992, all the 20 SOEs investigated in this study enjoy greater discretion over development and operation of their planning and control systems at the responsibility centre level. This statement is statistically verified by testing (or rejecting) the "Primary Hypothesis" as shown in Section 7.4.1 above. This enlarged autonomy applies whether the SOEs are wholly or partly owned by the government or have a listing on a stock exchange. This proposition is also statistically verified by testing (or rejecting) the first and second "Secondary Hypotheses - H1 & H2" as shown in Sections 7.4.2 and 7.4.3 above.

The pace of change as measured by the degree of discretion over planning and control appears to vary with form of "ownership" (or specific factor/variable). This phenomenon is statistically tested in Section 7.4.3 and found that the pace of change is similar regardless of ownership (12 Wholly SOEs v. 8 Shareholding SOEs) but the 8 Shareholding SOEs are changing more rapidly in terms of control influences.

The different pace of change is associated with (a) the "location" of the SOEs; and (b) the "industry" sector which are found to be affected by the "local government regulations" and "macro-economic control measures" (or specific factors/variables) respectively. These two associations are also statistically verified by testing (or rejecting) the third and fourth "Secondary Hypotheses - H3 & H4" as shown in Sections 7.4.4 and 7.4.5 above. These two sections also highlight statistically that there are some planning and control differences among the various locations and industries of these 20 SOEs before and after 1992.

The purpose of this Section is to expand the previous analysis performed in Section 7.4 in order to combine the specific factors/variables (i.e. ownership, location and industry) and identify the underlying reasons for the changes in planning and control influences.

<sup>&</sup>lt;sup>6</sup> To enhance the implementation policies of socialist market economy was the top agenda item of the 15th Communist Party Representatives Conference of China held in September 1997 according to *Wen Wei Po* (Hong Kong Newspaper) on 25 August 1997.

## 7.5.1 Planning & Control Influences Analysis by Ownership & Location

The captioned analysis is summarized in Table 7A in the Appendix 1. Since the hypothesis testing performed in Section 7.4 confirms that the planning and control influences in the 20 SOEs have changed before and after 1992 irrespective of different types of ownership, locations and industries, it is justified to analyse the planning and control scores after 1992 which reflect the prevailing situation. Going into the details of Table 7A, the following observations can be offered.

- (1) Both of the average planning and control scores of the Shareholding SOE (i.e. BPMH: 2.70/2.10) are higher (or influences lower) than the 5 Wholly SOEs (2.38/1.92) located in Beijing.
- (2) Both of the average planning and control scores of the 2 Shareholding SOEs (3.00/2.35) are higher (or influences lower) than the 5 Wholly SOEs (2.46/1.80) located in Shanghai.
- in Guangzhou are slightly higher (or influences lower) than the 2 Shareholding SOEs (3.02/2.42) in Shanghai. And in turn, both of the average planning and control scores of the 2 Shareholding SOEs (3.00/2.35) in Shanghai are higher (or influences lower) than the Shareholding SOEs (3.00/2.35) in Beijing (i.e BPMH).
- (4) Similar to (3), both of the average planning and control scores of the 2 Wholly SOEs (2.90/2.00) in Xiamen are higher (or influences lower) than the 5 Wholly SOEs (2.46/1.80) in Shanghai. In addition, the average planning score of the 5 Wholly SOEs (2.46) in Shanghai is higher (or influence lower) than the 5 Wholly SOE (2.38) in Beijing.
- (5) As a combined result of (3) and (4), the average planning and control scores are in a descending order of Guangzhou, Xiamen, Shanghai and Beijing.

From observations (1) and (2) above, it suggests that the Shareholding SOEs in both Shanghai and Beijing are subject to less planning and control influences from their local government than the Wholly SOEs mainly because of the higher autonomy delegated to the shareholding enterprises according to the Company Law (1993). This change is more significant to the

Shanghai shareholding enterprises as shown in Table 7A in respect of the score differences between the two forms of ownership compared with Beijing.

In relation to observations (3), (4) and (5) above, it can be seen that both the average planning and control scores of the 5 Shareholding SOEs in Guangzhou are the highest (or the lowest planning and control influences) among the 20 SOEs selected from 4 different cities. Other than the reason that these 5 SOEs are shareholding enterprises, Guangzhou is one of the earliest economic developing cities in China which can be dated back to the early Qing Dynasty (1644-1911). Since the economic reform formally started in 1979, the industrial and commercial enterprises in Guangzhou have been granted substantial favourable local government policies and regulations (i.e. import/export, tax, foreign exchange, land use, capital investment, labour, pricing, etc.). Furthermore, Guangzhou is the capital of Guangdong Province and close to Hong Kong which has acted as an economic window or gateway for Guangzhou and Guangdong Province.

The average planning scores of the 2 Wholly SOEs in Xiamen is significantly higher (or influences lower) than the 10 Wholly SOEs investigated in Shanghai and Beijing and even higher than the listed SOE (i.e. BPMH) in Beijing. Xiamen has been one of the five Special Economic Development Zones since 1984 and enjoyed many favourable local government policies and regulations similar to Guangzhou in order to encourage foreign investment especially from Taiwan which is just across the Taiwan Strait. Some of the details are described in Chapters 5 & 6 (e.g. Sections 5.2-6, 6.3-4), and also Data Analyses 2 & 17 in Volume 3.

Both the average planning and control scores of the 10 Wholly SOEs in Shanghai and Beijing are lower (or influences higher) than their counterparts in Xiamen and Guangzhou. The 5 Wholly SOEs investigated in Shanghai are relatively old and traditional large-sized SOEs which are still subject to certain local government policies and regulations, and also some macro-economic control measures from their respective government authorities. Tighter situations can be found on the 5 Wholly SOEs located in Beijing which is the central government of China.

Finally, the analysis in Table 7A supports the findings at the end of Section 7.4.4 that the planning influences after 1992 are significant only between (1) Beijing and Xiamen (2.43 v. 2.90); (2) Beijing and Guangzhou (2.43 v.3.02); and (3) Shanghai and Guangzhou (2.61 v. 3.02). Furthermore, the control influences of the 20 SOEs located in the 4 different cities are not significantly different.

In conclusion, it is found that the planning and control influences of these 20 SOEs located in 4 different cities are different mainly due to the specific factor/variable of "local government policies and regulations".

## 7.5.2 Planning & Control Influences Analysis by Ownership & Industry

The captioned analysis is summarized in Table 7B in the Appendix 1. From this table, the following observations can be offered.

- (1) Both of the average planning and control scores of the Shareholding SOE (i.e. BPMH: 2.70/2.10) are higher (or influences lower) than the 5 Wholly SOEs (2.43/1.88) in the same industry of machines and equipment manufacturing.
- (2) The average planning and control scores of the Shareholding SOE (i.e. SCM2: 2.70/1.90) are higher (or influence lower) than and equal to the Wholly SOE (i.e. BCM3: 2.40/1.90) in the same industry of textiles manufacturing respectively.
- (3) Both of the average planning and control scores of the Wholly SOE (i.e. XLIG: 3.00/2.00) are higher (or influences lower) than the 2 Shareholding SOEs (2.85/1.95) in the same industry of consumables manufacturing.
- (4) According to the average scores, the degree of planning and control influences among the 6 different industries can be ranked as follow (the higher the rank, the lower the planning or control influences):

	Shareholding SOEs		Wholly SOEs		All SOEs	
Industries*	PS Rank#	CS Rank+	PS Rank	CS Rank	PS Rank	CS Rank
I & S	N/A	N/A	2nd	5th	4th	6th
M & E	3rd	2nd	3rd	4th	5th	3rd
D. Stores	1st	1st	N/A	N/A	1st	1st
Consum.	2nd	3rd	1st	1st	2nd	2nd
Textiles	3rd	4th	4th	2nd	3rd	4th
Hotel	N/A	N/A	4th	2nd	5th	4th

\* Types of Industry:

I&S

- Iron & Steel Manufacturing

M & E D. Stores Machines & Equipment ManufacturingDepartment Stores (Retailing/Servicing)

Consum.

- Consumables Manufacturing

Textiles

- Textiles Manufacturing

Hotel

- Hotel Servicing

# Ranking of Planning Scores

+ Ranking of Control Scores

From observations (1) and (2) above, it can suggest that the Shareholding SOEs in both the machines & equipment and textiles manufacturing industries are subject to less planning and control influences from their government authorities than the Wholly SOEs in the same industries mainly because of the higher autonomy delegated to the shareholding enterprises according to the Company Law (1993). Furthermore, the 2 Shareholding SOEs in these two industries are listed companies in the Shanghai Stock Exchange with full management authority vested in their boards of directors.

However, observation (3) indicates that the planning and control influences on the Wholly SOE (i.e. XLIG) are slightly lower than the 2 Shareholding SOEs in the same industry of consumables manufacturing. As explained in Section 7.5.1 above, Xiamen and Guangzhou are special economic development cities in which their SOEs enjoy more favourable local government policies and regulations.

In relation to observation (4), the enterprises (6 Shareholding SOEs and 1 Wholly SOE) investigated in the industries of department stores and consumable manufacturing are subject to less planning and control influences when compared with the 13 SOEs in the other 4 industries selected for this study. The possible reason is that their respective government authorities exert less macro-economic control measures (see Section 1.2.2.3 in Chapter 1) on them as described in Chapters 5 & 6 (e.g. Sections 5.1-3, 5.5, 6.0-1, 6.3-4). Contrary, the Wholly SOEs in the machines & equipment, hotel and iron & steel industries are subject to tighter macro-economic controls from their government authorities similarly described in Chapters 5 & 6.

Finally, the analysis in Table 7B supports the findings at the end of Section 7.4.5 that the planning and control influences after 1992 are significantly different between the following pairs of industries:

Comparing Industries	Comparing PS after 1992	Comparing CS after 1992
I & S v. M & E	Not Significant	1.77 v. 1.91
I & S v. D. Stores	2.53 v. 3.18	1.77 v. 2.75
I & S v. Consum.	2.53 v. 2.90	Not Significant
M & E v. D. Stores	2.40 v. 3.18	1.91 v. 2.75
M & E v. Consum.	2.40 v. 2.90	Not Significant
D. Stores v. Consum.	3.19 v. 2.90	2.75 v. 1.97
D. Stores v. Textiles	3.19 v. 2.55	2.75 v. 1.90

In conclusion, it is found that the planning and control influences of these 20 SOEs which belong to 6 different industries are different mainly due to the specific factor/variable of "macro-economic control measures" exerted by their respective government authorities.

# 7.5.3 Planning & Control Influences Analysis by Ownership/Industry/Location

The captioned analysis is summarized in Table 7C in the Appendix 1. From this table, the following observations can be offered.

- (1) Beijing
- (A) Both of the average planning and control scores of the Shareholding SOE (i.e. BPMH:
   2.70/2.10) are higher (or influences lower) than the 3 Wholly SOEs (2.37/1.87) in the industry of machines and equipment manufacturing.
- (B) Both of the average planning and control scores of the 2 Wholly SOEs in the industries of textiles manufacturing and hotels are the same (i.e. BCM3:2.40/1.90; BFSH: 2.40/1.90), and they are both slightly higher than the 3 Wholly SOEs (2.37/1.87) in the industry of machines and equipment manufacturing.

As a combined result of (A) and (B), all the 5 Wholly SOEs investigated in Beijing are subject to similar local government policies and regulations, and macro-economic control measures from their respective government authorities. The listed SOE (i.e. BPMH) has higher autonomy in respect of planning and control systems.

- (2) Shanghai
- (C) Both of the average planning and control scores of the Shareholding SOE (i.e. SDS1: 3.30/2.80) in the industry of department stores and the Shareholding SOE (i.e. SCM2: 2.70/1.90) in the textiles industry are higher (or influences lower) than the other 5 Wholly SOEs (2.53/1.77 & 2.35/1.85) in the industries of iron & steel and machines & equipment manufacturing.
- (D) The 2 listed Shareholding SOEs (i.e. SDS1 & SCM2) are subject to less local government policies and regulations, and macro-economic control measures from their respective government authorities especially the department store SDS1.
- (3) Xiamen
- (E) The planning and control influences on the 2 Wholly SOEs (i.e. XFLT: 2.80/2.00 & XLIG: 3.00/2.00) in two different industries are similar, but they are lower than all the Shareholding and Wholly SOEs in Beijing and Shanghai except the department store SDS1 (3.30/2.80). This implies that the favourable local government policies and regulations granted to the enterprises in this city is the major reason.

- (4) Guangzhou
- (F) The average planning scores of the 3 Shareholding SOE (3.13) in the industry of department stores are higher (or influences lower) than the 3 Wholly SOEs (2.85) in the industry of consumables manufacturing.
- (G) The average control scores of the 3 Shareholding SOE (2.73) in the industry of department stores are significantly higher (or influences lower) than the 3 Wholly SOEs (1.95) in the industry of consumables manufacturing.
- (H) The planning and control influences on the 5 Shareholding SOEs in the industries of department stores and consumables manufacturing are lower than all the Shareholding and Wholly SOEs in Beijing, Shanghai and Xiamen except the department store SDS1 and the beverage manufacturer XLIG. This implies that the favourable local government policies and regulations granted to the enterprises in this city is the major reason.

# 7.5.4 Responsibility Accounting Style Analysis by Ownership/Industry/Location

The captioned analysis is summarized in Table 7D in the Appendix 1. This analysis is an extension of the above 3 matrix analyses (7.5.1-7.5.3) by looking into what types of ownership, industry and location of the 20 SOEs affect the classification of their post 1992 responsibility accounting styles into Strategic Control and Financial Control according to Goold and Campbell categories. This would allow a contingency framework to be inferred as the overall conclusion of these matrix analyses.

The 20 SOEs are ranked in descending order according to their Responsibility Accounting Scores (RA Scores) which are calculated by multiplying their respective Post 1992 Overall Average Planning Scores and Overall Average Planning Scores as listed in Section 7.2.3 of this Chapter (e.g. SDS1(11)=3.3x2.8=9.24). The higher the RA Score indicates the lower the planning influence or control influence or both, and the more bias to the strategic control style of responsibility accounting.

From Table 7D, the following observations can be offered.

- (1) All the 8 Shareholding SOEs are ranked within the top ten with RA Scores over 5.00. By drawing a line separating the 8 Strategic Control Style SOEs and the 12 Financial Control Style SOEs, 6 SOEs of the former group are shareholding enterprises.
- (2) All the 4 Department Stores fall into the Strategic Control Style after 1992 and they are all Shareholding SOEs. All the 3 Consumables Manufacturing SOEs attain RA Scores over 5.30 and 2 of them (i.e. XLIG(17) & GLIL(16)) are moving towards the Strategic Control Style after 1992.
- (3) All the 7 SOEs located in Guangzhou and Xiamen are ranked within the top nine and except GNFF(07), 6 of them belong to the Strategic Control Style after 1992.

The above observations suggest that the responsibility accounting style to be adopted by these 20 SOEs are affected at least by three contingent variables -- ownership, industry and location which are influenced by the shareholding transformation, macro-economic control measures and local government policies and regulations respectively as shown in the Responsibility Accounting Research Domain (Figure 1 in Appendix 3).

From the same Table 7D, some propositions, which are subject to future empirical research, can be made as follow.

- In the Chinese Retailing Industry (e.g. department store), the Shareholding SOEs located in the Southern Provinces (e.g. Guangzhou) tend to adopt Strategic Control Style of Responsibility Accounting subject to less planning and control influences from the government after the legislation changes and market economy reforms since 1992.
- In the Chinese Consumables Manufacturing Industry (e.g. food & beverage, cleaning products, etc.), the Shareholding SOEs located in the Southern Provinces (e.g. Xiamen, Guangzhou, etc.) are moving towards the Strategic Control Style of Responsibility Accounting subject to less planning and control influences from the government after the legislation changes and market economy reforms since 1992.

• In the Chinese Machine and Equipment Manufacturing Industry (e.g. crane, conveyor, rectifier, measuring tools, etc.), the Wholly SOEs located in the Northern Provinces (e.g. Beijing, Shanghai, etc.) enter into the Financial Control Style of Responsibility Accounting subject to various degrees of planning and control influences from the government after the legislation changes and market economy reforms since 1992.

The following table is a further analysis based on Table 7D of the ownership, location and industry effects on the RA Styles of the 20 SOEs. The Rank Index is the average of ranks of a certain type of ownership or location or industry within the 20 SOEs. For examples,

Ownership: Shareholding (8 SOEs) = (1+2+3+4+6+7+9+10)/8 = 42/8 = 5.25

Location: Beijing (6 SOEs) = (7+12+13+13+16+19)/6 = 80/6 = 13.33

Industry: M&E Manu. (7 SOEs) = (7+8+12+16+16+18+19) = 96/7 = 13.71

The lower Rank Index indicates that type of ownership or location or industry is subject to less planning and control influences from the government and bias to the Strategic Control RA Style.

Ownership	Rank Index	Location	Rank Index	Industry	Rank Index
Shareholding	42/8 =5.25	Guangzhou	25/5= 4.80	Depart. Store	10/4= 2.50
Wholly SOE	166/12=13.8	Xiamen	13/2= 6.50	Consum. Manu.	20/3= 6.67
		Shanghai	91/7=13.00	Textiles Manu.	23/2=11.50
		Beijing	80/6=13.33	Hotel Servicing	13/1=13.00
				M&E Manu.	96/7=13.71
				Iron/Steel Manu.	46/3=15.30

From the above table, the following suggestions can be offered.

- After the "ownership transformation", the Shareholding SOEs are subject to less planning and control influences from the government.
- The SOEs located closer to the central government (i.e. Beijing) are subject to tighter "local government policies and regulations" in terms of planning and control influences.

Different industries are subject to various degrees of "macro-economic control measures" taken by their respective government authorities. For example, the retailing and consumables manufacturing industries are subject to less planning and control influences from their government authorities than the machines and equipment, and iron and steel industries.

All in all, Section 7.5 (Matrix Analysis) reinforces the significance of the Research Domain, as depicted under Section 1.4 in Chapter 1 and also Figure 1 in Appendix 3, which develops a contingent framework of this research study.

#### 7.6 SUMMARY

- (1) 15 SOEs (mainly the Wholly SOEs before and after 1992) have been moving from the "Financial Programming Style" to the "Financial Control Style" since 1992. (see 7.3)
- (2) 5 Shareholding SOEs have been moving from either the "Financial Programming Style" or the "Financial Control Style" to the "Strategic Control Style" since 1992. (see 7.3)
- (3) By applying the descriptive, parametric (T-Tests for Paired Samples) and non-parametric (Wilcoxon Matched-Pairs Signed-Ranks Test) statistics on the planning and control scores, it is concluded that the following "Primary Null Hypothesis: H0" can be rejected (see 7.4.1):
  - "H0 -- The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs investigated in this research have not changed before and after 1992."
- (4) By applying the descriptive, parametric (T-Tests for Paired Samples) and non-parametric (Wilcoxon Matched-Pairs Signed-Ranks Test) statistics on the planning and control scores, it is concluded that the following first "Secondary Null Hypothesis: H1" can be rejected (see 7.4.2):

- "H1 -- The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 12 Wholly SOEs, which have remained as Wholly SOEs after 1992, have not changed before and after 1992."
- (5) By applying the descriptive, parametric (T-Tests for Paired Samples) and non-parametric (Wilcoxon Matched-Pairs Signed-Ranks Test) statistics on the planning and control scores, it is concluded that the following second "Secondary Null Hypothesis: H2" can be rejected (see 7.4.3):
  - "H2 -- The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 8 Wholly SOEs, which have converted into Shareholding SOEs after 1992, have not changed before and after 1992."
- (6) To compare the changes of planning and control influences of the 8 Shareholding SOEs with the 12 Wholly SOEs, a parametric "Independent Samples T-Test" is performed and the following 3 observations are offered (see 7.4.3).
  - 6.1 Both the planning and control influences (i.e. mean scores) of the 12 Wholly SOEs and 8 Shareholding SOEs are <u>significantly different</u> before and after 1992. In general, the 8 Shareholding SOEs are moving towards the "Strategic Control Style" with lower planning and control influences than the other 12 Wholly SOEs.
  - 6.2 The decreases of planning influences (or increases in mean score differences) before and after 1992 of the 12 Wholly SOEs and 8 Shareholding SOEs are <u>not significantly different</u> which implies that the magnitudes of change in planning influence of the two samples are the same.
  - 6.3 The decreases of control influences (or increases in mean score differences) before and after 1992 of the 12 Wholly SOEs and 8 Shareholding SOEs are significantly different which implies that the magnitude of change in control influence of the latter sample is higher than the former sample.

- (7) By applying the descriptive, parametric (T-Tests for Paired Samples) and non-parametric (Wilcoxon Matched-Pairs Signed-Ranks Test) statistics on the planning and control scores, it is concluded that the following third "Secondary Null Hypothesis: H3" can be rejected (see 7.4.4):
  - "H3 -- The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs, which are located in 4 different cities, have not changed before and after 1992."
- (8) To test statistically the changes of the planning and control influences of the 20 SOEs located in 4 different cities, a parametric "One-Way ANOVA Test" is performed and the following 3 observations are offered (see 7.4.4).
  - 8.1 The planning influences (i.e. mean scores) of the 20 SOEs located in 4 different cities are <u>significantly different</u> before and after 1992.
  - 8.2 The control influences (i.e. mean scores) of the 20 SOEs located in 4 different cities are <u>not significantly different</u> before and after 1992.
  - 8.3 The decreases of planning and control influences (or increases in the mean score differences) before and after 1992 of the 20 SOEs located in 4 different cities are not significantly different which implies that the magnitudes of change in both planning and control influences of the four samples are the same.
- (9) Pursuant to observation 8.1 above, "Independent Samples T-Tests" are performed and the results indicate *significant planning differences* between the SOEs in Beijing and Xiamen (only after 1992), in Beijing and Guangzhou, and in Shanghai and Guangzhou before and after 1992. (see 7.4.4)
- (10) The above observations in (8) and (9) can suggest that the further away from the central government (i.e. in Beijing), the less planning influences are exerted from the local government on the SOEs (external dimension) and in turn, from the enterprise management on the responsibility centres within these SOEs (internal dimension).

Furthermore, the more favourable economic policies granted to Xiamen and Guangzhou have enhanced the management independence of the SOEs located in these two cities. (see 7.4.4)

- (11) By applying the descriptive, parametric (T-Tests for Paired Samples) and non-parametric (Wilcoxon Matched-Pairs Signed-Ranks Test) statistics on the planning and control scores, it is concluded that the following fourth "Secondary Null Hypothesis: H4" can be rejected (see 7.4.5):
  - "H4 -- The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs, which belong to 6 different industries, have not changed before and after 1992 disregarding which industry they belong to."
- (12) To test statistically the changes of the planning and control influences of the 20 SOEs which belong to 6 different industries, a parametric "One-Way ANOVA Test" is performed and the following 3 observations are offered (see 7.4.5).
  - 12.1 The planning influences (i.e. mean scores) of the 20 SOEs belonging to 6 different industries are <u>significantly different</u> before and after 1992.
  - 12.2 The control influences (i.e. mean scores) of the 20 SOEs belonging to 6 different industries are <u>significantly different</u> before and after 1992.
  - 12.3 The decreases of planning and control influences (or increases in the mean score differences) before and after 1992 of the 20 SOEs belonging to 6 different industries are <u>significantly different</u> which implies that the magnitudes of change in both planning and control influences of the six industries are different.
- (13) Pursuant to observation 12.1 above, "Independent Samples T-Tests" are performed and the results indicate *significant planning differences* between the following pairs of industries before and after 1992 (see 7.4.5):
  - 13.1 iron & steel vs department stores

- 13.2 iron & steel vs consumables
- 13.3 machines & equipment vs department stores
- 13.4 machines & equipment vs consumables
- 13.5 department stores & consumables
- 13.6 department stores & textiles
- 13.7 consumables vs textiles (only before 1992)
- (14) Pursuant to observation 12.2 above, "Independent Samples T-Tests" are performed and the results indicate *significant control differences* between the following pairs of industries before and after 1992 (see 7.4.5):
  - 14.1 iron & steel vs machines & equipment
  - 14.2 iron & steel vs department stores
  - 14.3 iron & steel vs consumables (only before 1992)
  - 14.4 machines & equipment vs department stores
  - 14.5 department stores vs consumables
  - 14.6 department stores & textiles
- (15) The *paired-comparisons* in (13) and (14) above support the previous observations (11 & 12) that the changes of planning and control influences of the Department Stores and Consumables industries are higher than the other four industries (i.e. Iron & Steel, Machines & Equipment, Textiles, Hotel) which are mainly Wholly SOEs and located closer to the central government in Beijing. (see 7.4.5)
- (16) Pursuant to observation 12.3 above, "Independent Samples T-Tests" are performed and the results indicate *significant planning and control mean score (increase in magnitude)*differences between the following pairs of industries before and after 1992 (see 7.4.5):

#### Planning Influence

- 16.1 iron & steel vs machines & equipment
- 16.2 iron & steel vs department stores

#### Control Influence

16.3 iron & steel vs machines & equipment

- 16.4 machines & equipment vs department stores
- 16.5 department stores vs consumables
- (17) The test results in (16) above further reveal the phenomenon that the magnitude of changes of planning and control influences in the Department Stores and Consumables industries are higher than the other four industries as described in (15) above. (see 7.4.5)
- (18) The degrees of planning and control influences on the 20 SOEs located in 4 different cities are in a descending order -- Guangzhou, Xiamen, Shanghai and Beijing. (see 7.5.1)
- (19) It is found that the planning and control influences of these 20 SOEs located in 4 different cities are different mainly due to the specific factor/variable of "local government policies and regulations". (see 7.5.1)
- (20) The 6 Shareholding SOEs and 1 Wholly SOE investigated in the industries of department stores and consumables manufacturing are subject to less planning and control influences when compared with the 13 SOEs in the other 4 industries selected for this study. (see 7.5.2)
- (21) It is found that the planning and control influences of these 20 SOEs which belong to 6 different industries are different mainly due to the specific factor/variable of "macro-economic control measures" exerted by their respective government authorities. (see 7.5.2)
- (22) The responsibility accounting style to be adopted by these 20 SOEs are affected at least by three contingent variables -- ownership, industry and location which are influenced by the shareholding transformation, macro-economic control measures and local government policies and regulations respectively as shown in the Responsibility Accounting Research Domain. (7.5.3)

# **CHAPTER 8: SUMMARY & CONCLUSION**

#### 8.1 INTRODUCTION

This final chapter summarizes the key purposes, findings and implications of the whole study. Firstly, the motive or importance to perform this research is highlighted (Section 8.2). Secondly, a summary of major research findings and some implications of this study, which are subjected to certain limitations, are provided (Sections 8.3-8.5). Thirdly, specific areas for future research in responsibility (management) accounting are described (Section 8.6). Fourthly, recommendations on SOE and responsibility (management) accounting reforms are listed for practice and research references (Section 8.7). Finally, an overview of this research (Section 8.8) is narrated before the ending conclusion (Section 8.9).

#### 8.2 IMPORTANCE OF THE RESEARCH

At the conclusion of the State Economic Planning Conference held in Beijing from 6-8 December 1996, the following 6 economic and social development plans were emphasized for further promulgation in 1997<sup>1</sup>:

- (1) to enhance the productivity of agricultural products;
- (2) to provide appropriate external environments and policies for promoting the SOE's efficiency and profitability;
- (3) to maintain the high industrial output growth and enhance overall economic efficiency;
- (4) to monitor and adjust the capital investment portfolio;
- (5) to promote the science and technology education; and
- (6) to adjust the foreign investment portfolio to increase overall contribution.

<sup>&</sup>lt;sup>1</sup> See Wen Wei Po (Hong Kong Newspaper) on 9 December 1996.

To promote SOE efficiency and profitability, the following 4 action plans<sup>2</sup> were approved:

- (1) to establish a "modern enterprise system" (or corporate governance in generic terms);
- (2) to assess the top management performance and ability, and make replacements if necessary;
- (3) to enhance the enterprise management system; and
- (4) to set appropriate policies to enhance effectiveness and efficiency; including:
  - (i) to purchase and use products made in China;
  - (ii) to diversify different channels to raise capital and reduce debts;
  - (iii) to forbid illegal appropriation of profits, funds and assets;
  - (iv) to expedite the social security system development; and
  - (v) to facilitate the re-employment scheme.

The purposes of establishing a "Modern Enterprise System" are to allow a SOE:

- (1) to be independent from the government (subject to macroeconomic control only);
- (2) to be self-financed and self-managed;
- (3) to be market driven/oriented; and
- (4) to employ scientific management.

The major context of "Modern Enterprise System" refers to the following 3 elements applicable to the SOEs<sup>4</sup>:

- (1) Legal entity -- the separation of ownership and management rights. The government is the ultimate owner of the SOE and is involved in strategic planning and selection of top management, but should not interfere in the daily operation.
- (2) Limited liability -- allowed to be converted into shareholding enterprises.
- (3) Scientific management -- maintain independence and control among the division of ownership, supervision, policy making and implementation within a SOE.

<sup>&</sup>lt;sup>2</sup> See Wen Wei Po (Hong Kong Newspaper) on 25 November 1996.

<sup>&</sup>lt;sup>3</sup> As from 1995, 2,500 SOEs have been selected to implement the "modern enterprise scheme" (including SSW5, GFDS, GDDS, GNFB, SDS1, SCM2, GLIL, BPMH).

<sup>&</sup>lt;sup>4</sup> See Wen Wei Po (Hong Kong Newspaper) on 15 March 1995.

Apparently, the scope of "Scientific Management" mainly covers the internal management aspects, including the planning and control systems, of the SOEs which rely on the responsibility accounting system. An understanding of the historical development and contemporary issues of the responsibility accounting system is crucial to reform this most important management accounting practice in China. More importantly, extensive and in-depth empirical research and experiments should be performed by the accounting academics and practitioners with specific attention paid to the feasibility of transplanting the western management accounting theories and techniques. This research study is to set an initial milestone to investigate and explain the current substance of the responsibility accounting system adopted by 20 SOEs from a cross-section of industries, and at the same time, observations from the case studies can suggest many propositions and hypotheses for future testing and comparisons with the western literature and research findings. The researcher strongly believes that management (responsibility) accounting is an indispensable tool to facilitate the economic well-being of the Chinese enterprises.

#### 8.3 SUMMARY OF MAJOR RESEARCH FINDINGS

#### 8.3.1 Planning System & Influence (see Chapter 5)

The promulgation of *market economy* and *SOE operation mechanisms transformation* (general factors/variables ascertained in Section 1.2.1 of Chapter 1) since 1992, and the significant restructuring of the State Council organisations in 1993 have encouraged the initiation and involvement of the enterprise managements to formulate both their long- and short-term plans. The *planning influences* from the government to enterprises (external dimension) and from enterprise managements to divisions or responsibility centres (internal dimension) of all the 20 SOEs in this study have been reduced (by various degrees after 1992). This is gauged in terms of 6 planning variables: organisation structure; review process; strategic themes, thrusts and suggestions; long-term plans; short-term plans/budgets; internal responsibility contracts; and management of interdependencies.

# 8.3.2 Control System & Influence (see Chapter 6)

Instead of direct control on the day-to-day operations of the SOEs, the government authorities have employed the macroeconomic control measures to monitor the economic performance of the SOEs since the economic reforms started in the early 1980s. As evidenced in this study, the control influences from the government to enterprises (external dimension) and from enterprise managements to divisions or responsibility centres (internal dimension) of these 20 SOEs have been reduced (by various degrees after 1992). This is gauged in terms of 4 control variables: decentralization and control; agreeing objectives; monitoring results; and rewards and incentives. It is noted that the 4 department stores in this study are moving towards strategic control style while the other 16 SOEs are entering into the domain of financial control style.

### 8.3.3 Responsibility Accounting Style (see Chapter 7)

The various measured changes of planning and control influences of these 20 SOEs before and after 1992 are mapped into a 2-dimensional grid called "Responsibility Accounting Style Grid" (adapted from Goold and Campbell 1991) as shown in Figure 2 (see Appendix 3). Basically two types of style changes can be identified. Firstly, the 4 department stores (in Shanghai and Guangzhou) and the listed printing machines manufacturing company in Beijing have been moving from either the "Financial Programming Style" or the "Financial Control Style" to the "Strategic Control Style" since 1992. They are all shareholding SOEs having higher product demand, better financial performance and less planning and control influences exerted by the government. Secondly, the other 15 SOEs have been moving from "Financial Programming Style" to the "Financial Control Style" since 1992. Most of these 15 enterprises are wholly state-owned facing bss of market share, unsatisfactory returns and tighter governmental supervision.

# \$.3.4 Hypotheses Testing (see Chapter 7)

After applying the descriptive, parametric and non-parametric statistics on the planning and control influence scores of these 20 SOEs, it is concluded that the following *primary (H0) and secondary (H1-4) hypotheses* can be rejected.

НО	The Responsibility Accounting Systems (or Styles) and the associated Planning and Control Influences of the 20 SOEs investigated in this research have not changed
	before and after 1992.
H1	The Responsibility Accounting Systems (or Styles) and the associated Planning and
	Control Influences of the 12 Wholly SOEs, which have remained as Wholly SOEs
	after 1992, have not changed before and after 1992.
H2	The Responsibility Accounting Systems (or Styles) and the associated Planning and
	Control Influences of the 8 Wholly SOEs, which have converted into Shareholding
	SOEs after 1992, have not changed before and after 1992.
Н3	The Responsibility Accounting Systems (or Styles) and the associated Planning and
	Control Influences of the 20 SOEs, which are located in 4 different cities, have not
	changed before and after 1992.
H4	The Responsibility Accounting Systems (or Styles) and the associated Planning and
	Control Influences of the 20 SOEs, which belong to 6 different industries, have not
	changed before and after 1992.

As a result of the hypothesis testing, the following propositions can be verified.

- (1) Under the "legislation" and "market economy" changes (or general factors/variables changes) since 1992, all the 20 SOEs investigated in this study enjoy greater discretion over development and operation of their planning and control systems at the responsibility centre level (by rejecting the Primary Hypothesis H0).
- (2) The enlarged autonomy applies whether the SOEs are wholly or partly owned by the government or have a listing on a stock exchange (by rejecting the Secondary Hypotheses H1 & H2).
- (3) The pace of change as measured by the degree of discretion over planning and control appears to vary with the form of "ownership" (or specific factor/variable).
- (4) The different pace of change is associated with (a) the "location" of the SOEs; and (b) the "industry" sector which are found to be affected by the "local government policies and regulations" and "macro-economic control measures" (or specific factors/variables) respectively (by rejecting Secondary Hypotheses H3 & H4).

The above findings reinforce the significance of the Research Domain, as depicted under Section 1.4 in Chapter 1, which develops a contingent framework for this research study.

#### 8.4 IMPLICATIONS OF THE RESEARCH

### 8.4.1 Contingency Model

The researcher believes that the most significant implication induced from this exploratory case study is a *Contingency Model* as shown on the next page (p.317a) as well as in Figure 1 (see Appendix 3) which is employed as the research model of this study as defined in Section 1.4 of Chapter 1 (see p.38).

The Data Analyses in Chapters 5 and 6, the Hypotheses Testing in Chapter 7 and the Cases Writing in Volumes 2 and 3 can provide substantial evidence that the Responsibility Accounting Styles and the associated Planning and Control Systems practised in the 20 SOEs have been changing mainly due to impacts from the Specific and General Factors (or Independent Variables) as described in Section 1.2 of Chapter 1 (see pp.8-29). The researcher also believes that those Long-Term Factors have diffusion effects on the styles and systems as well although they have not been focused in this study.

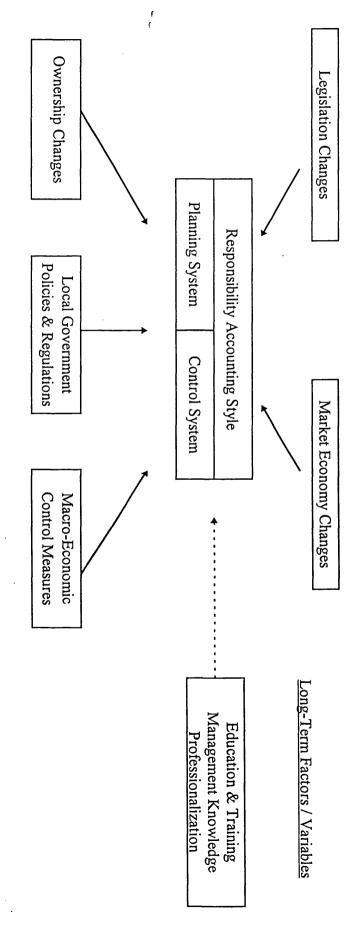
The researcher expects that this *Contingency Model* can be verified in other Chinese SOEs and extended to some areas of future research as suggested in Section 8.6 below. In addition, cross-cultural comparisons and analyses can also be investigated based on this model.

### 8.4.2 Specific Contributions

In responding to the *Research Significance* described in Section 1.7 of Chapter, the following contributions to the responsibility accounting (or management accounting) development in China have been accomplished by undertaking this research study:

(1) to ascertain the diversity of practices in responsibility accounting system, adopted by 20 SOEs in 6 industries and located in 4 cities, due to the legislation, ownership, economic





Specific Factors / Variables

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and government policy changes in the 1990s (see Chapter 2: Part B & Chapters 4 to 6);

- (2) to measure the pace of changes in the responsibility accounting styles and the associated planning and control systems before and after 1992 of these 20 SOEs under different ownerships, geographical locations and types of industries (see Chapter 7);
- (3) to compare the western literature/research findings with the observations in this study in order to identify potential responsibility (management) accounting areas for future research (see Chapter 2: Part A & Data Analyses in Volume 3); and
- (4) to recommend means and ways to improve the effectiveness of the responsibility accounting and the associated planning and control systems with an ultimate objective to enhance the economic performance in the Chinese SOEs (see Section 8.7 below).

### 8.4.3 General Contributions

It is important to recognise that case studies are concerned with induction, rather than prediction (see Section 3.3 in Chapter 3). Management accounting research will be greatly strengthened if case studies focus on explanation and theoretical generalisation. They will provide clearer understandings of management accounting practice and help both managers and accountants to work out their problems on a day-to-day basis. They may also act as a stimulus for resolving problems which have remained below the surface. Case study methods themselves will not provide the answers to such problems, but they should provide practitioners with a deeper and richer understanding of the social context in which they work and make them aware of the problems, and the possibilities for solutions (Scapens 1990: 278-279).

The detail descriptions of these 20 case studies (i.e. 20 SOEs) in Volume 2 and Volume 3 attached with this dissertation provide accounting practitioners and academics with a deeper and richer understanding of the practices of responsibility (management) accounting systems in China, so that further investigations and research can be instigated in order to enhance the contributions of responsibility accounting in specific and the management accounting in general.

#### 8.5 LIMITATIONS OF THE RESEARCH

As discussed in Section 1.9 of Chapter 1, this study has been subject to the following research limitations.

- (1) Literature Review -- the lack of prior research has compelled the researcher to employ exploratory case study method (or Keating's (1995) theory discovery approach) in this study.
- (2) Research Methodology -- the exploratory case study approach adopted in this research was difficult to come up with any "generalisation" since only 20 SOEs have been investigated.
- (3) Questionnaire Design -- the holistic ideal of studying all aspects of the responsibility accounting system in China is clearly unattainable and some limits on the subject matter had to be placed. This was influenced by the Goold and Campbell's framework which is not the only framework available.
- (4) Sample Size -- was limited due to employing the case study method and investigating the objects over a number of years of time.
- (5) Selection of Sample -- the freedom to choose a portfolio of SOEs to be investigated was limited. Although the researcher could suggest which types of enterprise to be included in the sample, the academic counterparts in China helped to gain access certain types of ownership profile, locations, etc.
- (6) Extraneous Variables -- the rapid political, social and economical changes in China might have introduced a few unanticipated variables into this study but they have proved to be minor factors and have same effect on all the 20 SOEs.
- (7) Quantitative Analysis -- the original design of this research was based on fieldwork without the requirement of using very sophisticated quantitative methods to analyse the data, yet some parametric and non-parametric statistical methods have been employed to test the defined hypotheses and their implications quantitatively as far as possible. This was regarded as necessary in order to accommodate the mass of data collected. Nevertheless the cases provide the opportunity for other researchers to assess the interpretations offered here.

- (8) Cultural Difference -- the insufficient working and learning experience gained in China by the researcher before undertaking this project has given rise to some extent of cultural difference, such as the management practice of the SOE, which has become less significant as the project went on.
- (9) Language Barrier -- the researcher's proficiency in Putonghua (official language in China) has improved substantially during the years of working in China although there was a little barrier in communicating with the managers during the early interviews.
- (10) Time Constraint -- it was difficult for the researcher, as a part-time PhD student having a full-time teaching job, to visit the targeted SOEs more frequently than what have been done in the last five years.

Despite the above 10 areas of limitations, the four major objectives/contributions of this research as stated in Section 8.4.1 above have been achieved.

#### 8.6 FUTURE RESEARCH

Based on substantial literature review, interviews with enterprise managers, data and information collected and analysed for this study, the following specific areas are suggested for future research in relation to the Responsibility (Management) Accounting development in China.

# (1) Economic Responsibility Contract System (ERCS)

Although the ERCS has enhanced the economic efficiency and profitability of most of the SOEs in the last decade, yet this system has suffered from some drawbacks such as short-term behaviour, unrealistic target-setting, dysfunctional effect and government interference (see Section 2.15.1 in Chapter 2). Furthermore, over 50% of all the SOEs, which have been using the ERCS, were still incurring financial losses at the end of 1997. As a result, other than the shareholding enterprises, gradually many wholly state-owned enterprises are replacing their existing ERCs by the new taxation system (see Section 4.4.3 in Chapter 4). It may be worthwhile to further study the contemporary development and operation of the ERCS in and identify its implications on the SOEs in relation to the on-going legislation, ownership, economic and government policy changes.

### (2) Internal Responsibility Contract System (IRCS)

IRCS is still the core of the responsibility accounting system adopted by the SOEs despite the fact that the ERCS is losing its effect (see Section 2.14 in Chapter 2). It is suggested that this typical IRCS can further be investigated to understand its effects on the SOE's planning and control systems in relation to (1) target setting (see Section 6.2 in Chapter 6); (2) internal transactions (transfers) (see Section 5.7 in Chapter 5); (3) performance evaluation (see Section 6.3 in Chapter 6); and (4) rewards and incentives (see Section 6.4 in Chapter 6). In addition, its effective use can also be assessed and compared between the wholly and shareholding SOEs.

#### (3) Legislation Changes

This is one of the two general factors/variables (see Section 1.2.1.1 in Chapter 1) identified in this study to test its impact on the planning and control influences within the responsibility accounting systems adopted by a sample of 20 SOEs. It is found that the recent legislation changes (e.g. operation mechanisms transformation) has enlarged the SOE's discretion over development and operation of their planning and control systems at the responsibility centre level. Specific focus can be placed in future research to assess the compliance of these legislations by the SOEs on the one hand, and to comprehend their effects in-depth on the planning and control systems in relation to long- and short-term planning, financial and non-financial targets setting, performance measurement, monetary and non-monetary rewards and incentives, social security and worker welfare, merger and acquisition, liquidation, privatisation, etc. on the other hand.

#### (4) Market Economy Changes

This is the other general factor/variable (see Section 1.2.1.2 in Chapter 1) which is verified to have the same effect as legislation changes on the planning and control systems of these 20 SOEs. To deepen the implementation policies of socialist market economy in order to enhance the SOE's economic efficiency was the top agenda item of the 15th Communist Party Representatives Conference of China held in September 1997. The existing policies relating to input/output pricing, market orientation (i.e. demand and supply effects), import/export right, and other new policies to be announced are specific factors or variables to be studied to understand their relationships with the SOE's planning and control systems.

# (5) Ownership Changes

Ownership changes (or shareholding transformation) is a specific factor/variable (see Section 1.2.2.1 in Chapter 2) which is attributable to the greater planning and control changes in the shareholding SOEs compared with the wholly SOEs investigated in this study. This is related to the provisions of Company Law enacted in 1993 in terms of full management and operation autonomy delegated to the board of directors in the shareholding enterprises. Other than these two forms of ownership, joint-venture, leased, partnership and private-owned enterprises as defined in Section 1.2.2.1 can also be the objects for studying their responsibility accounting, planning and control systems.

### (6) Local Government Policies and Regulations

This is another specific factor/variable (see Section 1.2.2.2 in Chapter 1) which is associated with the different pace of change in the planning and control systems adopted by these 20 SOEs located in 4 cities from north to south. In the future research, more specific local government policies and regulations can be identified to ascertain their planning and control effects on enterprises of different forms of ownership.

#### (7) Macro-Economic Control Measures

This is the third specific factor/variable (see Section 1.2.2.3 in Chapter 1) which can partly explain the difference pace of change in the planning and control system adopted by these 20 SOEs belonging to 6 different industries. Other than the 5 control measures identified in Section 1.2.2.3, government budget, monetary supply, interest rate, capital investment, bank risk, stock market, commodity price, market and distribution are possible control measures to be studied in order to find their implications on the planning and control systems employed by enterprises of different types of ownership.

#### (8) Education & Training

It is envisaged in this study that education and training is the most important long-term factor/variable (see Section 1.2.3 in Chapter 1) which can enhance the knowledge of management

accounting principles, theories and practices for the accountants and managers in the Chinese enterprises to improve their economic effectiveness and efficiency. Research in this facet can be done in collaboration with the Chinese and foreign educational institutes, accounting professional bodies and business enterprises in order to promote the implementation of various management accounting systems in different enterprises and entities in China.

### (9) Long-Term Planning (Strategic Planning)

Some strategic and operational aspects relating to the long-term planning practised in these 20 SOEs are described in Section 5.4 of Chapter 5 and the 20 Data Analyses (Volume 3) as well. Further research can be performed in this planning area with specific focus on its relationship with the variables of market economy, local government policies and regulations, and macro-economic control measures.

#### (10) Short-term Planning (Budgeting)/Review Process

Much of this topic concerning the 20 SOEs are described in Section 5.5 of Chapter 5 and the 20 Data Analyses (Volume 3). However, further research on many factors (see p.194-195, 198 & 208) envisaged in this study and related to this area can be conducted in order to understand better their interactions with the short-term planning and review process.

#### (11) Management Control System

The relationships and interactions between target setting (Section 6.2), performance measurement (Sections 6.3) and rewards and incentives (Sections 6.4) can be studied in detail for different types of Chinese enterprises (i.e. ownership). Participation, motivation, job specification, role ambiguity, job satisfaction, etc. can be treated as intervening variables in these future studies.

#### (12) Computer Application

As observed in this study, computer application in planning and control is one of the weaknesses when the SOEs operate their responsibility (management) accounting systems (see Sections 2.15.5 & 6.3.3). Specific research in this area may generate valuable and practical contributions for the future development of management accounting in China.

### (13) Quantitative Analysis

This study only employs simple statistical method in processing the data and testing the few hypotheses. In performing future research as suggested above, more advanced and sophisticated quantitative methods can be employed to analyse the information gathered from tailor-made questionnaires or other research instruments.

#### 8.7 **RECOMMENDATIONS**

#### 8.7.1 SOE Reforms

As noted in Chapter 7, other than the legislation, ownership, location and industry specific changes since the 1990s, there are many other subsidiary factors affecting the development and operation of responsibility (management) accounting in the SOEs. Therefore, SOE reforms (both external and internal environments) have become the prerequisites before the responsibility accounting (i.e. planning and control aspects) system could be properly and effectively operated in order to enhance the economic efficiency and performance of the SOEs. Bearing in mind that the medium-term national economic objective as laid down by the late Chinese top leader, Mr Deng Xiao Ping, in 1984 is to achieve four times of the 1980 GDP in the year of 2000.

In fact, the master blueprint to reform the weakening SOEs was clearly drawn out in March 1995 when the Chinese Premier, Mr Li Pang, announced the Government Work Plan for 1996-2000<sup>5</sup> (refer to Section 2.12 in Chapter 2 as well). The following is a summary of the relevant policies.

- (1) Enhance the implementation of the "State-Owned Industrial Enterprises Operation Mechanisms Transformation Regulation" enacted in July 1992 by the government including --
  - 1.1 to supervise the capitals and asset values of the SOEs;
  - to separate the ownership and management rights between the government and the SOEs;

<sup>&</sup>lt;sup>5</sup> See Wen Wei Po (Hong Kong Newspaper) on 6 March 1996.

- to audit and ascertain the networth of the SOEs in order to ensure capital growth and avoid illegal loss of capital;
- 1.4 to establish supervisory committees in about 1,000 SOEs with government representatives sitting in;
- 1.5 to balance the ratios between capital and liabilities in the SOEs and solve the bad debts problems; and
- 1.6 to allow more avenues for the SOEs to raise working capital.
- (2) Identify a batch of SOEs by the government --
  - 2.1 to establish Modern Enterprise System (2,500 SOEs before 2000)
  - 2.2 to establish State-Controlled Holding Group Companies (about 15 SOEs); and
  - 2.3 to supervise and develop the Shareholding SOEs through laws and regulations.
- (3) Request the loss-making SOEs that cannot be turned around --
  - 3.1 to go into bankruptcy (liquidation);
  - 3.2 to perform restructuring, merger and acquisition; and
  - 3.3 to convert into joint-venture, cooperative shareholding (i.e. management-buy-out), leased-out, contracted-out and auctioned-off.
- (4) Determine SOE's strategic focuses --
  - 4.1 to improve product and market development and exploration;
  - 4.2 to diversify the business and market portfolio; and
  - 4.3 to reduce and adjust the management organisations.
- (5) Reduce the social responsibilities of the SOEs -
  - to make the social welfare businesses (e.g. hospital, school, restaurant, housing, etc.) become independent and self-financed;
  - 5.2 to transfer some social welfare businesses to the local government; and
  - to arrange the surplus (redundant) employees (a) receiving reemployment training;(b) changing jobs; and (c) subsidizing by the government.

- (6) Improve the SOE's internal management system --
  - 6.1 to strengthen the top management leadership ability;
  - 6.2 to employ scientific management techniques;
  - 6.3 to focus on product research and development;
  - 6.4 to be market oriented in every aspect;
  - 6.5 to enhance the competitive edge;
  - 6.6 to promote enterprise culture and goodwill;
  - 6.7 to compile with the laws and regulations;
  - 6.8 to provide better education and training;
  - 6.9 to improve financial and cost control;
  - 6.10 to regulate the financial reporting; and
  - 6.11 to facilitate the working capital utility and control.
- (7) Refine the social security system and enforce the Labour Law (1995)--
  - 7.1 to implement the retirement and unemployment insurance policies;
  - 7.2 to improve the central pension fund system contributed by the government, enterprises and employees;
  - 7.3 to enhance the coverage and effectiveness of medical and work injury insurance schemes; and
  - 7.4 to establish a systematic and cost-effective central home purchasing scheme.

# 8.7.2 Responsibility (Management) Accounting Reforms

In parallel with the different SOE reforms summarized in the last section, the responsibility (management) accounting adopted by the SOEs should also undertake some sort of reforms bearing two major objectives: (1) to enhance the economic (both financial and non-financial) performance in short- and long-term; and (2) to cope with the various and tremendous environmental (both internal and external) changes. Given the fact that the legislation, ownership and economic reforms have enhanced the planning and control systems in the SOEs as evidenced in this research, the followings are some broad suggestions based on the findings and observations in this study in order to make responsibility accounting more effective in future.

- (1) To ensure the compatibility and integration of the responsibility (management) accounting system with the forthcoming *accounting standards* to be applied to all enterprises in China (30 SSAPs/GAAPs will be implemented before the year 2000).
- (2) To instigate scientific and empirical research into the areas as suggested in Section 8.6 above.
- (3) To study the relationships between the responsibility accounting and other *AIS/MAS* (e.g. standard costing, marginal costing, cost-volume-profit analysis, common cost allocation, inventory control, working capital control, etc.) and identify their complementary effects.
- (4) To invest in and use of *computing systems* extensively to operate the IAS/MAS as the building blocks for the integrated MIS eventually.
- (5) To explore the anticipated or possible impacts on the responsibility (management) accounting system due to the *advanced manufacturing/operating environments* (e.g. ABC, CIM, FMS, JIT, MRP, etc.) and prepare for the changes.
- (6) To expand the education and training programmes in management accounting at undergraduate (including certificate and diploma) and postgraduate levels in tertiary institutions with the support from the government and other foreign professional bodies (e.g. CIMA, CMA, etc.).
- (7) To promote management accounting research in the universities in collaboration with the SOEs, foreign invested joint-ventures, government authorities, Chinese and foreign accountancy institutions.
- (8) To establish a professional institution in management accounting in China which should be promulgated by the government (i.e. Ministry of Finance), supported by the Accounting Society of China (ASC) and assisted by the foreign management accountancy institutions (e.g. CIMA, CMA, etc.).

#### 8.8 OVERVIEW OF THE RESEARCH

The State sector (e.g. SOEs) plays a vital role in China's economy. Around 40% of the country's gross domestic product (GDP) is created by the State sector and enterprises whose shares are controlled by the State. More than 60% of the country's revenue comes from SOEs. But because SOEs have long operated in the planned economy, many of them are backward in management, technology and resource allocation, resulting in low economic returns<sup>6</sup>.

With the deepening of economic reforms and developing of market economy, practice in recent years has repeatedly confirmed that the only way out for SOEs is deepening of reform. Without this, there would be much more erosion of State property. In addition, the absence of further reform would cause two serious consequences. First, there would be more redundant workers<sup>7</sup>, resulting in social instability because more SOEs would go bankrupt. Second, because SOEs could not repay bank loans, bank would have difficulty in maintaining capital circulation, damaging economic stability (see China Daily on 15 January 1998).

The country has tried four methods to revive its SOEs. From 1979-1982, it implemented the "profit-dividing" system. With this system, enterprises no longer return all profits to the State, but instead shared profits with the State. From 1983-1986, enterprises stopped paying profits to the State and began paying income tax. This enabled profitable enterprises to reinvest more. From 1987-1991, the State implemented the "economic responsibility contract system". This system meant enterprises no longer paid taxes to the State but handed in profits in line with the agreement they had signed.

Since 1992, the State has implemented the system of "operation mechanisms transformation" and allowed the SOEs to be market driven. But no real effort has been made by the SOEs to transform their management mechanisms. Instead, the changes have merely delegated greater power to enterprises. However, it is hard to realize this power because the country's

<sup>&</sup>lt;sup>6</sup> See China Daily on 28 January 1997.

<sup>&</sup>lt;sup>7</sup> In 1994, urban unemployment was 4.8 million or 2.9% of the workforce (increased to 7 million in 1997), and 100 million rural unemployed. Further, it was estimated about 30 million workers in the SOEs, although on the payroll, are in fact idle (*China Daily* on 8 March 1995).

administrative system has not been truly reformed, and enterprises are still subordinate to relevant government authorities.

As no substantial progress had been made in the reform of SOEs in more than a decade, the Third Plenary Session of the 14th Party Congress held in 1993 made it clear that the deepening of the reform of SOEs was aimed at establishing the modern business enterprise system, the State decided to initially select 100 pilot enterprises to implement the system. The trial implementation was set for 1996, but the experiment will continue and extend to 2,500 enterprises at the end of the year 2000. It is hard to make substantial progress in the reform of SOEs because opinions are divided as to what the modern enterprise system is; whether the corporate system is a modern enterprise system which meets the requirements of large-scale socialist production or an enterprise organization system typical of capitalism; whether the renovation of the mechanism of SOEs should start with the reform of the original property rights system; and whether the reform of the property rights system means privatization of State property. As a result, it cannot meet the demands of the modern business enterprise: a clear definition of property rights; the ending of government controls over enterprises; and scientific management. It is beyond doubt that an enterprise must create economic returns and improve its competitive edge. Otherwise an enterprise will fail no matter what the form of ownership (such as the shareholding enterprise SCM2 described in the case). These are the variables tested and observed in this research.

In the past 15 years inefficient SOEs have been exposed to market forces with reforms in taxation, prices and accounting. And their share of national output has continued to drop as non-State firms have mushroomed. According to the State Statistics Bureau, more than 40% of SOEs are incurring losses and their share in the national output value has dropped from 78.5% in 1979 to about 41% in 1996.

Bankruptcy and auctions have been adopted to handle small and inefficient firms. Medium-sized and some large ones have been improved through absorbing foreign investments and advanced management. Large enterprises that are quite essential to the national economy are to be supported with government subsidies as well as favourable policies. SOEs themselves have also been asked to strengthen their management, bolster technological innovation and adjust

production mix based on market demands which could be assisted by the functions of management accounting.

In seeking to learn and assimilate western management accounting, being critical seems essential, at least in China. After a 15-year period of learning, more and more Chinese accountants have begun to realize that western management accounting itself is far from perfect and does not offer a panacea. This sentiment has been heightened when western criticisms of Anglo-American management accounting and of currently used research approaches, such as Kaplan (1983) and Scapens (1985) became known in China. It was noted that to avoid similar problems in China, it is necessary to undertake further research on the western prototype and to gain a clearer idea of its problems and trends (Ding & Yang 1984). The existing problems in the western system, such as the divorce of academic research from practice, the lopsided development of 'sophisticated' quantitative techniques and models, and the lack of a sound theoretical basis (Bromwich & Hopwood 1986), may be seen as warning signs for the development of Chinese management accounting system.

Western management accounting (especially responsibility accounting) has been used and studied in China for over a decade, and can be said to have contributed greatly to Chinese accounting practice and thought. However, management accounting in China does have problems. Most of these problems result from the perceived unsuitability of the western techniques for the Chinese environment or the failure of the Chinese environment to meet the underlying assumptions necessary for these techniques to operate. To overcome these problems, it seems necessary for Chinese management researchers and accounting researchers to obtain a clearer understanding of present and possible future social and economic environments for enterprises and to develop techniques that can work properly in these environments (Scapens & Meng 1993).

As has been the case in the past, the future development of Chinese management accounting will largely depend upon the direction and pace of economic reforms, and particularly upon the future changes in the pattern of enterprise operation and management (Bromwich & Wang 1991). As such, inductive approach for research, such as the methodology adopted in this study, would be appropriate to understand and contribute to this development.

#### 8.9 CONCLUSION

During the 15th National Congress of the Chinese Communist Party held in September 1997, the Chinese government decided to turn ten thousands of debt-ridden SOEs around within three years. Reforming these enterprises is difficult, however, because so many different and interrelated changes must be made. For the external environment of SOEs, there must be fundamental changes in financial markets, the tax system, the legal, regulatory and accounting framework, and the worker welfare system. Internal to the enterprise there must be the creation of some kind of property rights (ownership), developing the right products/markets, reducing the redundant employees plus revamping of the internal incentive structure of the enterprise (Perkins 1993). The prime objective envisaged by the Chinese government and leaders is to establish the so called "modern business enterprises" which possess the functional mechanisms (e.g. planning, controlling, coordinating, marketing, operating, etc.) of the counterparts in the capitalist countries and retain the traditional values (e.g. patriotic ideology, state ownership, communist party leadership, commonwealth, spiritual health, etc.) of the socialist countries.

This crucial part of economic reform in China has been proceeding on a trial-and-error basis or on an "experimental stage" in the words of the Chinese top leader, Mr Deng Xiao Ping, who was the "Chief Economic Architect" and has laid down a 66-year economic plan<sup>8</sup> for his country. To accomplish this long-term vision, the Chinese enterprises must be reformed continuously in line with the global development in order to contribute wealth in enhancing the living standards of all the people in China. To this end, "scientific management" (as described in Section 8.2 above) in the Chinese enterprises is the most important tool because it needs the managers to make decisions. Management accounting should play an important role in this management process.

<sup>&</sup>lt;sup>8</sup> In 1984, Mr Deng Xiao Ping set a long-term economic milestone which is to turn China into a developed country at medium level (perhaps equivalent to Japan in the 1980s) approximately in the year of 2050.

Management accounting has been contributing its effectiveness to the economic well-being of all types of organisations in the western countries over the past 50 years (Kaplan 1984a). There are no reasons why management accounting cannot generate the same or similar effects in the Chinese enterprises irrespective of their types of ownership or industry although the differences between the capitalist and socialist environments are recognized. How to make management accounting (in particular the responsibility accounting) an effective management tool in the Chinese enterprises (or organisations) is also in a trial-and-error or experimental basis which should be greatly facilitated through theoretical and empirical research in the next 50 years.

This study is an exploratory attempt to reveal the past and present responsibility (management) accounting practices adopted in the Chinese enterprises, and more importantly, it sheds some light on those important areas related to the future development of management accounting for further investigations and research in China. Although the current accounting reform in China is still focusing on the setting and implementing financial accounting standards (30 SSAPs/GAAPs will be implemented before the year 2000), this researcher strongly believes that management accounting will have the highest development potential soon turning into the next century. The researcher wishes to continue his research in this direction after completion of this dissertation because he loves his country -- China!

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	APPENDIX	1	

Table 1A: Enterprises Background Information (Part A)

Enterprise Code (No.)	SSW5(01)	XFLT(02)	GFDS(03)	GDDS(04)
Business Nature	Iron & Steel Manufacturing	Fork Lift Truck Manufacturing	Department Store	Department Store
Ownership - Before 1992 After 1992	Wholly SOE Wholly SOE	Wholly SOE Wholly SOE	Wholly SOE Shareholding	Wholly SOE Shareholding
Total Assets (Rmb'm)	5,000 (1992)	52 (1992)	100 (1992)	45 (1992)
Turnover (Rmb'm) - 1992 1993 1994 1995	2,800 3,800 4,500 4,800	102 120 150 180	466 710 900 	230 400 600
PBT (Rmb'm) - 1992 1993 1994 1995	150 190 170 175	5.5 7.5 8.0 9.0	35 50 58 	14 22 30
PBT % Turnover - 1992 1993 1994 1995	5.4% 5.0% 3.8% 3.7%	5.4% 6.3% 5.3% 5.0%	7.5% 7.0% 6.4%	6.1% 5.5% 5.0%
ERCS Periods	1983-1987 1988-1992	No Formal ERC	1987-1991	1987-1991
ERCS Targets	PBT(G=5%, 7%) 50% PBT Handover Income Tax 33% Gross Wages & Growth %	PBT (G=10%) 10% PBT Handover Income Tax 15%	PBT (G=10%) 60% Target PBT Handover 30% Over -Target PBT Handover	PBT (G=6%) 55% Target PBT Handover 16.5% Over- Target PBT Handover
ERCS Replacement	Since 1992 - Sales, Income (33%) & Other Taxes levied	Since 1992 - Sales, Income (15%) & Other Taxes levied	Since 1992 - Sales, Income (15%) & Other Taxes levied	Since 1992 - Sales, Income (15%) & Other Taxes levied
Size of Enterprise	Large	Medium	Medium	Medium
No. of Employees	23,000 (1994)	1,100 (1994)	2,300 (1993)	950 (1993)

- 1. Rmb'm = China currency Renminbi in million
- 2. PBT = Profit Before Tax (Income Tax)
- 3. ERCS = Economic Responsibility Contract System
- 4. SOE = State-Owned Enterprise
- 5. G = PBT Annual Growth Factor

12.02.97

Table 1B: Enterprises Background Information (Part B)

Enterprise Code (No.)	BEEF(05)	SMCW(06)	GNFF(07)	GNFB(08)
Business Nature	Electrostatic Equip. Manu.	Instrument & Tool Manu.	Flour Manufacturing	Department Store
Ownership - Before 1992 After 1992	Wholly SOE Wholly SOE	Wholly SOE Wholly SOE	Wholly SOE Shareholding	Wholly SOE Shareholding
Total Assets (Rmb'm)	25 (1992)	108 (1992)	236 (1993)	155 (1992)
Turnover (Rmb'm) - 1992 1993 1994 1995	15 12 17 18	44 71 102 140	320 370 260 400	685 1,050 1,300
PBT (Rmb'm) - 1992 1993 1994 1995	1.5 1.1 0.0 0.0	5.9 6.5 7.7 3.3	30 33 15 20	21 26 31 
PBT % Turnover - 1992 1993 1994 1995	10.0% 9.2% 0.0% 0.0%	13.4% 9.2% 7.6% 2.4%	9.4% 8.9% 5.8% 5.0%	3.1% 2.5% 2.4%
ERCS Periods	1992 - no time limit	1988-1992 1993-1997	1988-1990 1991-1992	1987-1991
ERCS Targets	Fixed PBT=1M (1992-1995) Actually Break- even (1994-1996) Income Tax 33%	PBT Foreign Exchange 55% PBT Hand- over	PBT (G=7%) Income Tax 55% on Target PBT Income Tax 35% on Over-Target PBT	PBT (G=6%) 55% Handover on Target PBT 16.5% Handover on Over-Target PBT
ERCS Replacement	Same as before	Same as before	Since 1992 - Sales, Income (15%) & Other Taxes levied	Since 1992 - Sales, Income (15%) & Other Taxes levied
Size of Enterprise	Small	Medium	Medium	Large
No. of Employees	600 (1994)	1,550 (1994)	940 (1994)	4,000 (1994)

- 1. Rmb'm = China currency Renminbi in million
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- 5. G = PBT Annual Growth Factor

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Table 1C: Enterprises Background Information (Part C)

Enterprise Code (No.)	BCRF(09)	BIMT(10)	SDS1(11)	SCCW(12)
Business Nature	Electronic Equip. Manufacturing	Tool Milling Machine Manu.	Department Store	Crane/Conveyor Manufacturing
Ownership - Before 1992 After 1992	Wholly SOE Wholly SOE	Wholly SOE Wholly SOE	Wholly SOE Listed Shares	Wholly SOE Wholly SOE
Total Assets (Rmb'm)	90 (1992)	130 (1992)	1,101 (1994)	190 (1994)
Turnover (Rmb'm) - 1992 1993 1994 1995	41 33 21 22	42 48 50 55	1,780 2,140	190 230 260
PBT (Rmb'm) - 1992 1993 1994 1995	5.2 0.0 (4.6) (4.5)	3.2 2.5 2.5 2.2	105 110 	2.1 3.3 3.5
PBT % Turnover - 1992 1993 1994 1995	12.7% 0.0% 	7.6% 5.2% 5.0% 4.0%	5.9% 5.1%	 1.1% 1.4% 1.4%
ERCS Periods	1992 (standing)	1991-1995	1987-1991	1988-1992
ERCS Targets	Income Tax 15% 40% PBT Hand- over Gross Wages Accerlarated Dep. R&D 1% Sales	PBT (G=8%) Foreign Exchange Gross Wages	Turnover PBT	PBT Handover Foreign Exchange Gross Wages Technology Improvement
ERCS Replacement	Same as above & 1M Loan Repayment tax deductable	Same as above	Since 1992 - Sales, Income (15%) & Other Taxes levied	Since 1992 - Turnover, PBT, Income Tax, A/R
Size of Enterprise	Medium	Medium	Large	Medium
No. of Employees	970 (1994)	1,250 (1994)	4,500 (1994)	2,470 (1994)

- 1. Rmb'm = China currency Renminbi in million
- 2. PBT = Profit Before Tax (Income Tax)
- 3. ERCS = Economic Responsibility Contract System
- 4. SOE = State-Owned Enterprise
- 5. G = PBT Annual Growth Factor

Table 1D: Enterprises Background Information (Part D)

Enterprise Code (No.)	SMEF(13)	SCM2(14)	SXSW(15)	GLIL(16)
Business Nature	Metallurgical Equip. Manu.	Textile Manufacturing	Iron & Steel Manufacturing	Cleaning Consumables Manu.
Ownership - Before 1992 After 1992	Wholly SOE Wholly SOE	Wholly SOE Listed Shares	Wholly SOE Wholly SOE	Wholly SOE Listed Shares
Total Assets (Rmb'm)	200 (1994)	40 (1994)	500 (1992)	279 (1993)
Turnover (Rmb'm) - 1992 1993 1994 1995	250 360 275 400	180 200 180 200	946 1,335 1,236 1,300	397 530 610
PBT (Rmb'm) - 1992 1993 1994 1995	0.0 5.2 (13.7) 0.0	7.0 4.0 5.1 4.0	15 19 13 10	30 43 44 
PBT % Turnover - 1992 1993 1994 1995	0.0% 1.4%  0.0%	3.9% 2.0% 2.8% 2.0%	1.6% 1.4% 1.1% 0.8%	7.6% 8.1% 7.2%
ERCS Periods	1988-1992 1993-1997	1988-1992	1989-1993	1986-1990 1991-1992
ERCS Targets	PBT Gross Wages	PBT (G=2%) Gross Wages	PBT (G=5%) Gross Wages	PBT (G=5%) Income Tax 55% on Target PBT Income Tax 25% on Over-Target PBT
ERCS Replacement	Zero PBT (1993- 1995) PBT review (1996-1997)	Since 1992 - Sales, Income (15%) & Other Taxes levied	Since 1992 - Sales, Income (33%) & Other Taxes levied	Since 1992 - Sales, Income (15%) & Other Taxes levied
Size of Enterprise	Large	Large	Large	Medium
No. of Employees	5,000 (1994)	4,860 (1994)	5,600 (1994)	1,450 (1993)

- 1. Rmb'm = China currency Renminbi in million
- 2. PBT = Profit Before Tax (Income Tax)
- 3. ERCS = Economic Responsibility Contract System
- 4. SOE = State-Owned Enterprise
- 5. G = PBT Annual Growth Factor

Table 1E: Enterprises Background Information (Part E)

Enterprise Code (No.)	XLIG(17)	BCM3(18)	BFSH(19)	BPMH(20)
Business Nature	Beverage Manufacturing	Textile Manufacturing	Hotel Service	Printing Machine Manufacturing
Ownership - Before 1992 After 1992	Wholly SOE Wholly SOE	Wholly SOE Wholly SOE	Wholly SOE Wholly SOE	Wholly SOE Listed Shares
Total Assets (Rmb'm)	56 (1993)	240 (1994)	290 (1993)	1,027 (1994)
Turnover (Rmb'm) - 1992 1993 1994 1995	110 208 287 	300 330 410 430	130 200 230	265 385 426 363
PBT (Rmb'm) - 1992 1993 1994 1995	11 17 27 	1.2 0.0 1.5 0.0	23 20 20	52 111 122 107
PBT % Turnover - 1992 1993 1994 1995	10.0% 8.2% 9.4% 	0.4% 0.0% 0.4% 0.0%	17.7% 10.0% 8.7%	19.6% 28.0% 28.6% 29.5%
ERCS Periods	1986-1990	1986-1990 1991-1995	N/A	N/A
ERCS Targets	PBT Income Tax 55% (Exempted in 1986 & 1987) Income Tax 42% since 1988	PBT (G=5%) Foreign Exchange Gross Wages Income Tax 55% (before 1992	N/A	N/A
ERCS Replacement	Since 1991 - Income Tax 42%	Since 1992 - Income Tax 33%	Turnover, PBT Foreign Exchange Capital Exp.	Sales, Income (15%) & Other Taxes levied
Size of Enterprise	Small	Large	Large	Large
No. of Employees	540 (1994)	8,000 (1994)	3,800 (1994)	2,800 (1994)

- 1. Rmb'm = China currency Renminbi in million
- 2. PBT = Profit Before Tax (Income Tax)
- 3. ERCS = Economic Responsibility Contract System
- 4. SOE = State-Owned Enterprise
- 5. G = PBT Annual Growth Factor

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Table 2A: Planning Parameter Changes Before/After 1992 (Part A)

EC	Parameters	5.0	5.1	5.1.1	5.1.2	5.1.3	5.1.4
01	SSW5	1.1/2.5	0.9/2.5	1.0/2.5	1.5/3.0	0.5/2.5	0.5/2.0
02	XFLT	1.6/2.8	1.3/2.3 :	1.5/2.5	1.5/2.5	1.0/2.0	1.0/2.0
03	GFDS	2.1/3.1	2.0/3.3	2.0/3.0	2.0/3.5	1.5/3.0	2.5/3.5
04	GDDS	2.0/3.1	2.0/3.1	2.0/3.0	2.0/3.0	1.5/3.0	2.5/3.5
05	BEEF	1.2/2.3	0.9/2.4	1.0/2.5	1.5/3.0	0.5/2.0	0.5/2.0
06	SMCW	1.3/2.4	0.9/2.3	1.0/2.5	1.0/2.5	1.0/2.0	0.5/2.0
07	GNFF	1.8/2.8	1.9/2.9	2.0/3.0	2.0/3.0	2.5/3.5	1.0/2.0
08	GNFB	2.1/3.2	2.1/3.3	2.0/3.0	2.5/3.5	1.5/3.0	2.5/3.5
09	BCRF	1.2/2.3	0.9/2.1	1.0/2.0	1.5/2.5	0.5/2.0	0.5/2.0
10	BIMT	1.3/2.5	1.0/2.3	1.0/2.0	1.5/2.5	0.5/2.0	1.0/2.5
11	SDS1	2.2/3.3	2.1/3.3	2.0/3.0	2.5/3.5	1.5/3.0	2.5/3.5
12	SCCW	1.4/2.3	1.4/1.8	1.5/1.5	1.5/2.0	1.0/2.0	1.5/1.5
13	SMEF	1.5/2.6	1.4/2.6	1.5/2.5	1.5/3.0	1.0/2.0	1.5/3.0
14	SCM2	1.6/2.7	1.8/2.8	1.5/2.5	2.0/3.0	1.5/2.5	2.0/3.0
15	SXSW	1.3/2.5	1.0/2.1	1.0/2.0	1.5/2.5	1.0/2.5	0.5/1.5
16	GLIL	1.9/2.9	1.6/3.1	1.5/3.0	1.5/3.0	2.0/3.5	1.5/3.0
17	XLIG	1.9/3.0	2.1/2.9	2.0/3.0	2.5/3.5	2.5/3.0	1.5/2.0
18	ВСМ3	1.4/2.4	1.3/2.1	1.0/2.0	1.5/2.5	1.5/2.5	1.0/1.5
19	BFSH	1.5/2.4	1.3/2.1	1.5/2.5	1.5/2.5	1.0/2.0	1.0/1.5
20	ВРМН	1.7/2.7	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
	Mean	1.6/2.7	1.5/2.6	1.5/2.5	1.7/2.9	1.3/2.5	1.5/2.4
	Std. Dev.	.34/.32	.45/.47	.41/.44	.53/.43	.60/.53	.73/.74

EC = Enterprise Code

Parameter 5.0 = Corporate Planning Influence = [(5.1+5.2+5.3+5.4+5.5+5.6+5.7)/7]

Parameter 5.1 = Organisation Structure = [(5.1.1+5.1.2+5.1.3+5.1.4)/4]

Parameter 5.1.1 = Responsibility Centre

Parameter 5.1.2 = Decentralization

Parameter 5.1.3 = Appointment

Parameter 5.1.4 = Interdependencies

x.x/y.y = Index Before 1992/Index After 1992

Index = Very High Planning Influence (0.0) ----> Very Low Planning Influence (4.0)

Table 2B: Planning Parameter Changes Before/After 1992 (Part B)

EC	Parameters	5.2	5.2.1	5.2.2	5.2.3	5.2.4
01	SSW5	1.4/2.6	1.0/2.5	1.5/3.0	1.5/2.5	1.5/2.5
02	XFLT	2.3/3.3	2.5/3.5	2.5/3.5	2.0/3.0	2.0/3.0
03	GFDS	2.1/3.3	2.0/3.5	2.5/3.5	2.0/3.0	2.0/3.0
04	GDDS	2.1/3.1	2.0/3.5	2.5/3.0	2.0/3.0	2.0/3.0
05	BEEF	1.3/2.4	1.0/2.0	1.5/2.5	1.0/2.5	1.5/2.5
06	SMCW	1.3/2.6	0.5/2.0	1.5/3.0	1.5/3.0	1.5/2.5
07	GNFF	1.6/2.9	1.0/2.5	2.0/3.0	1.5/3.0	2.0/3.0
08	GNFB	2.1/3.4	2.0/3.5	2.5/3.5	2.0/3.5	2.0/3.0
09	BCRF	1.3/2.4	1.0/2.0	1.5/2.5	1.0/2.5	1.5/2.5
10	BIMT	1.3/2.4	1.0/2.0	1.5/2.5	1.0/2.5	1.5/2.5
11	SDS1	2.3/3.5	2.0/3.5	2.5/3.5	2.0/3.5	2.5/3.5
12	SCCW	1.3/2.1	1.0/1.5	1.5/2.5	1.0/2.0	1.5/2.5
13	SMEF	1.5/2.8	1.5/2.5	1.5/3.0	1.5/3.0	1.5/2.5
14	SCM2	1.5/2.8	1.5/2.5	1.5/3.0	1.5/3.0	1.5/2.5
15	SXSW	1.3/2.6	1.0/2.5	1.5/3.0	1.0/2.5	1.5/2.5
16	GLIL	2.3/3.3	2.5/3.5	2.5/3.5	2.0/3.0	2.0/3.0
17	XLIG	1.9/3.1	2.0/3.0	2.0/3.5	1.5/3.0	2.0/3.0
18	ВСМ3	1.4/2.4	1.0/2.0	1.5/2.5	1.5/2.5	1.5/2.5
19	BFSH	1.4/2.4	1.5/2.5	1.5/2.5	1.0/2.0	1.5/2.5
20	ВРМН	2.0/3.1	2.0/3.5	2.5/3.5	1.5/2.5	2.0/3.0
	Mean	1.7/2.8	1.5/2.7	1.9/3.0	1.5/2.8	1.8/2.8
	Std. Dev.	.40/.42	.59/.68	.48/.41	.40/.41	.30/.30

EC = Enterprise Code

Parameter 5.2 = Review Process = [(5.2.1+5.2.2+5.2.3+5.2.4)/4]

Parameter 5.2.1 = Central Planning

Parameter 5.2.2 = Operation

Parameter 5.2.3 = Participation

Parameter 5.2.4 = Review & Communication

x.x./y.y = Index Before 1992/Index After 1992

Index = Very High Planning Influence (0.0) ----> Very Low Planning Influence (4.0)

Table 2C: Planning Parameter Changes Before/After 1992 (Part C)

EC	Parameters	5.3	5.3.1	5.3.2	5.3.3	
01	SSW5	0.8/1.7	0.5/1.0	1.0/2.0	1.0/2.0	
02	XFLT	0.8/1.8	0.5/1.5 €	1.0/1.5	1.0/2.5	
03	GFDS	1.8/3.2	1.5/2.5	2.0/3.5	2.0/3.5	
04	GDDS	1.8/3.2	1.5/2.5	2.0/3.5	2.0/3.5	
05	BEEF	0.8/2.0	0.5/1.5	1.0/2.0	1.0/2.5	
06	SMCW	1.2/2.3	1.0/2.0	1.5/2.5	1.0/2.5	
07	GNFF	1.5/2.3	2.0/2.5	1.5/2.5	1.0/2.0	
08	GNFB	2.2/3.2	2.0/3.0	2.5/3.5	2.0/3.0	
09	BCRF	1.0/2.2	1.0/2.0	1.0/2.0	1.0/2.5	
10	BIMT	1.0/2.2	1.0/2.0	1.0/2.0	1.0/2.5	
11	SDS1	2.2/3.0	2.0/3.0	2.5/3.5	2.0/2.5	
12	SCCW	1.0/2.2	1.0/2.0	1.0/2.0	1.0/2.5	
13	SMEF	1.2/2.3	1.0/2.0	1.5/2.5	1.0/2.5	
14	SCM2	1.2/2.3	1.0/2.0	1.5/2.5	1.0/2.5	
15	SXSW	1.3/2.3	1.5/2.0	1.5/2.5	1.0/2.0	
16	GLIL	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	
17	XLIG	1.0/2.2	1.0/2.0	1.0/2.0	1.0/2.5	
18	BCM3	1.0/2.0	1.0/2.0	1.0/2.0	1.0/2.0	
19	BFSH	1.3/2.2	1.0/2.0	1.5/2.0	1.5/2.5	
20	ВРМН	1.3/2.3	1.5/2.5	1.5/2.5	1.0/2.0	 
	Mean	1.3/2.4	1.2/2.1	1.5/2.5	1.3/2.5	
	Std. Dev.	.43/.44	.47/.48	.48/.61	.41/.43	

EC = Enterprise Code

Parameter 5.3 = Strategic Themes, Thrusts & Suggestions = [(5.3.1+5.3.2+5.3.3)/3]

Parameter 5.3.1 =Themes

Parameter 5.3.2 = Thrusts

Parameter 5.3.3 = Suggestions

x.x./y.y = Index Before 1992/Index After 1992

Index = Very High Planning Influence (0.0) ----> Very Low Planning Influence (4.0)

Table 2D: Planning Parameter Changes Before/After 1992 (Part D)

EC	Parameters	5.4	5.4.1	5.4.2	5.4.3	5.4.4
01	SSW5	1.0/2.0	1.0/2.5	1.0/2.0	1.0/2.0	1.0/2.0
02	XFLT	1.5/2.4	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.0
03	GFDS	1.8/2.5	1.5/2.5	2.0/2.5	1.5/2.0	2.0/3.0
04	GDDS	1.5/2.4	1.5/2.5	2.0/2.5	0.5/1.5	2.0/3.0
05	BEEF	1.5/2.4	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.0
06	SMCW	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
07	GNFF	1.6/2.9	1.5/3.0	1.5/3.0	1.5/2.5	2.0/3.0
08	GNFB	1.8/2.5	1.5/2.5	2.0/2.5	1.5/2.0	2.0/3.0
09	BCRF	1.4/2.3	1.5/2.5	1.5/2.5	1.0/2.0	1.5/2.0
10	BIMT	1.4/2.3	1.5/2.5	1.5/2.5	1.0/2.0	1.5/2.0
11	SDS1	1.9/2.8	2.0/3.0	2.0/3.0	1.5/2.0	2.0/3.0
12	SCCW	1.4/2.3	1.5/2.5	1.5/2.5	1.0/2.0	1.5/2.0
13	SMEF	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
14	SCM2	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
15	SXSW	1.4/2.4	1.5/2.5	1.5/2.5	1.5/2.5	1.0/2.0
16	GLIL	1.8/2.8	1.5/2.5	2.0/3.0	2.0/3.0	1.5/2.5
17	XLIG	2.0/2.9	2.5/3.5	2.0/3.0	2.0/3.0	1.5/2.0
18	ВСМ3	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
19	BFSH	1.4/2.4	1.0/2.0	1.5/2.5	1.5/2.5	1.5/2.5
20	ВРМН	1.5/2.6	1.5/3.0	1.5/2.5	1.5/2.5	1.5/2.5
	Mean	1.6/2.5	1.5/2.6	1.6/2.6	1.4/2.3	1.6/2.4
,	Std. Dev.	.22/.22	.30/.31	.28/.25	.35/.27	.29/.41

EC = Enterprise Code

Parameter 5.4 = Long-Term Plans = [(5.4.1+5.4.2+5.4.3+5.4.4)/4]

Parameter 5.4.1 = Central Planning

Parameter 5.4.2 = Operation

Parameter 5.4.3 = Participation

Parameter 5.4.4 = Review & Communication

x.x./y.y = Index Before 1992/Index After 1992

Index = Very High Planning Influence (0.0) ----> Very Low Planning Influence (4.0)

Table 2E: Planning Parameter Changes Before/After 1992 (Part E)

EC	Parameters	5.5	5.5.1	5.5.2	5.5.3	5.5.4
01	SSW5	1.5/3.3	1.5/3.0	1.5/3.0	1.0/3.5	2.0/3.5
02	XFLT	2.0/3.5	2.0/3.5 +	2.0/3.5	2.0/3.5	2.0/3.5
03	GFDS	2.4/3.4	2.5/3.5	2.5/3.0	2.0/3.5	2.5/3.5
04	GDDS	2.0/3.5	2.0/3.5	2.0/3.5	2.0/3.5	2.0/3.5
05	BEEF	2.0/3.0	2.0/3.0	2.0/3.0	2.0/3.0	2.0/3.0
06	SMCW	2.0/3.5	2.0/3.5	2.0/3.5	2.0/3.5	2.0/3.5
07	GNFF	2.5/3.5	2.5/3.5	2.5/3.5	2.5/3.5	2.5/3.5
08	GNFB	2.4/3.5	2.5/3.5	2.5/3.5	2.0/3.5	2.5/3.5
09	BCRF	2.0/3.4	2.0/3.0	2.0/3.5	2.0/3.5	2.0/3.5
10	BIMT	2.0/3.4	2.0/3.0	2.0/3.5	2.0/3.5	2.0/3.5
11	SDS1	2.5/3.6	3.0/4.0	2.5/3.5	2.0/3.5	2.5/3.5
12	SCCW	2.0/3.0	2.0/3.0	2.0/3.0	2.0/3.0	2.0/3.0
13	SMEF	2.0/3.3	2.0/3.5	2.0/3.0	2.0/3.5	2.0/3.0
14	SCM2	2.0/3.3	2.0/3.5	2.0/3.0	2.0/3.5	2.0/3.0
15	SXSW	1.6/3.0	1.5/3.0	1.5/3.0	1.5/3.0	2.0/3.0
16	GLIL	2.4/3.5	2.5/3.5	2.0/3.5	2.5/3.5	2.5/3.5
17	XLIG	2.3/3.4	2.0/3.5	2.0/3.0	2.5/3.5	2.5/3.5
18	ВСМ3	2.1/3.3	2.0/3.5	2.0/3.0	2.5/3.5	2.0/3.0
19	BFSH	2.0/3.0	2.0/3.0	2.0/3.0	2.0/3.0	2.0/3.0
20	ВРМН	2.3/3.3	2.5/3.5	2.0/3.0	2.5/3.5	2.0/3.0
	Mean	2.1/3.3	2.1/3.4	2.1/3.2	2.1/3.4	2.2/3.3
	Std. Dev.	.27/.19	.36/.29	.28/.26	.36/.21	.24/.25

EC = Enterprise Code

Parameter 5.5 = Short-Term Plans = [(5.5.1+5.5.2+5.5.3+5.5.4)/4]

Parameter 5.5.1 = Central Planning

Parameter 5.5.2 = Operation

Parameter 5.5.3 = Participation

Parameter 5.5.4 = Review & Communication

x.x./y.y = Index Before 1992/Index After 1992

Index = Very High Planning Influence (0.0) ----> Very Low Planning Influence (4.0)

Table 2F: Planning Parameter Changes Before/After 1992 (Part F)

EC	Parameters	5.6	5.6.1	5.6.2	5.6.3	5.6.4
01	SSW5	1.5/3.4	1.0/3.0	1.5/3.5	2.0/3.5	1.5/3.5
02	XFLT	1.6/3.4	1.5/3.0	1.5/3.5	2.0/3.5	1.5/3.5
03	GFDS	2.3/3.1	2.0/3.0	2.0/3.0	2.5/3.5	2.5/3.0
04	GDDS	2.3/3.4	2.0/3.0	2.0/3.5	2.5/3.5	2.5/3.5
05	BEEF	1.4/2.5	1.5/2.5	1.0/2.0	1.5/2.0	1.5/3.5
06	SMCW	1.3/2.6	1.0/2.5	1.0/2.5	1.5/2.5	1.5/3.0
07	GNFF	1.6/2.6	1.5/2.5	1.5/2.5	1.5/2.5	2.0/3.0
08	GNFB	2.3/3.4	2.0/3.0	2.0/3.5	2.5/3.5	2.5/3.5
09	BCRF	1.4/2.4	1.5/2.5	1.0/2.0	1.5/2.0	1.5/3.0
10	BIMT	1.4/2.4	1.5/2.5	1.0/2.0	1.5/2.0	1.5/3.0
11	SDS1	2.3/3.4	2.0/3.0	2.0/3.5	2.5/3.5	2.5/3.5
12	SCCW	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
13	SMEF	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
14	SCM2	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
15	SXSW	1.6/3.3	1.5/3.0	1.5/3.5	2.0/3.5	1.5/3.0
16	GLIL	1.8/2.6	1.5/2.5	1.5/2.5	2.0/2.5	2.0/3.0
17	XLIG	2.1/3.3	2.0/3.0	2.0/3.5	2.5/3.5	2.0/3.0
18	ВСМ3	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
19	BFSH	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
20	ВРМН	1.6/2.6	2.0/3.0	1.5/2.5	1.5/2.5	1.5/2.5
	Mean	1.7/2.9	1.6/2.8	1.5/2.8	1.9/2.8	1.8/3.0
	Std. Dev.	.35/.42	.31/.26	.34/.57	.43/.59	.41/.40

EC = Enterprise Code

Parameter 5.6 = Internal Responsibility Contracts = [(5.6.1+5.6.2+5.6.3+5.6.4)/4]

Parameter 5.6.1 = Target Bias

Parameter 5.6.2 = Participation

Parameter 5.6.3 = Review & Communication

Parameter 5.6.4 = Incentive

x.x./y.y = Index Before 1992/Index After 1992

Index = Very High Planning Influence (0.0) ----> Very Low Planning Influence (4.0)

Table 2G: Planning Parameter Changes Before/After 1992 (Part G)

EC	Parameters	5.7	5.7.1	5.7.2	5.7.3	
01	SSW5	0.5/1.7	0.5/2.0	0.5/1.5	0.5/1.5	
02	XFLT	N/A	N/A	N/A	N/A	
03	GFDS	N/A	N/A	N/A	N/A	
04	GDDS	N/A	N/A	N/A	N/A	
05	BEEF	0.5/1.7	0.5/2.0	0.5/1.5	0.5/1.5	
06	SMCW	0.7/1.3	0.5/1.5	0.5/1.0	1.0/1.5	
07	GNFF	N/A	N/A	N/A	N/A	
08	GNFB	N/A	N/A	N/A	N/A	
09	BCRF	0.5/1.3	0.5/1.0	0.5/1.5	0.5/1.5	
10	BIMT	1.3/2.3	1.5/2.5	1.5/2.5	1.0/2.0	
11	SDS1	N/A	N/A	N/A	N/A	
12	SCCW	N/A	N/A	N/A	N/A	
13	SMEF	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	
14	SCM2	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	
15	SXSW	0.7/1.5	0.5/1.5	0.5/1.5	1.0/1.5	
16	GLIL	N/A	N/A	N/A	N/A	
17	XLIG	N/A	N/A	N/A	N/A	
18	всм3	1.2/2.2	1.0/2.0	1.0/2.0	1.5/2.5	
19	BFSH	N/A	N/A	N/A	N/A	
20	ВРМН	1.8/2.8	2.0/3.0	2.0/3.0	1.5/2.5	
	Mean	1.0/2.0	1.0/2.0	1.0/2.0	1.1/2.0	
	Std. Dev.	.49/.55	.58/.60	.58/.64	.44/.50	

EC = Enterprise Code

Parameter 5.7 = Management of Interdependencies = [(5.7.1+5.7.2+5.7.3)/3]

Parameter 5.7.1 = Characteristics

Parameter 5.7.2 = Participation

Parameter 5.7.3 = Review

x.x./y.y = Index Before 1992/Index After 1992

Index = Very High Planning Influence (0.0) ----> Very Low Planning Influence (4.0)

Table 3A: Control Parameter Changes Before/After 1992 (Part A)

EC	Parameters	6.0	6.1	6.1.1	6.1.2	6.1.3	
01	SSW5	1.0/1.6	1.1/2.0	1.1/2.1	1.4/2.7	0.9/1.2	
02	XFLT	1.2/2.0	1.5/2.1	1.4/2.3	1.8/2.6	1.2/1.3	
03	GFDS	1.8/2.8	2.0/3.0	2.0/3.1	2.3/3.3	1.8/2.7	
04	GDDS	1.8/2.6	2.0/2.8	1.9/2.6	2.3/3.2	1.8/2.6	
05	BEEF	1.2/1.8	1.4/1.9	1.4/2.1	1.6/2.3	1.2/1.3	
06	SMCW	1.1/1.8	1.3/2.0	1.3/2.1	1.4/2.4	1.1/1.5	
07	GNFF	1.2/1.9	1.4/2.0	1.4/2.1	1.6/2.5	1.1/1.5	
08	GNFB	1.9/2.8	2.2/3.0	2.4/3.1	2.3/3.2	1.9/2.8	
09	BCRF	1.3/1.9	1.5/1.9	1.5/2.1	1.8/2.4	1.2/1.3	
10	BIMT	1.2/1.9	1.4/2.0	1.5/2.3	1.6/2.4	1.2/1.3	
11	SDS1	1.8/2.8	2.0/3.1	2.1/3.1	2.2/3.3	1.8/2.8	
12	SCCW	1.2/1.9	1.4/2.0	1.5/2.1	1.6/2.4	1.1/1.4	
13	SMEF	1.1/1.9	1.3/2.0	1.4/2.1	1.5/2.3	1.1/1.5	
14	SCM2	1.1/1.9	1.2/2.0	1.4/2.1	1.3/2.2	1.0/1.6	
15	SXSW	1.1/1.8	1.4/2.0	1.5/2.1	1.7/2.6	0.9/1.3	
16	GLIL	1.2/2.0	1.4/2.1	1.5/2.4	1.6/2.5	1.1/1.5	
17	XLIG	1.3/2.0	1.5/2.2	1.5/2.4	1.8/2.6	1.3/1.6	
18	BCM3	1.1/1.9	1.2/2.0	1.4/2.1	1.3/2.2	1.0/1.6	
19	BFSH	1.2/1.9	1.3/2.0	1.4/2.1	1.3/2.2	1.1/1.7	
20	ВРМН	1.3/2.1	1.4/2.3	1.5/2.4	1.3/2.3	1.4/2.1	
	Mean	1.3/2.1	1.5/2.2	1.6/2.3	1.7/2.6	1.3/1.7	
	Std. Dev.	.28/.37	.31/.40	.31/.36	.35/.37	.31/.55	

EC = Enterprise Code

Parameter 6.0 = Control Influence (System) = [(6.1+6.2+6.3+6.4)/4]

Parameter 6.1 = Decentralisation & Control = [(6.1.1+6.1.2+6.1.3)/3]

Parameter 6.1.1 = Organisational Design

Parameter 6.1.2 = Personnel

Parameter 6.1.3 = Control Mechanisms

x.x/y.y = Index Before 1992/Index After 1992

Index = Tight Financial Control (0.0) ----> Tight Strategic Control (4.0)

Table 3 B: Control Parameter Changes Before/After 1992 (Part B)

EC	Parameters	6.2	6.3	6.3.1	6.3.2	6.3.3	
01	SSW5	1.0/2.0	0.9/0.8	0.7/1.3	1.0/0.5	1.0/0.5	
02	XFLT	1.0/2.0	1.0/1.9	1.1/1.7	1.0/2.0	1.0/2.0	
03	GFDS	2.2/3.1	1.6/2.7	1.8/2.5	1.0/2.0	2.0/3.5	
04	GDDS	2.1/2.8	1.6/2.5	1.8/2.5	1.0/2.0	2.0/3.0	
05	BEEF	1.0/1.6	1.0/1.9	1.0/1.7	1.0/2.0	1.0/2.0	
06	SMCW	1.0/1.6	1.0/1.9	1.0/1.9	1.0/2.0	1.0/2.0	
07	GNFF	1.0/2.0	1.0/1.9	1.0/1.7	1.0/2.0	1.0/2.0	
08	GNFB	2.2/3.1	1.6/2.7	1.8/2.5	1.0/2.0	2.0/3.5	
09	BCRF	1.1/2.0	1.4/1.9	1.1/1.7	1.5/2.0	1.5/2.0	
10	BIMT	1.0/2.0	1.0/1.9	1.0/1.7	1.0/2.0	1.0/2.0	
11	SDS1	2.2/3.0	1.6/2.8	1.9/2.8	1.0/2.0	2.0/3.5	
12	SCCW	1.0/2.0	1.0/1.9	1.1/1.8	1.0/2.0	1.0/2.0	
13	SMEF	1.0/2.0	1.0/1.9	1.0/1.7	1.0/2.0	1.0/2.0	
14	SCM2	1.0/2.0	1.0/1.9	1.0/1.7	1.0/2.0	1.0/2.0	
15	SXSW	1.0/2.0	0.9/1.1	0.7/1.3	1.0/0.5	1.0/1.5	
16	GLIL	1.1/2.0	1.0/1.9	1.1/1.8	1.0/2.0	1.0/2.0	
17	XLIG	1.0/2.0	1.4/1.9	1.1/1.8	1.5/2.0	1.5/2.0	
18	ВСМ3	1.0/2.0	1.0/1.9	1.0/1,7	1.0/2.0	1.0/2.0	
19	BFSH	1.0/2.0	1.2/1.7	1.1/1.7	1.5/1.5	1.0/2.0	-
20	ВРМН	1.1/2.0	1.4/2.1	1.1/1.7	1.5/2.5	1.5/2.0	
	Mean	1.3/2.2	1.2/2.0	1.2/1.9	1.1/1.9	1.3/2.2	
,	Std. Dev.	.48/.45	.27/.48	.36/.40	.21/.49	.41/.71	

EC = Enterprise Code

Parameter 6.2 = Agreeing Objectives

Parameter 6.3 = Monitoring Results = [(6.3.1+6.3.2+6.3.3)/3]

Parameter 6.3.1 = Reporting Requirements

Parameter 6.3.2 = Performance Measurement

Parameter 6.3.3 = Review & Communication

x.x/y.y = Index Before 1992/Index After 1992

Index = Tight Financial Control (0.0) ----> Tight Strategic Control (4.0)

Table 3C: Control Parameter Changes Before/After 1992 (Part C)

EC	Parameters	6.4	6.4.1	6.4.2	6.4.3	6.4.4	
01	SSW5	1.0/1.7	1.6/1.7	0.5/1.0	1.0/2.0	1.0/2.0	
02	XFLT	1.2/1.8	1.6/1.7	1.0/1.5	1.0/2.0	1.0/2.0	
03	GFDS	1.5/2.2	1.8/2.2	1.5/2.5	1.0/2.0	1.5/2.0	1 2 2
04	GDDS	1.5/2.2	1.8/2.2	1.5/2.5	1.0/2.0	1.5/2.0	
05	BEEF	1.2/1.8	1.6/1.7	1.0/1.5	1.0/2.0	1.0/2.0	
06	SMCW	1.2/1.8	1.6/1.7	1.0/1.5	1.0/2.0	1.0/2.0	
07	GNFF	1.2/1.8	1.7/1.8	1.0/1.5	1.0/2.0	1.0/2.0	
08	GNFB	1.5/2.2	1.8/2.2	1.5/2.5	1.0/2.0	1.5/2.0	
09	BCRF	1.2/1.8	1.6/1.7	1.0/1.5	1.0/2.0	1.0/2.0	
10	BIMT	1.2/1.8	1.6/1.7	1.0/1.5	1.0/2.0	1.0/2.0	
11	SDS1	1.5/2.2	1.9/2.3	1.5/2.5	1.0/2.0	1.5/2.0	
12	SCCW	1.2/1.8	1.6/1.7	1.0/1.5	1.0/2.0	1.0/2.0	
13	SMEF	1.2/1.8	1.6/1.7	1.0/1.5	1.0/2.0	1.0/2.0	
14	SCM2	1.2/1.8	1.7/1.8	1.0/1.5	1.0/2.0	1.0/2.0	
15	SXSW	1.0/1.9	1.4/1.9	0.5/1.5	1.0/2.0	1.0/2.0	
16	GLIL	1.1/2.0	1.4/2.0	1.0/2.0	1.0/2.0	1.0/2.0	
17	XLIG	1.3/1.9	1.5/1.9	1.0/1.5	1.5/2.0	1.0/2.0	
18	BCM3	1.2/1.8	1.7/1.8	1.0/1.5	1.0/2.0	1.0/2.0	
19	BFSH	1.2/1.9	1.6/1.9	1.0/1.5	1.0/2.0	1.0/2.0	
20	ВРМН	1.2/1.8	1.7/1.8	1.0/1.5	1.0/2.0	1.0/2.0	
	Mean	1.3/1.9	1.6/1.9	1.1/1.7	1.0/2.0	1.1/2.0	
	Std. Dev.	.15/.17	.13/.20	.28/.44	.11/.00	.21/.00	

EC = Enterprise Code

Parameter 6.4 = Rewards & Incentives = [(6.4.1+6.4.2+6.4.3+6.4.4)/4]

Parameter 6.4.1 = Incentives

Parameter 6.4.2 = Performance Orientation

Parameter 6.4.3 = Participation

Parameter 6.4.4 = Review & Communication

x.x/y.y = Index Before 1992/Index After 1992

Index = Tight Financial Control (0.0) ----> Tight Strategic Control (4.0)

MULTIPLE REGRESSION \* \* \* \*

Listwise Deletion of Missing Data

Table 4

Equation Number 1 Dependent Variable.. ASSETS

EMPLOYEE Block Number 1. Method: Enter

Variable(s) Entered on Step Number

EMPLOYEE 1..

Multiple R .91507 .83736 R Square .82833 Adjusted R Square Standard Error 456.70014

Analysis of Variance

DF Sum of Squares Mean Square 19329770.84908 1 19329770.84908 Regression Residual 18 3754350.35092 208575.01950

F =92.67539 Signif F = .0000

------ Variables in the Equation ------

SE B В Beta T Sig T Variable 203.408742 21.129412 .915075 9.627 .0000 EMPLOYEE (Constant) -276.498680 129.697125 -2.132 .0470

End Block Number 1 All requested variables entered.

Table 5: Annual Turnover and PBT Growth % (1992-1995)

		Turnov	ver Grou	th %	PBT G	rowth %	. <u>.                                   </u>	PBT % Turnover
	EC	1993	1994	1995	1993	1994	1995	92-95 Aerage
01	SSW5	36	18	7	27	-11	3	4.3 ⇔
02	XFLT	18	25	20	36	7	13	5.4
03	GFDS	52	27		43	16		6.9
04	GDDS	74	50		57	36		5.4
05	BEEF	-20	42	6	-27	-100	0	4.2 ⇔
06	SMCW	61	44	37	10	19	-57	6.6
07	GNFF	16	-30	54	10	-55	33	7.3
08	GNFB	53	24		24	19		2.6 ⇔
09	BCRF	-20	-36	5	-100	0	0	-7.6 ⇔
10	BIMT	14	4	10	-22	0	-12	5.3
11	SDS1		20			5		5.5
12	sccw		21	13		57	6	1.3 ፟
13	SMEF	44	-24	45	100	-264	100	-0.7 Φ
14	SCM2	11	-10	11	-43	28	-22	2.6 ⇔
15	sxsw	41	-7	5	27	-32	-23	1.2 🗢
16	GLIL	34	15		43	2		7.6
17	XLIG	89	38		55	59		9.1
18	BCM3	10	24	5	-100	100	-100	0.2 ፟⊅
19	BFSH		54	15		-13	0	11.3
20	ВРМН	45	11	-15	114	10	-12	27.2
	Average	33	16 🗢	16 ⇔	15	-6 ⇔	-5 ⇔	5.3

Turnover Growth % = Turnover increase % compared with last year

PBT Growth % = Profit Before Tax increase % compared with last year

PBT % Turnover = PBT as a percentage of Turnover

92-95 Average = PBT % Turnover overall average during 1992 to 1995

EC = Enterprise Code

12.02.97

CHANGES O	F PLANNIN	IG & CONT	ROL INFLUEN	ICES (ALL 20 S	DES)		TABLE 6A
	VEDALL DI	A N I N I N I N I N I N I	FLUENOE	0/5541	CONTROL	11151115116	_
L	VERALL PL					INFLUENC	<u> </u>
	0(Before, 5.	<u>1 1</u>		6.0(Before	6.0(After)		
SSW5(01)	1.1	2.5	1.4	1	1.6		
XFLT(02)	1.6	2.8	1.2	1.2			
GFDS(03)	2.1	3.1	1	1.8			
GDDS(04)	1.2	3.1	1.1	1.8			
BEEF(05)		2.3	1.1	1.2			
SMCW(06)	1.3	2.4 2.8	1.1	1.1	t		
GNFF(07)	1.8	2.8	1	1.2	4	L	
GNFB(08)	2.1	3.2	1.1	1.9			
BCRF(09)	1.2	2.3	1.1	1.3		1.	
BIMT(10)	1.3	2.5	1.2	1.2	1.9	0.7	
SDS1(11)	2.2	3.3	1.1	1.8	2.8	1	
SCCW(12)	1.4	2.3	0.9	1.2	1.9	0.7	
SMEF(13)	1.5	2.6	1.1	1.1	1.9	0.8	
SCM2(14)	1.6	2.7	1.1	1.1	1.9	0.8	
SXSW(15)	1.3	2.5	1.2	1.1	1.8	0.7	
GLIL(16)	1.9	2.9	1	1.2	2	0.8	
XLIG(17)	1.9	2.9 3	1.1;	1.3	2	0.7	
BCM3(18)	1.4	2.4	1	1.1	1.9		
BFSH(19)	1.5	2.4	0.9	1.2	1.9		
BPMH(20)	1.7	2.7	1,	1.3	2.1	0.8	
Mean	1.61	2.69	1.09	1.31	2.07	0.76	
		!					
Notes :			<u>;</u>	-			
EC = Enterpri	a combo		·		 		
			ece Before 199				
5.0(After) =	Overall Plai	nning Influer	nce After 1992				
			e Before 1992	<u> </u>	ļ		· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·			e After 1992		<u></u>		
				and Before 1992			
6.0A-6.0B =	Difference of	of Control In	fluence After a	nd Before 1992			29.11.96

	S OF PLANNI				<del>-</del>	T/	BLE 6
REMAIN A	AS WHOLLY	SOEs BEFO	RE & AFTER 1	992 (6B1)			
	OVERALLE	LANNING IN	FLUENCE	OVERALL CO	NTROLINI	FLUENCE	
EC*		5.0(After) 5.0		6.0(Before) 6.			
SSW5(01)		2.5	1.4	1	1.6	0.6	
XFLT(02)	1.6	2.8	1.2	1.2	2	0.8	
BEEF(05)		2.3	1.1	1.2	1.8	0.6	
SMCW(06		2.4	1.1:	1.1	1.8	0.7	
BCRF(09)		2.3	1.1	1.3	1.9	0.6	
3IMT(10)	1.3	2.5	1.2	1.2	1.9	0.7	
SCCW(12	) 1.4	2.3	0.9	1.2	1.9	0.7	
SMEF(13)		2.6	1.1	1.1	1.9	0.8	
SXSW(15)		2.5	1.2	1.1	1.8	0.7	
KLIG(17)	1.9	3	1.1	1.3	2	0.7	
BCM3(18)		2.4	1	1.1	1.9	0.8	
BFSH(19)	1.5	2.4	0.9	1.2	1.9	0.7	
Mean	1.39	2.50	1.11	1.17	1.87	0.70	
	1				i		
			1		· · · · · · · · · · · · · · · · · · ·		
• • • • • • • • • • • • • • • • • • • •			ROL INFLUENC ANGED TO SHA	CES AREHOLDING SOI	Es AFTER	1992 (6	B2)
WHOLLY	SOEs BEFOR	LANNING IN	NGED TO SHA	OVERALL CO	NTROL IN	FLUENCE	32)
WHOLLY	OVERALL P	LANNING IN	NGED TO SHA	OVERALL CO 6.0(Before) 6.	NTROL IN 0(After)  6.0	FLUENCE DA-6.0B	32)
WHOLLY  EC*  GFDS(03)	OVERALL P 5.0(Before) (	LANNING IN 5.0(After)   5.0	FLUENCE DA-5.0B	OVERALL CO 6.0(Before) 6.	ONTROL INI O(After)   6.0 2.8	FLUENCE DA-6.0B	32)
WHOLLY  EC*  GFDS(03)  GDDS(04)	OVERALL P 5.0(Before) 8	LANNING IN 5.0(After)   5.0 3.1 3.1	NGED TO SHA	OVERALL CO 6.0(Before) 6. 1.8	0NTROL INI 0(After)   6.0 2.8 2.6	FLUENCE DA-6.0B 1 0.8	32)
WHOLLY  GC*  GFDS(03)  GDDS(04)  GNFF(07)	OVERALL P 5.0(Before) 5.0 2.1 2 1.8	LANNING IN 5.0(After)   5.0 3.1 3.1 2.8	FLUENCE DA-5.0B 1 1.1	OVERALL CO 6.0(Before) 6. 1.8 1.8	0NTROL IN 0(After)   6.0 2.8 2.6 1.9	FLUENCE DA-6.0B 1 0.8 0.7	32)
WHOLLY  GFDS(03)  GDDS(04)  GNFF(07)  GNFB(08)	OVERALL P 5.0(Before) ( 2.1 2 1.8 2.1	RE 1992 CHA LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2	FLUENCE DA-5.0B 1 1.1 1.1	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9	0NTROL IN 0(After)   6.0 2.8 2.6 1.9 2.8	FLUENCE DA-6.0B 1 0.8	32)
WHOLLY  GFDS(03)  GDDS(04)  GNFF(07)  GNFB(08)  GDS1(11)	OVERALL P 5.0(Before) { 2.1 2 1.8 2.1 2.1 2.2	RE 1992 CHA LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2 3.3	ANGED TO SHA FLUENCE DA-5.0B 1 1.1 1.1 1.1	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8	0NTROL IN 0(After)   6.0 2.8 2.6 1.9 2.8 2.8	FLUENCE DA-6.0B 1 0.8 0.7 0.9	32)
WHOLLY  GFDS(03)  GDDS(04)  GNFF(07)  GNFB(08)  SDS1(11)  SCM2(14)	OVERALL P 5.0(Before) ! 2.1 2 1.8 2.1 2.2 1.6	LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2 3.3 2.7	FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1	OVERALL CO 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1	0NTROL INI 0(After)   6.0 2.8 2.6 1.9 2.8 2.8 1.9	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8	32)
WHOLLY  GFDS(03) GDDS(04) GNFF(07) GNFB(08) SDS1(11) SCM2(14) GLIL(16)	OVERALL P 5.0(Before) 5 2.1 2 1.8 2.1 2.2 1.6 1.9	RE 1992 CHA LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9	ANGED TO SHA FLUENCE DA-5.0B 1 1.1 1.1 1.1	OVERALL CO 6.0(Before) 6. 1.8 1.2 1.9 1.8 1.1 1.2	0NTROL IN 0(After)   6.0 2.8 2.6 1.9 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8	32)
C* GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) BPMH(20)	OVERALL P 5.0(Before) 5 2.1 2 1.8 2.1 2.2 1.6 1.9 1.7	RE 1992 CHA LANNING IN 5.0(After) 5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7	ANGED TO SHA FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.1 1.1	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)
C* GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) BPMH(20)	OVERALL P 5.0(Before) 5 2.1 2 1.8 2.1 2.2 1.6 1.9	RE 1992 CHA LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9	FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1	OVERALL CO 6.0(Before) 6. 1.8 1.2 1.9 1.8 1.1 1.2	0NTROL IN 0(After)   6.0 2.8 2.6 1.9 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8	32)
WHOLLY  GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) BPMH(20) Mean	OVERALL P 5.0(Before) 5 2.1 2 1.8 2.1 2.2 1.6 1.9 1.7	RE 1992 CHA LANNING IN 5.0(After) 5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7	ANGED TO SHA FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.1 1.1	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)
WHOLLY  GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) BPMH(20) Mean	OVERALL P 5.0(Before) 5 2.1 2 1.8 2.1 2.2 1.6 1.9 1.7 1.93	RE 1992 CHA LANNING IN 5.0(After) 5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7	ANGED TO SHA FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.1 1.1	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)
WHOLLY  GFDS(03)  GDDS(04)  GNFF(07)  GNFB(08)  GDS1(11)  GCM2(14)  GLIL(16)  BPMH(20)  Mean  Notes:  EC = Ente	OVERALL P 5.0(Before) 5 1.8 2.1 2.2 1.6 1.9 1.7 1.93	RE 1992 CHA LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7 2.98	ANGED TO SHA FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1 1.1 1.1	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.2 1.3	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)
GC* GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) BPMH(20) Mean  Notes EC = Ente 6.0(Before	OVERALL P 5.0(Before) 5 1.8 2.1 2.2 1.6 1.9 1.7 1.93  rprise Code 0 = Overall Pla	RE 1992 CHA LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7 2.98	ANGED TO SHA FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1 1.1 1.05	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.2 1.3	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)
GEC* GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) GPMH(20) Mean  Notes EC = Ente G.0(Before	OVERALL P 5.0(Before) 5 2.1 2.1 2.2 1.6 1.9 1.7 1.93  rprise Code = Overall Pla = Overall Pla	RE 1992 CHA LANNING IN 5.0(After)   5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7 2.98 anning Influed	FLUENCE DA-5.0B 1 1.1 1.1 1.1 1.1 1.05 ece Before 1992	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.2 1.3	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)
GC* GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) BPMH(20) Mean  Notes GC = Ente GO(Before GO(After) GO(Before	OVERALL P 5.0(Before); 2.1 2, 1.8 2.1 2.2 1.6 1.9 1.7 1.93  rprise Code 0) = Overall Pla e) = Overall Co	LANNING IN 5.0(After) 5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7 2.98 anning Influerontrol Influerontrol Influeron	FLUENCE 0A-5.0B  1 1.1 1.1 1.1 1.1 1.1 2.1 1.05 ece Before 1992 be Before 1992	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.2 1.3	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)
C* GFDS(03) GDDS(04) GNFF(07) GNFB(08) GDS1(11) GCM2(14) GLIL(16) GPMH(20) Mean  Notes C = Ente O(Before	OVERALL P 5.0(Before); 2.1 2, 1.8 2.1 2.2 1.6 1.9 1.7 1.93  rprise Code 0) = Overall Pla = Overall Co = Overall Co = Overall Co	RE 1992 CHA LANNING IN 5.0(After) 5.0 3.1 3.1 2.8 3.2 3.3 2.7 2.9 2.7 2.98 anning Influence	FLUENCE DA-5.0B  1 1.1 1.1 1.1 1.1 1.1 2.1 1.05  ece Before 1992 ce After 1992 ce After 1992	OVERALL CC 6.0(Before) 6. 1.8 1.8 1.2 1.9 1.8 1.1 1.2 1.3	2.8 2.6 1.9 2.8 2.8 2.2 2.8 2.8 1.9 2	FLUENCE DA-6.0B 1 0.8 0.7 0.9 1 0.8 0.8 0.8	32)

	S OF PLAN			LUENCES	<b>.</b>			TABLE 60
SOEs LO	CATED IN E	BIEJING	(6C1)					
	OVERALL	PLANNING	INFLUENC	<u>:</u> ::	OVERALL	CONTROL	INFLUENC	F
EC*		5.0(After)				6.0(After)		
BEEF(05)	1.2	<u> </u>			1.2			
BCRF(09)			1.1		1.3			
BIMT(10)	1.3	2.5			1.2	1		
BCM3(18)	1.4		1	····	1.1			
BFSH(19)	1.5			÷	1.2	h		
BPMH(20)				<del></del>	1.3		4	
Mean	1.38	2.43	1.05		1.22		<u>'                                    </u>	
				<b>‡</b>				
CHANGES	S OF PLAN	NING & CO	NTRÔL ÎNÊ	LUENCES	· · · · · · · · · ·		-	
	CATED IN S			LOLITOLO	<del>-</del>			
	OVERALL	ΡΙ ΔΝΙΝΙΝΙΏ	INIELLIENI	: : := : : : : : : : : : : : : : : : : :	OVERALL	CONTROL	INFLUENC	<b>E</b>
EC*		5.0(After)				6.0(After)		<b>-</b>
SSW5(01)			1.4		0.0(Belore)	1.6	<u>.                                      </u>	
SMCW(06		2.3	1.4	1	1.1		+	
SDS1(11)	2.2	3.3		<del></del>	1.1	2.8	÷	
SCCW(12)		2.3		<del></del>	1.2		<del></del>	
SMEF(13)	Zi			;	1.1			
SCM2(14)				<del>.</del> . —	1.1	1.9		
SXSW(15)				<u> </u>	1.1			
Mean	1.49	2.61			1.20			
	T					1.00	0.70	
	İ				1			
	OF PLANN			LUENCES	·			
SOEs LO	CATED IN X	CIAMEN	(6C3)	i 	<u>.</u>			
	OVERALL	PLANNING	INFLUENC	E	OVERALL	CONTROL	INFLUENCI	<b>=</b>
EC*	5.0(Before)	5.0(After)	5.0A-5.0B	<u> </u>	6.0(Before)	6.0(After)	6.0A-6.0B	
XFLT(02)	1.6				1.2	2	0.8	
XLIG(17)	1.9		1.1		1.3			
Mean	1.75	2.90	1.15		1.25	2.00	0.75	
	+				:			
CHANGES	OF PLANN	IING & COI	NTROL INF	LUENCES	i <del></del> -			
SOEs LO	CATED IN C	SUANGZHO	υ	(6C4)				
	OVERALL	PI ANNING	INFLLIENC	: ::-	OVERALI	CONTROL	INFLUENCE	=
EC*	5.0(Before)			<u></u>		6.0(After)		_
GFDS(03)	2.1		3.0A-3.0B	<b></b>	1.8		3.07-0.00	
GDDS(03)		3.1	1.1		1.8	2.6	0.8	
3DD3(04) GNFF(07)	1.8	2.8	1		1.0	1.9	0.8	
	* · · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	1.1	ļ	1.2	2.8	0.7	
GNFB(08) GLIL(16)	1.9	2.9	1.1		1.9	2.0	0.9	
Mean	1.98		1.04		1.58	2.42	0.84	
vicali	1.90	3.02	1.04	÷ · ·	1.00	2.42	0.04	
					1		ı !	

Notes:	TABLE 6C
EC = Enterprise Code	
5.0(Before) = Overall Planning Influnece Before 1992	
5.0(After) = Overall Planning Influence After 1992	i i
6.0(Before) = Overall Control Influence Before 1992	,
6.0(After) = Overall Control Influence After 1992	
5.0A-5.0B = Difference of Planning Influence After and Before 1992	
6.0A-6.0B = Difference of Control Influence After and Before 1992	29.11.96

,		NING & CO		·				TABLE 6D
SOEs IN	IRON & STI	EEL INDUS	TRY	(6D1)	: <u> </u>	ļ		
	OVEDALL	DI ANNUNIO		<u>.</u>	O) (EDALL	CONTROL	ANELLIENO	
EC*		PLANNING 5.0(After)			:		INFLUENC	<b>E</b>
SSW5(01)					0.0(Belore	6.0(After) 1.6		
SXSW(15)		2.5 2.5		I	<u>.</u> 1.1	1.8	<del></del>	
Mean	1.20			4	1.05	<u> </u>		
IVIEALI	1.20	2.50	1.30		1.05	1.70	0.65	
		ļ	<del>,</del>	 	· · · · · · · · · · · · · · · · · · ·		ļ	
CHANGES	OF DI ANI	NING & CO	NTDOL ING	LIENCES	<u> </u>		<del> </del>	
		& EQUIPM			(6D2)	<del> </del>	<u> </u>	
3013 114	MACHINES	G EQUIT IV	LIVI INDO		(002)	<u> </u>	<u> </u>	
	OVERÁLL	PLANNING	INFLLIËNC	). SE	OVERALL	CONTROL	INFLUENC	F
EC*		5.0(After)		<u> </u>		6.0(After)		<u> </u>
XFLT(02)	1.6				1.2			
BEEF(05)	. 1.0	2.3			1.2		0.6	
SMCW(06				_	1.1	4	→ 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
BCRF(09)	<i>n</i>		L	4	1.3	÷	<del>-</del>	
BIMT(10)	1.3				1.3	<u></u>		
SCCW(12)				4	1.2		<u>+</u>	
SMEF(13)				L .	1.1			
BPMH(20)			١		1.3	1		
Mean	1.40			<u>-</u>	1.20			
IVICALI	1.70	2.43	1.00	: 	1.20	1.31	0.71	
		,				!		
-	1							
CHANGES	OF DI ANI	NING & CO	NTPOL INE	HENCES				
		NING & CO			(6D3)	· · · · · · · · · · · · · · · · · · ·		
		NING & CO			(6D3)		-	
	DEPARTME	NT STORE	S INDUST	RY		CONTROL	INFLUENC	F
SOEs IN I	OVERALL	NT STORE PLANNING	INFLUENC	RY DE	OVERALL		INFLUENC	E
SOEs IN I	OVERALL 5.0(Before)	NT STORE PLANNING 5.0(After)	S INDUSTI INFLUENC 5.0A-5.0B	RY DE	OVERALL 6.0(Before	6.0(After)	6.0A-6.0B	E
SOEs IN I EC* GFDS(03)	OVERALL 5.0(Before) 2.1	PLANNING 5.0(After) 3.1	INFLUENC 5.0A-5.0B	RY CE	OVERALL 6.0(Before 1.8	6.0(After) 2.8	6.0A-6.0B	E
EC* GFDS(03) GDDS(04)	OVERALL 5.0(Before) 2.1 2	PLANNING 5.0(After) 3.1 3.1	INFLUENC 5.0A-5.0B 1 1.1	RY DE	OVERALL 6.0(Before 1.8 1.8	6.0(After) 2.8 2.6	6.0A-6.0B 1 0.8	E
EC* GFDS(03) GDDS(04) GNFB(08)	OVERALL 5.0(Before) 2.1 2 2.1	PLANNING 5.0(After) 3.1 3.2	INFLUENC 5.0A-5.0B 1 1.1 1.1	RY	OVERALL 6.0(Before 1.8 1.9	6.0(After) 2.8 2.6 2.8	6.0A-6.0B 1 0.8 0.9	E
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11)	OVERALL 5.0(Before 2.1 2 2.1 2.2	PLANNING 5.0(After) 3.1 3.2 3.3	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.1	RY DE	OVERALL 6.0(Before 1.8 1.8 1.9 1.8	6.0(After) 2.8 2.6 2.8 2.8	6.0A-6.0B 1 0.8 0.9	E
EC* GFDS(03) GDDS(04) GNFB(08)	OVERALL 5.0(Before) 2.1 2 2.1	PLANNING 5.0(After) 3.1 3.2 3.3	INFLUENC 5.0A-5.0B 1 1.1 1.1	RY DE	OVERALL 6.0(Before 1.8 1.9	6.0(After) 2.8 2.6 2.8 2.8	6.0A-6.0B 1 0.8 0.9	E
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11)	OVERALL 5.0(Before 2.1 2 2.1 2.2	PLANNING 5.0(After) 3.1 3.2 3.3	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.1	RY DE	OVERALL 6.0(Before 1.8 1.8 1.9 1.8	6.0(After) 2.8 2.6 2.8 2.8	6.0A-6.0B 1 0.8 0.9	E
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean	OVERALL 5.0(Before) 2.1 2 2.1 2.2 2.10	PLANNING 5.0(After) 3.1 3.1 3.2 3.3 3.18	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.1 1.08	RY	OVERALL 6.0(Before 1.8 1.8 1.9 1.8	6.0(After) 2.8 2.6 2.8 2.8	6.0A-6.0B 1 0.8 0.9	E
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean CHANGES	OVERALL 5.0(Before 2.1 2 2.1 2.2 2.10	PLANNING 5.0(After) 3.1 3.2 3.3 3.18	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.1 1.08	RY DE LUENCES	OVERALL 6.0(Before 1.8 1.8 1.9 1.8	6.0(After) 2.8 2.6 2.8 2.8	6.0A-6.0B 1 0.8 0.9	E
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean CHANGES	OVERALL 5.0(Before 2.1 2 2.1 2.2 2.10	PLANNING 5.0(After) 3.1 3.1 3.2 3.3 3.18	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.1 1.08	RY	OVERALL 6.0(Before 1.8 1.8 1.9 1.8	6.0(After) 2.8 2.6 2.8 2.8	6.0A-6.0B 1 0.8 0.9	E
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean CHANGES	OVERALL 5.0(Before) 2.1 2 2.1 2.2 2.10 OF PLANI	PLANNING 5.0(After) 3.1 3.2 3.3 3.18 NING & CO	S INDUSTI INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF	ELUENCES	OVERALL 6.0(Before 1.8 1.8 1.9 1.8	6.0(After) 2.8 2.6 2.8 2.8 2.75	6.0A-6.0B 1 0.8 0.9 1 0.93	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean CHANGES SOEs IN 0	OVERALL 5.0(Before) 2.1 2.1 2.2 2.10 OF PLANI CONSUMAI	PLANNING 5.0(After) 3.1 3.2 3.3 3.18  NING & CO	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF STRY	ELUENCES	OVERALL 6.0(Before 1.8 1.8 1.9 1.8 1.83	6.0(After) 2.8 2.6 2.8 2.8 2.75	6.0A-6.0B 1 0.8 0.9 1 0.93	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean CHANGES SOEs IN C	OVERALL 5.0(Before 2.1 2.1 2.2 2.10 OF PLANI CONSUMAI 5.0(Before	PLANNING 5.0(After) 3.1 3.2 3.3 3.18 NING & CO BLES INDU PLANNING 5.0(After)	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.1 1.08 NTROL INF STRY	ELUENCES	OVERALL 6.0(Before 1.8 1.9 1.8 1.83 OVERALL 6.0(Before	6.0(After) 2.8 2.6 2.8 2.8 2.75  CONTROL 6.0(After)	6.0A-6.0B 1 0.8 0.9 1 0.93 INFLUENC 6.0A-6.0B	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean  CHANGES SOES IN 0  EC* GNFF(07)	OVERALL 5.0(Before) 2.1 2.1 2.2 2.10 OVERALL OVERALL 5.0(Before) 1.8	PLANNING 5.0(After) 3.1 3.2 3.3 3.18 NING & CO BLES INDU PLANNING 5.0(After) 2.8	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF STRY INFLUENC 5.0A-5.0B	ELUENCES	OVERALL 6.0(Before 1.8 1.9 1.8 1.83 OVERALL 6.0(Before 1.2	6.0(After) 2.8 2.6 2.8 2.75 2.75 CONTROL 6.0(After)	6.0A-6.0B 1 0.8 0.9 1 0.93 INFLUENC 6.0A-6.0B	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean  CHANGES SOEs IN (  EC* GNFF(07) GLIL(16)	OVERALL 5.0(Before 2.1 2.2 2.10 CONSUMAN OVERALL 5.0(Before 1.8 1.9	PLANNING 5.0(After) 3.1 3.2 3.3 3.18 NING & CO BLES INDU PLANNING 5.0(After) 2.8 2.9	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.1 1.08 NTROL INF STRY INFLUENC 5.0A-5.0B 1	ELUENCES	OVERALL 6.0(Before 1.8 1.8 1.9 1.8 1.83 OVERALL 6.0(Before 1.2 1.2	6.0(After) 2.8 2.6 2.8 2.75 2.75  CONTROL 6.0(After) 1.9 2	INFLUENC 6.0A-6.0B 0.9 1 0.93 INFLUENC 6.0A-6.0B 0.7 0.8	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean  CHANGES SOEs IN (  EC* GNFF(07) GLIL(16) XLIG(17)	OVERALL 5.0(Before) 2.1 2.2 2.10 CONSUMAN OVERALL 5.0(Before) 1.8 1.9	PLANNING 5.0(After) 3.1 3.2 3.3 3.18  NING & CO BLES INDU  PLANNING 5.0(After) 2.8 2.9 3	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF STRY INFLUENC 5.0A-5.0B 1 1.1	ELUENCES (6D4)	OVERALL 6.0(Before 1.8 1.8 1.9 1.8 1.83  OVERALL 6.0(Before 1.2 1.3	6.0(After) 2.8 2.6 2.8 2.75  CONTROL 6.0(After) 1.9 2	INFLUENC 6.0A-6.0B 0.9 1 0.93 0.93 INFLUENC 6.0A-6.0B 0.7	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean  CHANGES SOEs IN (  EC* GNFF(07) GLIL(16)	OVERALL 5.0(Before 2.1 2.2 2.10 CONSUMAN OVERALL 5.0(Before 1.8 1.9	PLANNING 5.0(After) 3.1 3.2 3.3 3.18  NING & CO BLES INDU  PLANNING 5.0(After) 2.8 2.9 3	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF STRY INFLUENC 5.0A-5.0B 1 1.1	ELUENCES (6D4)	OVERALL 6.0(Before 1.8 1.8 1.9 1.8 1.83 OVERALL 6.0(Before 1.2 1.2	6.0(After) 2.8 2.6 2.8 2.75  CONTROL 6.0(After) 1.9 2	INFLUENC 6.0A-6.0B 0.9 1 0.93 0.93 INFLUENC 6.0A-6.0B 0.7	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean  CHANGES SOEs IN (  EC* GNFF(07) GLIL(16) XLIG(17)	OVERALL 5.0(Before) 2.1 2.2 2.10 CONSUMAN OVERALL 5.0(Before) 1.8 1.9	PLANNING 5.0(After) 3.1 3.2 3.3 3.18  NING & CO BLES INDU  PLANNING 5.0(After) 2.8 2.9 3	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF STRY INFLUENC 5.0A-5.0B 1 1.1	ELUENCES (6D4)	OVERALL 6.0(Before 1.8 1.8 1.9 1.8 1.83  OVERALL 6.0(Before 1.2 1.3	6.0(After) 2.8 2.6 2.8 2.75  CONTROL 6.0(After) 1.9 2	INFLUENC 6.0A-6.0B 0.9 1 0.93 0.93 INFLUENC 6.0A-6.0B 0.7	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean  CHANGES SOEs IN (  EC* GNFF(07) GLIL(16) XLIG(17)	OVERALL 5.0(Before) 2.1 2.2 2.10 CONSUMAN OVERALL 5.0(Before) 1.8 1.9	PLANNING 5.0(After) 3.1 3.2 3.3 3.18  NING & CO BLES INDU  PLANNING 5.0(After) 2.8 2.9 3	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF STRY INFLUENC 5.0A-5.0B 1 1.1	ELUENCES (6D4)	OVERALL 6.0(Before 1.8 1.8 1.9 1.8 1.83  OVERALL 6.0(Before 1.2 1.3	6.0(After) 2.8 2.6 2.8 2.75  CONTROL 6.0(After) 1.9 2	INFLUENC 6.0A-6.0B 0.9 1 0.93 0.93 INFLUENC 6.0A-6.0B 0.7	
EC* GFDS(03) GDDS(04) GNFB(08) SDS1(11) Mean  CHANGES SOEs IN (  EC* GNFF(07) GLIL(16) XLIG(17)	OVERALL 5.0(Before) 2.1 2.2 2.10 CONSUMAN OVERALL 5.0(Before) 1.8 1.9	PLANNING 5.0(After) 3.1 3.2 3.3 3.18  NING & CO BLES INDU  PLANNING 5.0(After) 2.8 2.9 3	INFLUENC 5.0A-5.0B 1 1.1 1.1 1.08 NTROL INF STRY INFLUENC 5.0A-5.0B 1 1.1	ELUENCES (6D4)	OVERALL 6.0(Before 1.8 1.8 1.9 1.8 1.83  OVERALL 6.0(Before 1.2 1.3	6.0(After) 2.8 2.6 2.8 2.75  CONTROL 6.0(After) 1.9 2	INFLUENC 6.0A-6.0B 0.9 1 0.93 0.93 INFLUENC 6.0A-6.0B 0.7	

CHANGES OF PI	ANNING & CO	NTROL IN	LUENCES				TABLE 60
SOEs IN TEXTIL	E INDUSTRY	(6D5)	1			· · · · · · · · · · · · · · · · · ·	
	T. T. L. T.			* _: ,	i		 <u> </u> -
l	ALL PLANNING			i	CONTROL		E
	fore, 5.0(After)	•	•		6.0(After)		·
SCM2(14)	1.6 2.7		ļ	1.1			
BCM3(18)	1.4 2.4			1.1			
Mean	1.50 2.55	1.05	! <b>:</b>	1.10	1.90	0.80	
		L		į			
		 			i <b>–</b>		
CHANGES OF PL			LUENCES		i		
SOEs IN HOTEL	INDUSTRY	(6D6)		ļ	I		
OVED	ALL PLANNING	S INICLIENIA	: >= · · · · ·	O)/EDALL	CONTROL	INITE LITAGO	
							·
	fore; 5.0(After)				6.0(After)		
BFSH(19)	1.50 2.40	0.90	· •	1.20	1.90	0.70	
	-			•			
Notes:		•	1 -	;			
EC = Enterprise C		6	1000	:	<u> </u>		<u></u>
5.0(Before) = Ove							
5.0(After) = Ove					·		
6.0(Before) = Ove					· - ·		l.,
6.0(After) = Ove				Doforo 1000			
5.0A-5.0B = Diffe							20 44 00
6.0A-6.0B = Diffe	erence of Contr	oi influence	Alter and B	eiore 1992	i		29.11.96

Table 7A: Planning and Control Influences Analysis by Ownership and Location

	tion/City	Beijing		Shangha		Xiamen		Guangz	
O*	EC@	PS(1)	CS(2)	PS(1) (	CS(2)	PS(1)	CS(2)	PS(1)	CS(2)
S#	ВРМН	2.7	2.1						
	SDS1			3.3	2.8				
	SCM2			2.7	1.9				
	GNFB	1						3.2	2.8
	GFDS							3.1	2.8
	GDDS							3.1	2.6
	GLIL							2.9	2.0
	GNFF				L			2.8	1.9
	Average	2.70	2.10	3.00	2.35		·	3.02	2.42
W+	BIMT	2.5	1.9						
	всм3	2.4	1.9						
	BFSH	2.4	1.9						
:	BCRF	2.3	1.9						
	BEEF	2.3	1.8						
	SMEF			2.6	1.9				
	SSW5			2.5	1.6				
	SXSW			2.5	1.8				
	SMCW			2.4	1.8				
	SCCW			2.3	1.9				
	XLIG					3.0	2.0		
	XFLT			!		2.8	2.0		
	Average	2.38	1.88	2.46	1.80	2.90	2.00		
Total	Average	2.43	1.92	2.61	1.96	2.90	2.00	3.02	2.42

#### Notes:

- (1) Planning Influence Scores after 1992.
- (2) Control Influence Scores after 1992.
- O\* Types of Ownership
- S# Shareholding Enterprises
- W+ Wholly State-Owned Enterprises
- EC@ Enterprise Codes

25.08.97

Table 7B: Planning and Control Influences Analysis by Ownership and Industry

	Industries(1) I & S												
<u>Indus</u>	tries(1)	1 & S		M &	E	D. St	ores	Cons	um.	Text	iles	Hote	<u>l</u>
О*	EC@	PS	CS	PS	CS	PS	CS	PS	CS	PS	cs	PS	CS
S#	врмн			2.7	2.1								
	SDS1					3.3	2.8						
	GNFB					3.2	2.8						
	GFDS					3.1	2.8						
	GDDS					3.1	2.6						
	GLIL							2.9	2.0				
	GNFF							2.8	1.9				
	SCM2									2.7	1.9		
	Average			2.70	2.10	3.18	2.75	2.85	1.95	2.70	1.90		
W+	SMEF	2.6	1.9										
	SSW5	2.5	1.6										
	SXSW	2.5	1.8										
	BIMT			2.5	1.9								
	BCRF			2.3	1.9								
:	BEEF			2.3	1.8								
	SMCW			2.4	1.8								
	SCCW			2.3	1.9								
	XFLT			2.8	2.0								
	XLIG							3.0	2.0				
	всм3									2.4	1.9		
	BFSH											2.4	1.9
	Average	2.53	1.77	2.43	1.88			3.00	2.00	2.40	1.90	2.40	1.90
Total	Average	2.53	1.77	2.40	1.91	3.18	2.75	2.90	1.97	2.55	1.90	2.40	1.90

#### Notes:

(1) Types of Industry:

I&S

- Iron & Steel Manufacturing

M & E

- Machines & Equipment Manufacturing

D. Stores

- Department Stores (Retailing/Servicing)

Consum.

- Consumables Manufacturing

Textiles

- Textiles Manufacturing

Hotel

- Hotel Servicing

PS	Planning Influence Scores after 1992		
CS	Control Influence Scores after 1992		
O*	Types of Ownership		
S#	Shareholding Enterprises	r	
W+	Wholly State-Owned Enterprises		
EC@	Enterprise Codes		28.12.97

Table 7C: Planning and Control Influences Analysis by Ownership/Industry/Location

## (1) Beijing

Indus	stries(1)	1 & S		M&	E	D. St	ores	Cons	um.	Text	les	Hote	l
0*	EC@	PS	CS	PS	CS	PS	CS	PS	CS	PS	CS	PS	CS
S#	врмн			2.7	2.1								
	Average			2.7	2.1								
W+	BIMT			2.5	1.9								
	BCRF			2.3	1.9								
	BEEF			2.3	1.8								
	всм3									2.4	1.9		
	BFSH											2.4	1.9
	Average			2.37	1.87					2.40	1.90	2.40	1.90
Total	Average			2.45	1.93					2.40	1.90	2.40	1.90

#### (2) Shanghai

Indus	stries(1)	I&S		M&	E	D. St	ores	Cons	um.	Texti	les	Hote	l
0*	EC@	PS	CS	PS	CS	PS	CS	PS	CS	PS	CS	PS	CS
S#	SDS1					3.3	2.8						
	SCM2									2.7	1.9		
	Average					3.3	2.8			2.7	1.9		
W+	SMEF	2.6	1.9										
	SSW5	2.5	1.6										
	SXSW	2.5	1.8										
	SMCW			2.4	1.8								
	SCCW			2.3	1.9								
	Average	2.53	1.77	2.35	1.85								
Total	Average	2.53	1.77	2.35	1.85	3.30	2.80			2.70	1.90		

#### (3) Xiamen

Indus	stries(1)	1 & S		M &	E	D. St	ores	Cons	um.	Texti	les	Hote	l
0*	EC@	PS	CS	PS	CS	PS	CS	PS	cs	PS	CS	PS	CS
W+	XFLT			2.8	2.0								-
<u> </u>	XLIG							3.0	2.0				
	Average			2.8	2.0			3.0	2.0				

#### (4) Guangzhou

Indu	stries(1)	1 & S	'	<i>M</i> &	E	D. St	ores	Cons	um.	Text	iles	Hote	l
0*	EC@	PS	CS	PS	CS	PS	CS	PS	CS	PS	CS	PS	CS
S#	GNFB					3.2	2.8						
	GFDS					3.1	2.8						
	GDDS					3.1	2.6						
	GLIL							2.9	2.0				
	GNFF							2.8	1.9				
	Average					3.13	2.73	2.85	1.95				

#### Notes:

(1) Types of Industry: I & S - Iron & Steel Manufacturing

M & E

- Machines & Equipment Manufacturing

D. Stores

- Department Stores (Retailing/Servicing)

D. Stores - Department Stores (Retailing/Servicing - Consum. - Consumables Manufacturing

Textiles - Textiles Manufacturing

Hotel - Hotel Servicing

PS Planning Influence Scores after 1992

CS Control Influence Scores after 1992

O\* Types of Ownership S# Shareholding Enterprises

W+ Wholly State-Owned Enterprises

EC@ Enterprise Codes 28.12.97

Table 7D: Responsibility Accounting Style Analysis by Ownership/Industry/Location

Rank	Enterprise	RA Score#	RA Style@	Industry	Location
01	SDS1(11)*	9.24	sc	Department Store	Shanghai
02	GNFB(08)*	8.96	SC	Department Store	Guangzhou
03	GFDS(03)*	8.68	SC	Department Store	Guangzhou
04	GDDS(04)*	8.06	SC	Department Store	Guangzhou
05	XLIG(17)	6.00	FC/SC	Consumables Manu.	Xiamen
06	GLIL(16)*	5.80	FC/SC	Consumables Manu.	Guangzhou
07	BPMH(20)*	5.67	SC	Mach./Equip. Manu.	Beijing
08	XFLT(02)	5.60	FC/SC	Mach./Equip. Manu.	Xiamen
09	GNFF(07)*	5.32	FC	Comsumables Manu.	Guangzhou
10	SCM2(14)*	5.13	FC	Textiles Manufacturing	Shanghai
11	SMEF(13)	4.94	FC	Iron & Steel Manu.	Shanghai
12	BIMT(10)	4.75	FC	Mach./Equip. Manu.	Beijing
13	BCM3(18)	4.56	FC	Textiles Manufacturing	Beijing
13	BFSH(19)	4.56	FC	Hotel Servicing	Beijing
15	SXSW(15)	4.50	FC	Iron & Steel Manu.	Shanghai
16	SCCW(12)	4.37	FC	Mach./Equip. Manu.	Shanghai
16	BCRF(09)	4.37	FC	Mach./Equip. Manu.	Beijing
18	SMCW(06)	4.32	FC	Mach./Equip. Manu.	Shanghai
19	BEEF(05)	4.14	FC	Mach./Equip. Manu.	Beijing
20	SSW5(01)	4.00	FC	Iron & Steel Manu.	Shanghai

<sup>#</sup> Responsibility Accounting Score = Overall Average Planning Score x Overall Average Control Score (Post 1992)

<sup>@</sup> Responsibility Accounting Style (Post 1992)

SC = Strategic Control

FC = Financial Control

FC/SC = In between Financial Control & Strategic Control

<sup>\*</sup> Shareholding State-Owned Enterprises

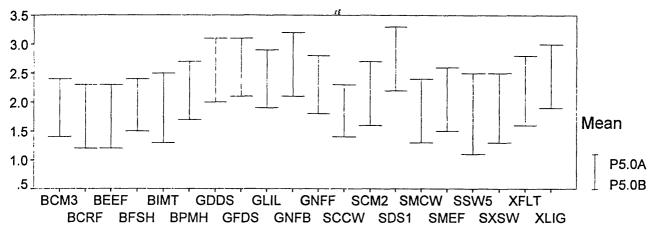
ę	
APPENDIX 2	

# Corporate Planning Influence (5.0)

Charts

## Changes Before/After 1992

#### Data Per Table 2A



SOE

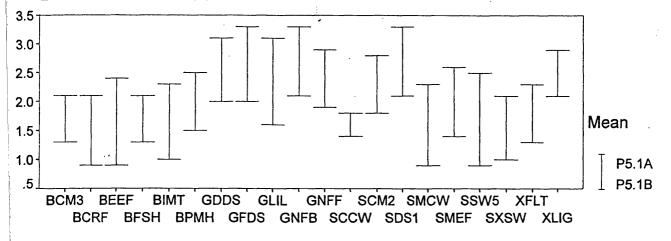
P5.0A = Mean After 1992

P5.0B = Mean Before 1992

## Organisation Structure (P5.1)

## Changes Before/After 1992

#### Data Per Table 2A



SOE

P5.1A = Mean After 1992

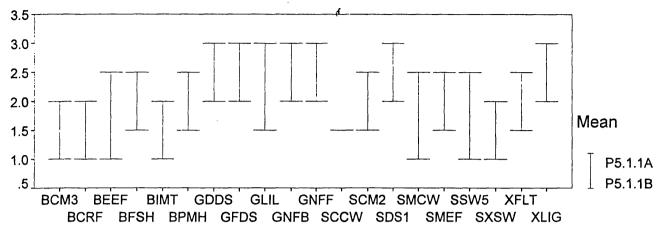
P5.1B = Mean Before 1992

# Responsibility Centre (P5.1.1)

Charts

# Changes Before/After 1992

#### Data Per Table 2A



SOE

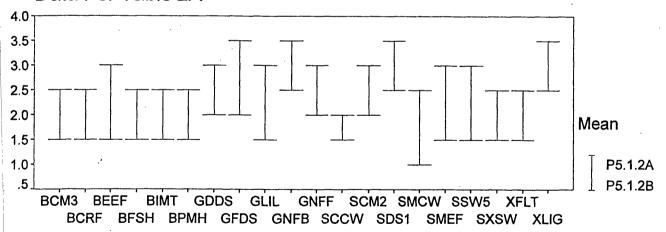
P5.1.1A = Mean After 1992

P5.1.1B = Mean Before 1992

## Decentralisation (P5.1.2)

## Changes Before/After 1992

#### Data Per Table 2A



SOE

P5.1.2A = Mean After 1992

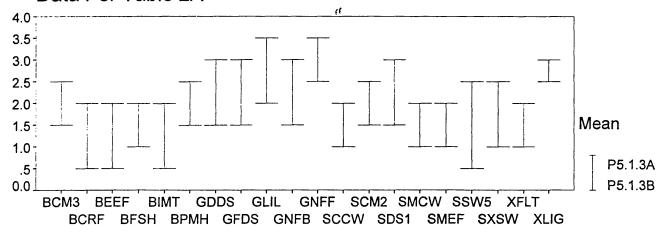
P5.1.2B = Mean Before 1992

## Appointment (P5.1.3)

Charts

## Changes Before/After 1992

#### Data Per Table 2A



#### SOE

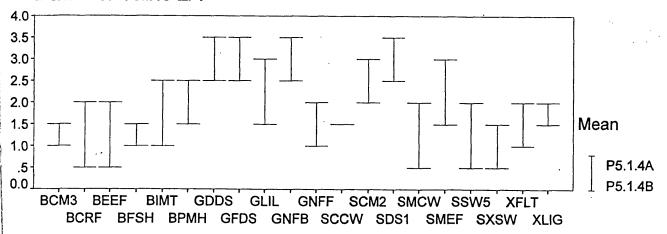
P5.1.3A = Mean After 1992

P5.1.3B = Mean Before 1992

## Interdependencies (P5.1.4)

# Changes Before/After 1992

#### Data Per Table 2A



#### SOE

P5.1.4A = Mean After 1992

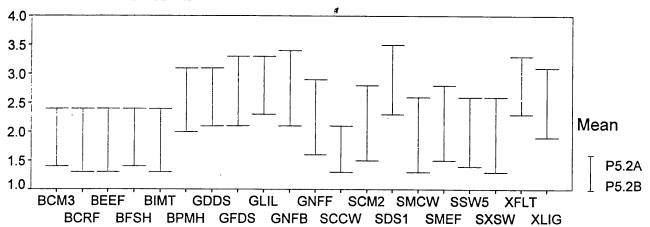
P5.1.4B = Mean Before 1992

# Review Process (P5.2)

#### Charts

# Changes Before/After 1992

#### Data Per Table 2B



SOE

P5.2A = Mean After 1992

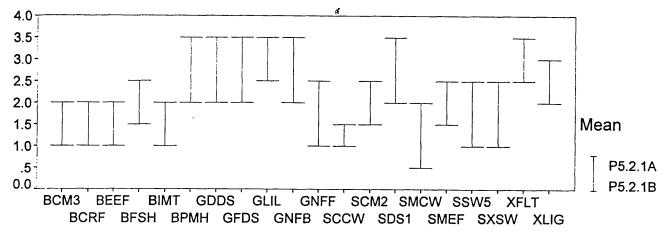
P5.2B = Mean Before 1992

# Central Planning (P5.2.1)

Charts

## Changes Before/After 1992

#### Data Per Table 2B



SOE

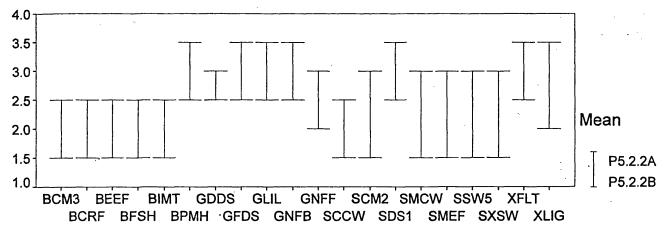
P5.2.1A = Mean After 1992

P5.2.1B = Mean Before 1992

## Operation (P5.2.2)

# Changes Before/After 1992

#### Data Per Table 2B



SOE

P5.2.2A = Mean After 1992

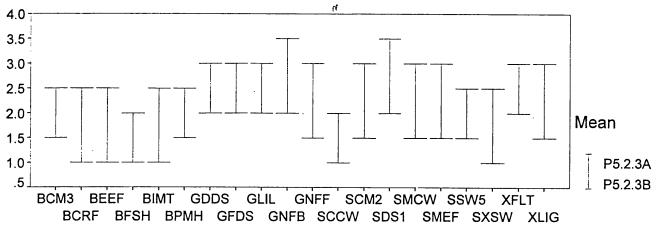
P5.2.2B = Mean Before 1992

## Participation (P5.2.3)

Charts

## Changes Before/After 1992





SOE

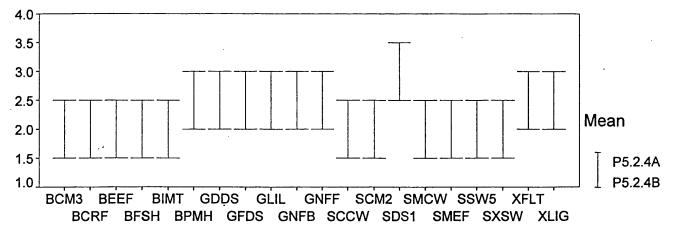
P5.2.3A = Mean After 1992

P5.2.3B = Mean Before 1992

## Review & Communication (P5.2.4)

# Changes Before/After 1992

#### Data Per Table 2B



SOE

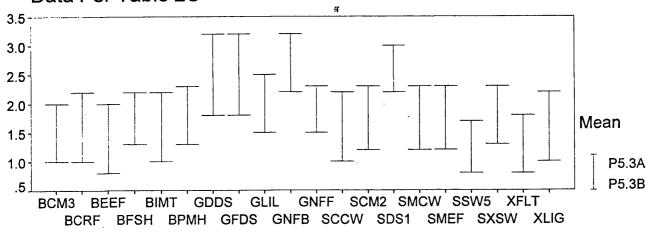
P5.2.4A = Mean After 1992

P5.2.4B = Mean Before 1992

# Strategic Themes, Thrusts & Suggestions (P5.3) Changes Before/After 1992

Charts

#### Data Per Table 2C



SOE

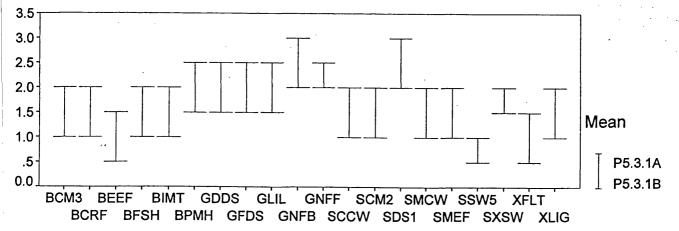
P5.3A = Mean After 1992

P5.3B = Mean Before 1992

## Themes (P5.3.1)

# Changes Before/After 1992

#### Data Per Table 2C



SOE

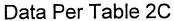
P5.3.1A = Mean After 1992

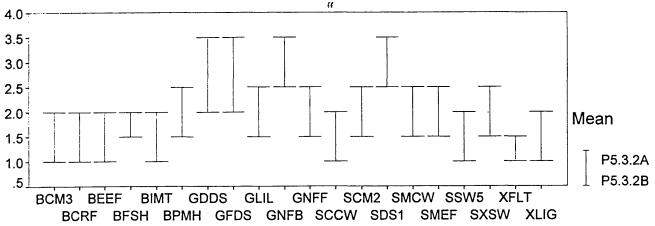
P5.3.1B = Mean Before 1992

#### Thrusts (P5.3.2)

Charts

# Changes Before/After 1992





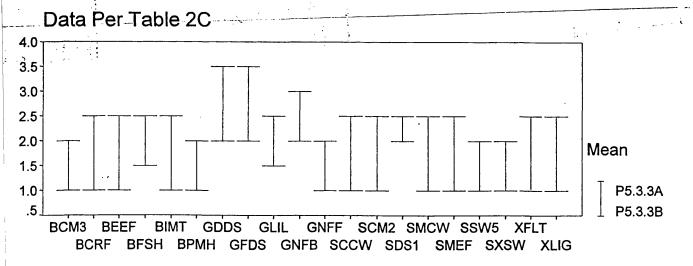
SOE

P5.3.2A = Mean After 1992

P5.3.2B = Mean Before 1992

## Suggestions (P5.3.3)

## Changes Before/After 1992



SOE

P5.3.3A = Mean After 1992

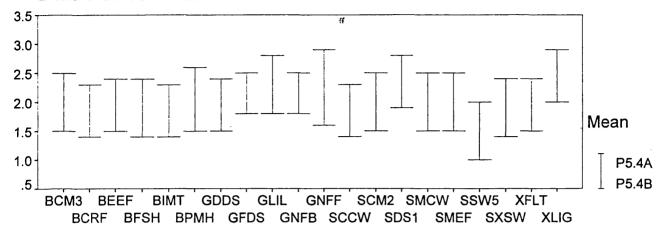
P5.3.3B = Mean Before 1992

# Long-Term Plans (P5.4)

#### Charts

# Changes Before/After 1992

#### Data Per Table 2D



SOE

P5.4A = Mean After 1992

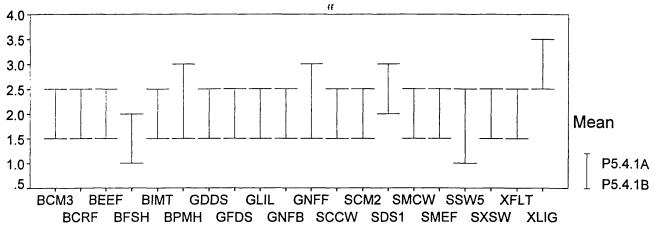
P5.4B = Mean Before 1992

#### Charts

## Central Planning (P5.4.1)

## Changes Before/After 1992

#### Data Per Table 2D



SOE

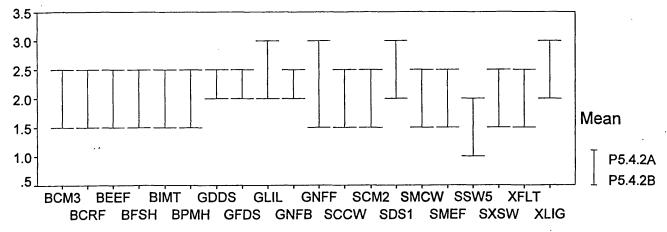
P5.4.1A = Mean After 1992

P5.4.1B = Mean Before 1992

## Operation (P5.4.2)

# Changes Before/After 1992

#### Data Per Table 2D



SOE

P5.4.2A = Mean After 1992

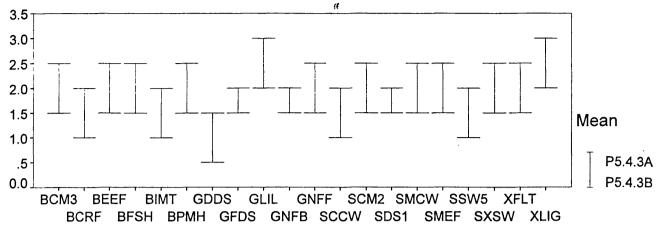
P5.4.2B = Mean Before 1992

## Participation (P5.4.3)

Charts

## Changes Before/After 1992





SOE

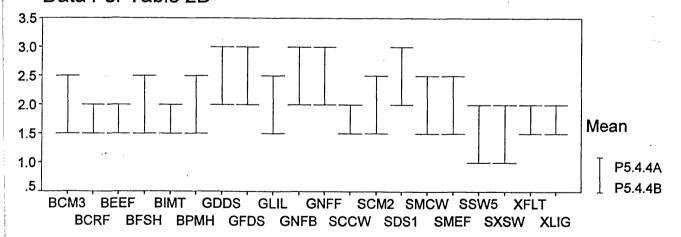
P5.4.3A = Mean After 1992

P5.4.3B = Mean Before 1992

## Review & Communication (P5.4.4)

# Changes Before/After 1992

#### Data Per Table 2D



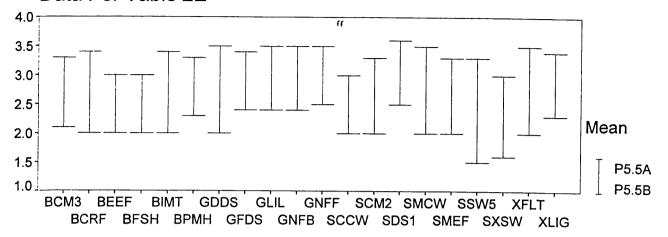
SOE

P5.4.4A = Mean After 1992

P5.4.4B = Mean Before 1992

# Changes Before/After 1992

#### Data Per Table 2E



SOE

P5.5A = Mean After 1992

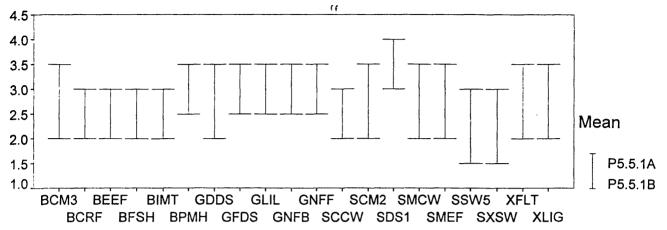
P5.5B = Mean Before 1992

## Central Planning (P5.5.1)

Charts

## Changes Before/After 1992





SOE

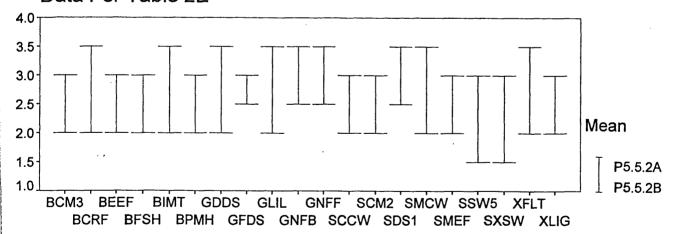
P5.5.1A = Mean After 1992

P5.5.1B = Mean Before 1992

# Operation (P5.5.2)

# Changes Before/After 1992

#### Data Per Table 2E



SOE

P5.5.2A = Mean After 1992

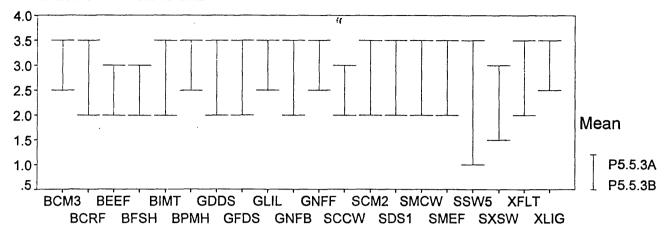
P5.5.2B = Mean Before 1992

# Participation (P5.5.3)

Charts

## Changes Before/After 1992

#### Data Per Table 2E



SOE

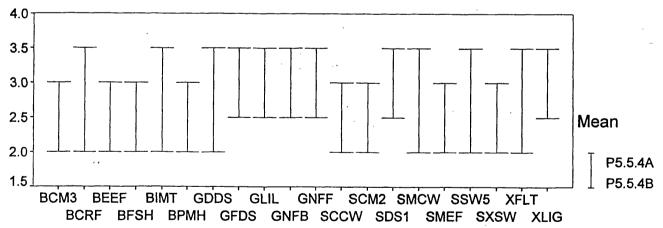
P5.5.3A = Mean After 1992

P5.5.3B = Mean Before 1992

# Review & Communication (P5.5.4)

## Changes Before/After 1992

#### Data Per Table 2E



SOE

P5.5.4A = Mean After 1992

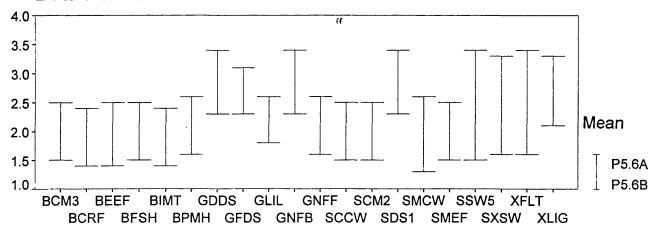
P5.5.4B = Mean Before 1992

# Internal Responsibility Contracts (P5.6)

Charts

# Changes Before/After 1992

#### Data Per Table 2F



SOE

P5.6A = Mean After 1992

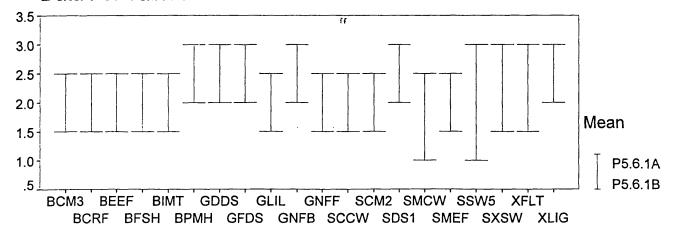
P5.6B = Mean Before 1992

### Target Bias (P5.6.1)

Charts

# Changes Before/After 1992

#### Data Per Table 2F



SOE

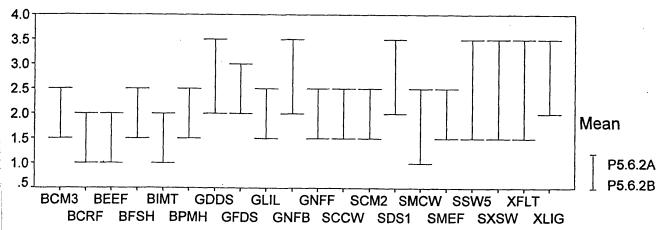
P5.6.1A = Mean After 1992

P5.6.1B = Mean Before 1992

# Participation (P5.6.2)

### Changes Before/After 1992

#### Data Per Table 2F



SOE

P5.6.2A = Mean After 1992

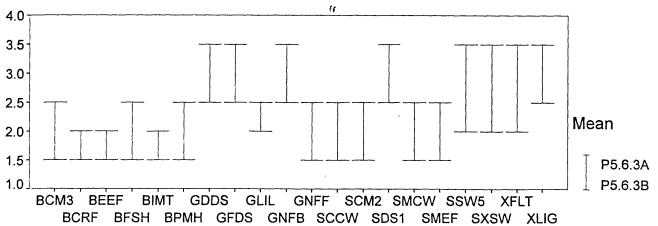
P5.6.2B = Mean Before 1992

### Review & Communication (P5.6.3)

Charts

### Changes Before/After 1992





SOE

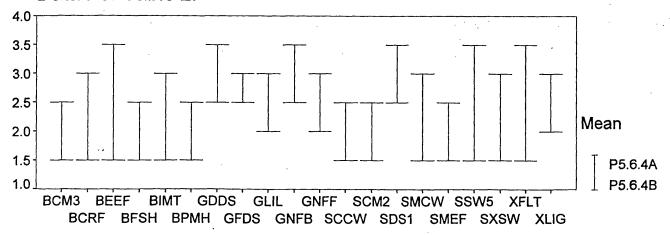
P5.6.3A = Mean After 1992

P5.6.3B = Mean Before 1992

### Incentive (P5.6.4)

### Changes Before/After 1992

#### Data Per Table 2F



SOE

P5.6.4A = Mean After 1992

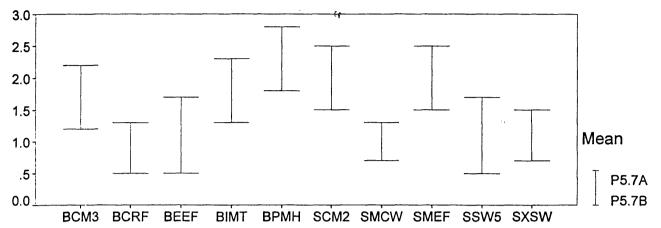
P5.6.4B = Mean Before 1992

# Management of Interdependencies (P5.7)

Charts

# Changes Before/After 1992





SOE

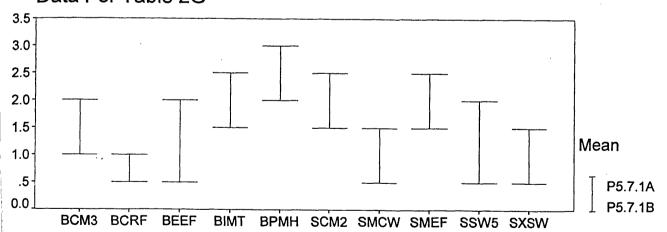
P5.7A = Mean After 1992

P5.7B = Mean Before 1992

### Characteristics (P5.7.1)

# Changes Before/After 1992

#### Data Per Table 2G



SOE

P5.7.1A = Mean After 1992

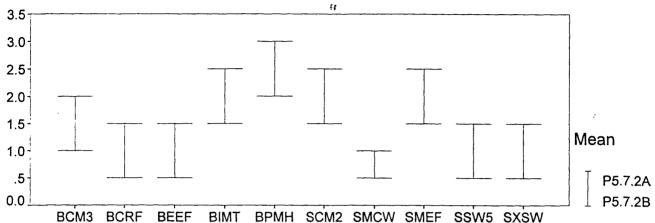
P5.7.1B = Mean Before 1992

# Participation (P5.7.2)

Charts

# Changes Before/After 1992





SOE

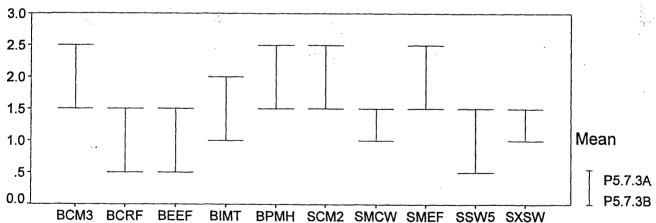
P5.7.2A = Mean After 1992

P5.7.2B = Mean Before 1992

# Review (P5.7.3)

# Changes Before/After 1992

#### Data Per Table 2G



SOE

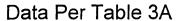
P5.7.3A = Mean After 1992

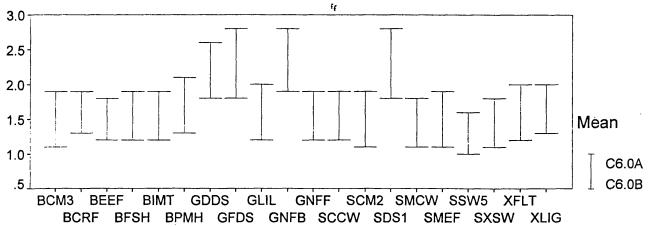
P5.7.3B = Mean Before 1992

# Control Influence/System (C6.0)

Charts

## Changes Before/After 1992





SOE

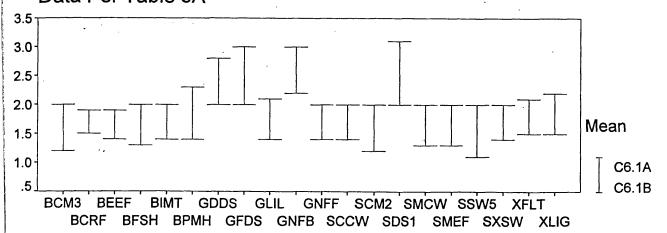
C6.0A = Mean After 1992

C6.0B = Mean Before 1992

### Decentralisation & Control (C6.1)

# Changes Before/After 1992

#### Data Per Table 3A



SOE

C6.1A = Means After 1992

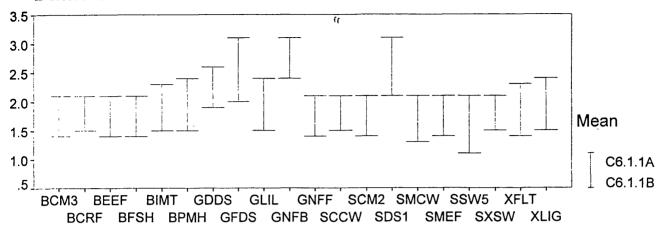
C6.1B = Means Before 1992

# Organisational Design (C6.1.1)

#### Charts

### Changes Before/After 1992

#### Data Per Table 3A



#### SOE

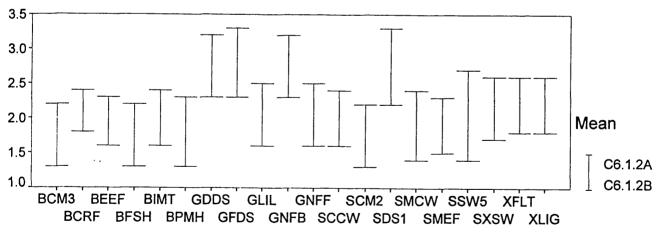
C6.1.1A = Mean After 1992

C6.1.1B = Mean Before 1992

### Personnel (C6.1.2)

#### Changes Before/After 1992

#### Data Per Table 3A



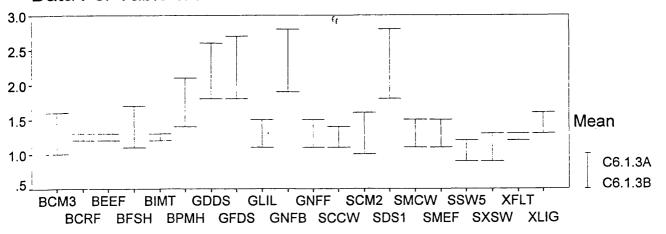
#### SOE

C6.1.2A = Mean After 1992

C6.1.2B = Mean Before 1992

### Changes Before/After 1992

#### Data Per Table 3A



SOE

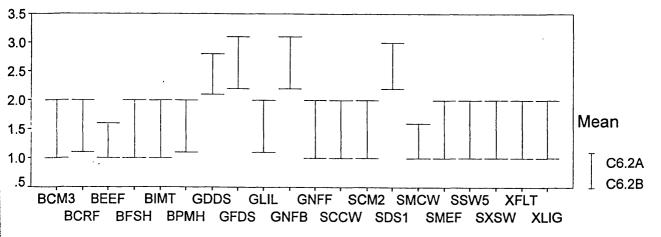
C6.1.3A = Mean After 1992

C6.1.3B = Mean Before 1992

# Agreeing Objectives (C6.2)

# Changes Before/After 1992

#### Data Per Table 3B



SOE

C6.2A = Mean After 1992

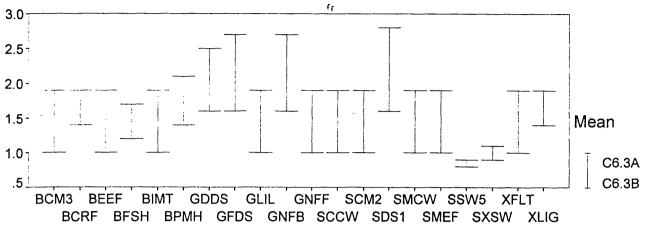
C6.2B = Mean Before 1992

# Monitoring Results (C6.3)

#### Charts

### Changes Before/After 1992





#### SOE

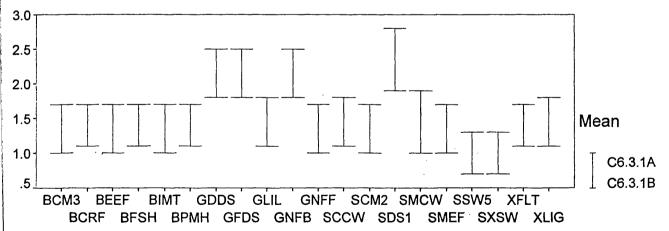
C6.3A = Mean After 1992

C6.3B = Mean Before 1992

### Reporting Requirements (C6.3.1)

### Changes Before/After 1992

#### Data Per Table 3B



SOE

C6.3.1 = Mean After 1992

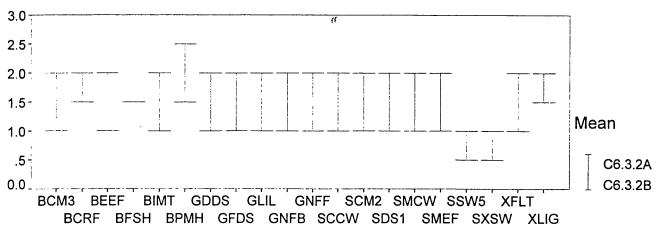
C6.3.2 = Mean Before 1992

#### Performance Measurement (C6.3.2)

#### Charts

### Changes Before/After 1992

#### Data Per Table 3B



SOE

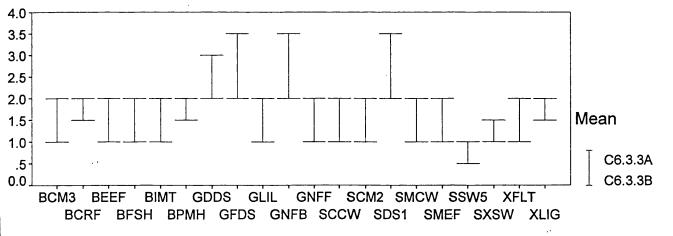
C6.3.2A = Mean After 1992

C6.3.2B = Mean Before 1992

# Review & Communication (C6.3.3)

### Changes Before/After 1992

#### Data Per Table 3B



SOE

C6.3.3A = Mean After 1992

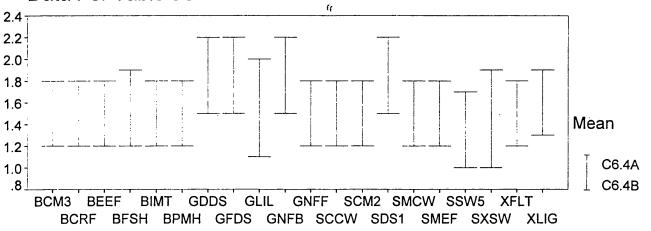
C6.3.3B = Mean Before 1992

# Rewards & Incentives (C6.4)

#### Charts

# Changes Before/After 1992

#### Data Per Table 3C



#### SOE

C6.4A = Mean After 1992

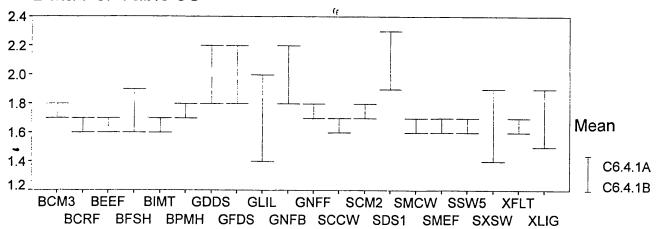
C6.4B = Mean Before 1992

# Incentives (C6.4.1)

Charts

### Changes Before/After 1992

#### Data Per Table 3C



SOE

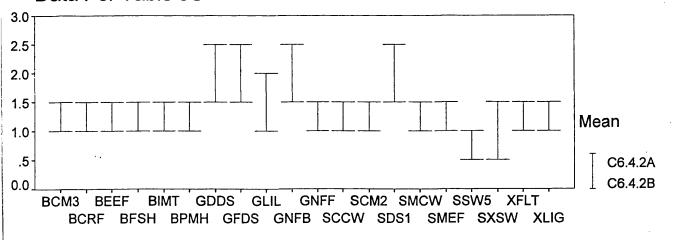
C6.4.1A = Mean After 1992

C6.4.1B = Mean Before 1992

### Performance Orientation (C6.4.2)

# Changes Before/After 1992

#### Data Per Table 3C



SOE

C6.4.2A = Mean After 1992

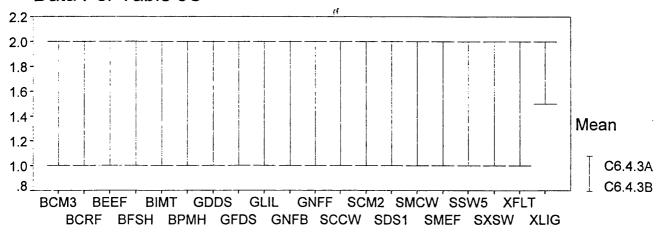
C6.4.2B = Mean Before 1992

### Participation (C6.4.3)

Charts

### Changes Before/After 1992

#### Data Per Table 3C



#### SOE

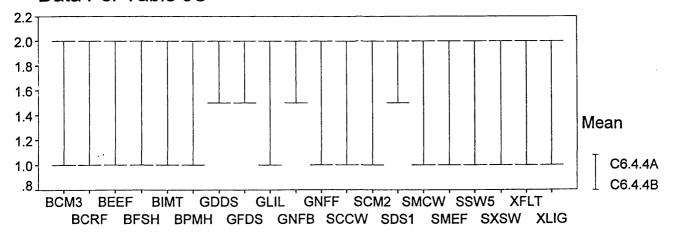
C6.4.3A = Mean After 1992

C6.4.3B = Mean Before 1992

### Review & Communication (C6.4.4)

### Changes Before/After 1992

#### Data Per Table 3C



#### SOE

C6.4.4A = Mean After 1992

C6.4.4B = Mean Before 1992

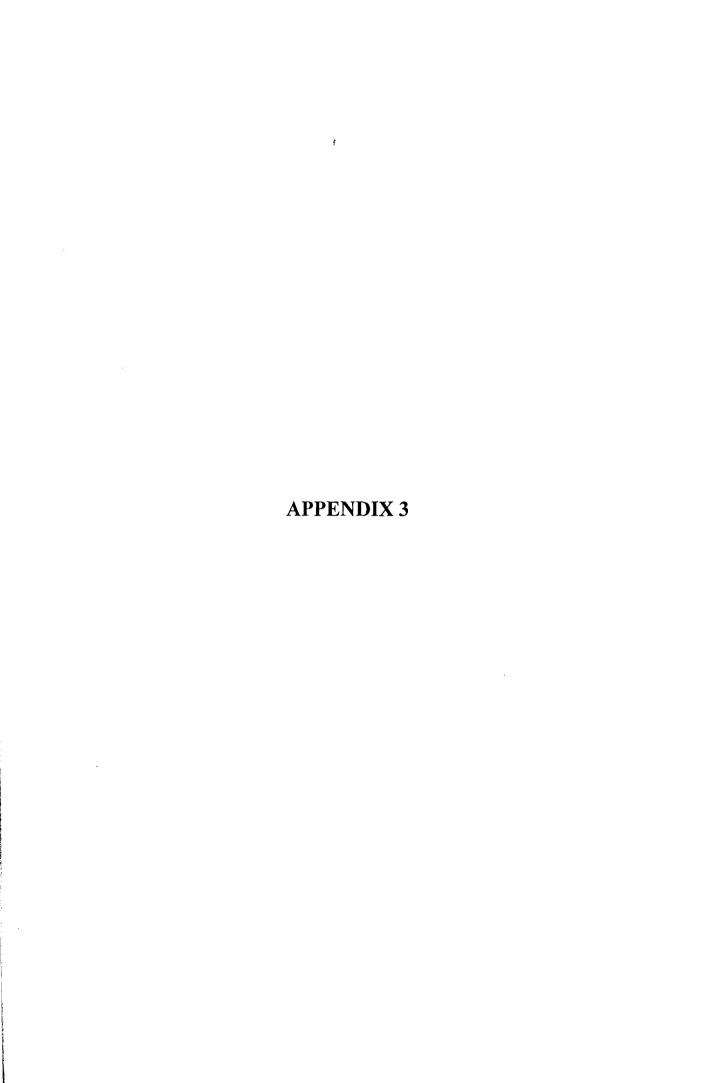
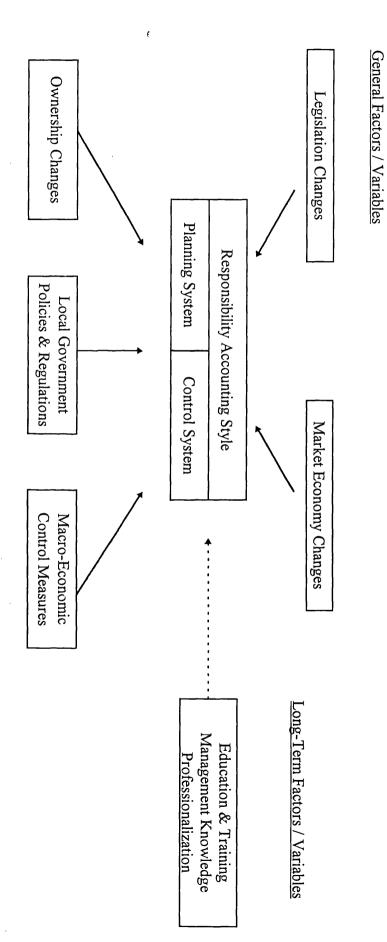
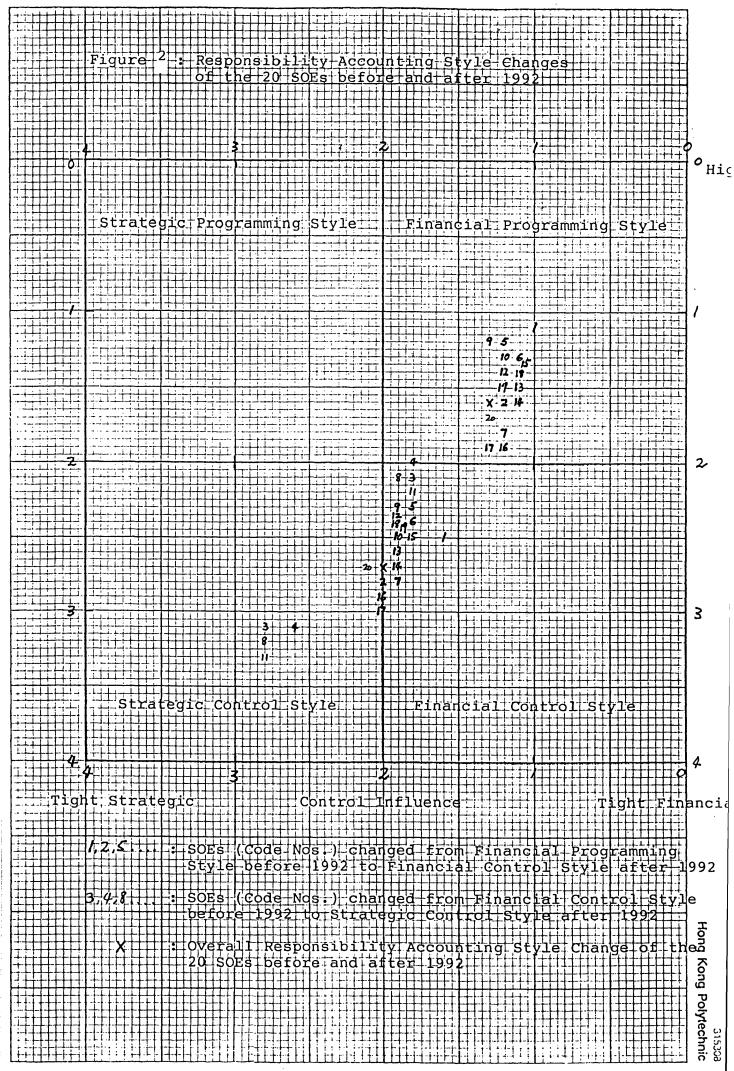


Figure 1 : Responsibility Accounting Research Domain



Specific Factors / Variables

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### **APPENDIX 4**

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.1A

P5.0A with P5.0B

Mean Rank	Cases	
10.50		- Ranks (P5.0B LT P5.0A) + Ranks (P5.0B GT P5.0A) Ties (P5.0B EQ P5.0A)
	20	Total
* z =	-3.9199	2-Tailed P = .0001

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---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.1B

C6.0A with C6.0B

Mean Rank	Cases			
10.50	20 0 0 	+ Ranks	(C6.0B LT (C6.0B GT (C6.0B EQ	C6.0A)
	20	Total		
<b>≯</b> Z =	-3.9199		2-Tailed	P = .0001

29 Nov 96 SPSS for MS WINDOWS Release 6.1

---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.2A

Mean Rank	Cases	
6.50 .00	12 0 0  12	- Ranks (P5.0B LT P5.0A) + Ranks (P5.0B GT P5.0A) Ties (P5.0B EQ P5.0A)
<b>★</b> Z =	-3.0594	2-Tailed P = .0022

\_ \_ - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.2B

C6.0A with C6.0B

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---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.3A

C6.0A with C6.0B

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---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.3B

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.4A

P5.0A with P5.0B

Mean	Rank	Cases		ŧŧ	
	3.50	-	- Ranks (F + Ranks (F Ties (F		5.0A)
*	Z =	-2.2014		2-Tailed	P = .0277

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- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.4B

C6.0A with C6.0B

Mean Rank	Cases	
3.50		- Ranks (C6.0B LT C6.0A) + Ranks (C6.0B GT C6.0A) Ties (C6.0B EQ C6.0A)
<b>*</b> Z =	-2.2014	2-Tailed P = .0277

29 Nov 96 SPSS for MS WINDOWS Release 6.1

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.5A

Mean Rank	Cases	
4.00		- Ranks (P5.0B LT P5.0A) + Ranks (P5.0B GT P5.0A) Ties (P5.0B EQ P5.0A) Total
<b>*</b> z =	-2.3664	2-Tailed P = .0180

```
29 Nov 96 SPSS for MS WINDOWS Release 6.1
                                                                  Workings 1.5B
- - - - Wilcoxon Matched-Pairs Signed-Ranks Test
    C6.0A
with C6.0B
   Mean Rank
               Cases
                     7 - Ranks (C6.0B LT C6.0A)
         4.00
                     0 + Ranks (C6.0B GT C6.0A)
          .00
                         Ties (C6.0B EQ C6.0A)
                     0
                     7
                          Total
      X = -2.3664
                                 2-Tailed P = .0180
29 Nov 96 SPSS for MS WINDOWS Release 6.1
                                                                  Workings 1.6A
- - - - Wilcoxon Matched-Pairs Signed-Ranks Test
    P5.0A
with P5.0B
    Mean Rank Cases
                     2 - Ranks (P5.0B LT P5.0A)
0 + Ranks (P5.0B GT P5.0A)
0 Ties (P5.0B EQ P5.0A)
         1.50
         .00
                     2 Total
                                 2-Tailed P = .1797
      \star Z = -1.3416
                                                                            . .-
29 Nov 96 SPSS for MS WINDOWS Release 6.1
- - - - Wilcoxon Matched-Pairs Signed-Ranks Test
                                                                  Workings 1.6B
    C6.0A
with C6.0B
    Mean Rank
                Cases
                      2 - Ranks (C6.0B LT C6.0A)
         1.50
```

---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.7A

with P5.0B

Mean Rank	Cases	
3.00		- Ranks (P5.0B LT P5.0A) + Ranks (P5.0B GT P5.0A) Ties (P5.0B EQ P5.0A)
	5	Total
<b>≭</b> Z =	-2.0226	2-Tailed P = .0431

29 Nov 96 SPSS for MS WINDOWS Release 6.1

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.7B

C6.0A with C6.0B

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- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.8A

Mean Rank	Cases	
1.50 .00		- Ranks (P5.0B LT P5.0A) + Ranks (P5.0B GT P5.0A) Ties (P5.0B EQ P5.0A)
<b>∦</b> Z =	-1.3416	2-Tailed P = .1797

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.8B

C6.0A with C6.0B

> Mean Rank Cases 1.50 2 - Ranks (C6.0B LT C6.0A) 0 + Ranks (C6.0B GT C6.0A) 0 Ties (C6.0B EQ C6.0A) .00 2 Total 2-Tailed P = .1797 $\star$  Z = -1.3416

29 Nov 96 SPSS for MS WINDOWS Release 6.1

---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.9A

P5.0A with P5.0B

> Mean Rank Cases 4.50 8 - Ranks (P5.0B LT P5.0A) .00 0 + Ranks (P5.0B GT P5.0A) Ties (P5.0B EQ P5.0A) 0 8 Total X = -2.5205

2-Tailed P = .0117

29 Nov 96 SPSS for MS WINDOWS Release 6.1

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.9B

C6.0A with C6.0B

> Mean Rank Cases 4.50 8 - Ranks (C6.0B LT C6.0A) + Ranks (C6.0B GT C6.0A) Ties (C6.0B EQ C6.0A) .00 0 Total 8 X = -2.52052-Tailed P = .0117

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.10A

P5.0A with P5.0B

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- - - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Working 1.10B

C6.0A with C6.0B

29 Nov 96 SPSS for MS WINDOWS Release 6.1

---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.11A

F 1

P5.0A with P5.0B

 ---- Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.11B

C6.0A with C6.0B

Mean Rank Cases

$$\chi$$
 Z = -1.6036 2-Tailed P = .1088

29 Nov 96 SPSS for MS WINDOWS Release 6.1

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.12A

P5.0A with P5.0B

Mean Rank Cases

$$\star$$
 Z = -1.3416 2-Tailed P = .1797

29 Nov 96 SPSS for MS WINDOWS Release 6.1

- - - - Wilcoxon Matched-Pairs Signed-Ranks Test

Workings 1.12B

C6.0A with C6.0B

Mean Rank Cases

$$\star$$
 Z = -1.3416 2-Tailed P = .1797

Workings 2.1A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	20	.942	.000	2.6900	.321	.072
P5.0B	20	. 312	.000	1.6050	.339	.076
						• \

Paire	d Differ	ences			
Mean	SD	SE of Mean	t-value	df	2-tail Sig
1.0850 95% CI (1.032,	.114 1.138)	.025	* 42.69	19	.000

#### 29 Nov 96 SPSS for MS WINDOWS Release 6.1

#### t-tests for Paired Samples

Workings 2.1B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	20	.975	.000	2.0650	.367	.082
C6.0B	20	.913	.000	1.3050	.278	.062

	red Diffe				
Mean ————	SD	SE of Mean	t-value	df 	2-tail Sig
.7600 95% CI (.707	.114	.026	* <u>29.75</u>	19	.000

#### 29 Nov 96 SPSS for MS WINDOWS Release 6.1

#### t-tests for Paired Samples

Workings 2.2A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	12	.793	.002	2.5000	.213	.062
P5.0B	12	.193	.002	1.3917	.215	.062

Pai Mean	red Diffe. SD	rences SE of Mean	t-value	df	2-tail Sig
1.1083 95% CI (1.02	.138	.040	★ 27.84	11	.000

Workings 2.2B

Variable	Numbe pai:		2-tail Sig	Mean	SD	SE of Mean
C6.0A		700	007	1.8667	.107	.031
C6.0B	12	.732	.007	1.1667	.089	.026
Mean	Paired Differ	rences SE of Mean	t-	-value	df	2-tail Sig
.7000 95% CI (	.074 .653, .747)	.021	*	32.83	11	.000

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.3A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	0	. 975	.000	2.9750	.231	.082
P5.0B	8	.915	.000	1.9250	.212	.075

Pa Mean	ired Differ SD	rences SE of Mean	t-value	df	2-tail Sig
1.0500 95% CT (1.0	.053 05. 1.095)	.019	<b>★</b> <u>55.56</u>	7	.000

#### 29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.3B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	8	. 985	000	2.3625	.424	.150
C6.0B	0	.965	.000	1.5125	.340	.120

Pai	red Diffe	rences			
Mean	SD	SE of Mean	t-value	df	2-tail Sig
.8500 95% CI (.761,	.107	.038	<b>*</b> 22.49	7	.000

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	6	.844	025	2.4333	.151	.061
P5.0B		.044	.035	1.3833	.194	.079
Pa: Mean	ired Differences SD SE o	f Mean	t-v	value	df	2-tail Sig
1.0500 95% CI (.940	.105	.043	* 2	24.52	5	.000

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.4B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A		405	210	1.9167	.098	.040
C6.0B	6	.495	.318	1.2167	.075	.031

Pa Mean	ired Diffe SD	rences SE of Mean	t-value	df	2-tail Sig
.7000 95% CI (.60	.089 6, .794)	.037	* <u>19.17</u>	5	.000

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.5A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	_			2.6143	.329	.124
P5.0B	7	.906	.005	1.4857	.353	.134

Paired Mean	d Diffe SD	rences SE of Mean	t-value	df	2-tail Sig
1.1286 95% CI (.990,	.150 1.267)	.057	<b>★</b> 19.96	6	.000

Workings 2.5B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	7	. 987	.000	1.9571	.387	.146
C6.0B	,	. 90 /	.000	1.2000	.271	.102
Pair Mean	ed Differences SD SE c	of Mean	t-:	value	df	2-tail Sig
.7571 95% CI (.639,	.127 .875)	.048	* 1	15.74	6	.000

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.6A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	2	1.000	000	2.9000	.141	.100
P5.0B	2		.000	1.7500	.212	.150
Pai	red Difference:	s	1			

Pai	red Diffe.	rences			
Mean	SD	SE of Mean	t-value	df	2-tail Sig
1.1500 95% CI (.515	.071 , 1.785)	.050	<b>*</b> 23.00	1	.028

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.6B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A				2.0000	.000	.000
C6.0B	2	•	•	1.2500	.071	.050

Pai Mean	red Diffe SD	rences SE of Mean	t-value	df	2-tail Sig
.7500 95% CI (.115	.071 , 1.385)	.050	* <u>15.00</u>	1	.042

Workings 2.7A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A				3.0200	.164	.073
P5.0B		.957	.011	1.9800	.130	.058
	red Differences		İ .		16	
Mean	SD SE C	of Mean	ξ-/	value	df	2-tail Sig
1.0400 95% CI (.972	.055 , 1.108)	.024	* _	12.46	4	.000

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.7B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	5	.983	.003	2.4200	.438	.196
C6.0B	3	.903	.003	1.5800	.349	.156

Pai	red Diffe	rences			
Mean	SD	SE of Mean	t-value	df	2-tail Sig
.8400 95% CI (.698	.114 , .982)	.051	<b>*</b> 16.47	4	.000

#### 29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.8A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	2			2.5000	.000	.000
P5.0B	<u> </u>	•	•	1.2000	.141	.100

	aired Diffe			•	
Mean	SD	SE of Mean	t-value	df .	2-tail Sig
1.3000 95% CI (.02	.141 29, 2.571)	.100	* <u>13.00</u>	1	.049

Workings 2.8B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A		4 000		1.7000	.141	.100
C6.0B	2	1.000	.000	1.0500	.071	.050

Paired Mean	Difference SD SE	es of Mean	t-value	df	2-tail Sig
.6500 . 95% CI (.015, 1.	071 285)	.050	<b>*</b> 13.00	1	.049

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.9A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	8	.866	005	2.4875	.196	.069
P5.0B	8	.866	.005	1.4000	.185	.065

Pai Mean	red Differ SD	ences SE of Mean	t-value	df	2-tail Sig
1.0875 95% CI (1.00	.099 05, 1.170)	.035	* <u>31.04</u>	7	.000

#### 29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.9B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	0	570	120	1.9125	.099	.035
C6.0B	8	.572	.138	1.2000	.076	.027

P	aired Diffe	rences			
Mean	SD	SE of Mean	t-value	df	2-tail Sig
.7125 95% CI (.6	.083 543, .782)	.030	* <u>24.15</u>	7	.000

Workings 2.10A

Variable	Numbe pa:	 Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A		0.53	1.47	3.1750	.096	.048
P5.0B		 .853	.147	2.1000	.082	.041
Mean	Paired Diffe	s of Mean	t-1	<i>r</i> alue	df	2-tail Sig
1.0750 95% CI (	.050 .995, 1.155)	 .025	* 4	13.00	3	.000

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t-tests for Paired Samples

Workings 2.10B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	Λ	.333	. 667	2.7500	.100	.050
C6.0B	<b>4</b>	. 333	.007	1.8250	.050	.025

Pai	ired Diffe	rences			
Mean	SD	SE of Mean	t-value	df	2-tail Sig
.9250 95% CI (.773	.096 3, 1.077)	.048	<b>★</b> 19.32	3	.000

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.11A

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A		0.66	222	2.9000	.100	.058
P5.0B	3	.866	.333	1.8667 .058	.058	.033
Pair	ed Differences	•	1			

Mean	Paired Differ SD	rences SE of Mean	t-value	df	2-tail Sig
1.0333 95% CI (.)	.058 890, 1.177)	.033	¥ <u>31.00</u>	2	.001

Workings 2.11B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	3	F00	667	1.9667	.058	.033
C6.0B	3	.500	. 667	1.2333	.058	.033

Pai	red Diffe	rences			
Mean	SD	SE of Mean	t-value	df	2-tail Sig
.7333 95% CI (.590	.058	.033	* <u>22.00</u>	2	.002

29 Nov 96 SPSS for MS WINDOWS Release 6.1

t-tests for Paired Samples

Workings 2.12A

Vari <b>a</b> ble	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
P5.0A	2	1.000	000	2.5500	.212	.150
P5.0B	2	1.000	.000	1.5000	.141	.100

Pa Mean	ired Diffe	rences SE of Mean	t-value	df	2-tail Sig
1.0500 95% CI (.41	.071 5, 1.685)	.050	<b>*</b> 21.00	1	.030

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and the second s

t-tests for Paired Samples

Workings 2.12B

Variable	Number of pairs	Corr	2-tail Sig	Mean	SD	SE of Mean
C6.0A	_			1.9000	.000	.000
C6.0B	2	•	•	1.1000	.000	.000

>Warning # 11836. Command name: T-TEST >The standard error of the difference is 0. This analysis cannot be >performed.

Variable	Number of Cases	Mean	SD	SE of Mean
P5.0B				
OWNER 1 OWNER 2	12 8	1.3917 1.9250	.215 .212	.062 .075

Mean Difference = -.5333

Levene's Test for Equality of Variances: F= .086 P= .772

t-tes Variances	st for Equality t-value	df 2-Tail S	-	Diff	95% CI for Diff
Equal Unequal	* <u>-5.46</u> -5.48 15	18 .0 .31 .0	00	.098	(739,328) (741,326)
Variable		Number of Cases	Mean	SD S	Workings 3.1B
P5.0A					

2.5000 .213 2.9750 .231

Mean Difference = -.4750

OWNER 1

OWNER 2

Levene's Test for Equality of Variances: F= .758 P= .395

12

	st for Equal: t-value	ity of M df	eans 2-Tail Sig	SE of Diff	95% CI for Diff
Equal Unequal	* <u>-4.72</u> -4.64	18 14.26	.000	.101	(686,264) (694,256)

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t-tests for Independent Samples of OWNER

Workings 3.1C

.062

.082

Variable	Number of Cases	Mean	SD	SE of Mean
P5.0D				
OWNER 1 OWNER 2	12 8	1.1083 1.0500	.138 .053	.040 .019

Mean Difference = .0583

Levene's Test for Equality of Variances: F= 1.671 P= .212

t-tes Variances	st for Equal	lity of Mo	eans 2-Tail Sig	SE of Diff	95% CI for Diff
Equal	* <u>1.13</u>	18	.272	.052	(050, .167)
Unequal	1.32	15.30	.205	.044	(035, .152)

Variable	Number of Cases	Mean	SD	SE of Mean
C6.0B				
OWNER 1 OWNER 2	12 8	,1.1667 1.5125	.089	.026 .120

Mean Difference = -.3458

Levene's Test for Equality of Variances: F= 96.718 P= .000

t-tes Variances	st for Equalit t-value	y of Means df 2-Tai	l Sig	SE of Diff	95% CI for Diff
Equal Unequal	<b>★</b> <u>-3.40</u> -2.81	18 7.64	.003	.102 .123	(560,132) (632,060)
Variable		Number of Cases	Mean	SD	Workings 3.2B SE of Mean
C6.0A			<del></del>		
OWNER 1 OWNER 2		12 8	1.8667 2.3625		.031 .150

Mean Difference = -.4958

Levene's Test for Equality of Variances: F= 74.284 P= .000

t-tes	t for Equali	ty of Me	eans	SE of Diff	95%
Variances	t-value	df	2-Tail Sig		CI for Diff
Equal	<b>★</b> <u>-3.92</u> <u>-3.24</u>	18	.001	.127	(762,230)
Unequal		7.60	.013	.153	(852,140)

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t-tests for Independent Samples of OWNER

Workings 3.2C

Variable	Number of Cases	Mean	SD	SE of Mean
C6.0D				
OWNER 1 OWNER 2	12 8	.7000 .8500	.074	.021

Mean Difference = -.1500

Levene's Test for Equality of Variances: F= 2.492 P= .132

t-tes Variances		for Equal -value	ity of ! df	Means 2-Tail Sig	SE of Diff	95% CI for Diff
Equal Unequal	*	-3.73 -3.46	18 11.43	.002 .005	.040	(235,065) (245,055)

---- ONEWAY ----

Variable P5.0B By Variable OWNER Workings 3.3A

Analysis of Variance

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Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups	3 16	1.1396 1.0499	.3799 .0656	<b>★</b> 5.7889	.0071
Total	19	2.1895	.0050		

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---- ONEWAY ----

Workings 3.3B

Variable P5.0A By Variable OWNER

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups Total	3 16 19	1.0681 .8899 1.9580	.3560 .0556	* <u>6.4013</u>	.0047

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---- ONEWAY ----

Workings 3.3C

Variable P5.0D By Variable OWNER

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups Total	3 16 19	.0392 .2063 .2455	.0131 .0129	¥ <u>1.0139</u>	.4124

---- ONEWAY ----

Workings 3.4A

Variable C6.0B By Variable OWNER

Analysis of Variance

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Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups Total	3 16 19	.5082 .9613 1.4695	.1694 .0601	* <u>2.8192</u>	.0722

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---- ONEWAY ----

Workings 3.4B

Variable C6.0A By Variable OWNER

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups Total	3 16 19	.8520 1.7135 2.5655	.2840 .1071	* <u>2.6520</u>	.0840

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---- ONEWAY ----

Workings 3.4C

Variable C6.0D By Variable OWNER

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	3	.0539		¥ 1.4795	.2578
Within Groups	16 19	.1941	.0121		
Total	19	.2480			

---- ONEWAY ----

Workings 3.5A

Variable P5.0B By Variable OWNER

Analysis of Variance

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Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups Total	5 14 19	1.8828 .3067 2.1895	.3766 .0219	* <u>17.1911</u>	.0000

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---- ONEWAY ----

Variable P5.0A By Variable OWNER Workings 3.5B

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	5	1.5968	.3194	<b>*</b> 12.3762	.0001
Within Groups	14	.3613	.0258		
Total	19	1.9580			

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---- ONEWAY ----

Workings 3.5C

Variable P5.0D By Variable OWNER

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	5	.1376	.0275	<b>★</b> 3.5697	.0273
Within Groups	14	.1079	.0077		
Total	19	. 2455			

---- ONEWAY ----

Workings 3.6A

Variable C6.0B By Variable OWNER

Analysis of Variance

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Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups Total	5 14 19	1.4103 .0592 1.4695	.2821 .0042	* <u>66.7425</u>	.0000

04 Dec 96 SPSS for MS WINDOWS Release 6.1

---- ONEWAY ----

Workings 3.6B

Variable C6.0A By Variable OWNER

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups	5	2.4401	.4880	¥ 54.4763	.0000
Within Groups Total	14 19	.1254 2.5655	.0090		

04 Dec 96 SPSS for MS WINDOWS Release 6.1

---- ONEWAY ----

Workings 3.6C

Variable C6.0D By Variable OWNER

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob.
Between Groups Within Groups	5 14	.1601 .0879	.0320	* <u>5.0984</u>	.0072
Total	19	.2480	.0005		

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# RESPONSIBILITY ACCOUNTING IN CHINA -TOWARDS AN EXPLORATORY FRAMEWORK

By

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The 20 Case Analyses Attached with

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## UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

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Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 1
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Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the **responsibility** accounting style grid.

For further details, please refer to the case writing of "Data Analysis 1" (28 January 1994).

\_\_\_\_\_\_\_

#### Name of SOE: Shanghai No.5 Steel Works (SSW5)

Staff Interviewed: Mr Huang Han Bin, Assistant Chief Accountant
(No. of years in this enterprises: 15 years)

Dates of Visits : First Visit - 13 September 1991

Second Visit - 25 January 1992
Third Visit - 16 September 1992
Fourth Visit - 27 May 1993
Fifth Visit - 10 September 1993
Sixth Visit - 6 September 1994
Seventh Visit - 7 February 1995

### Section 1: History & Background (Q.1.1-5)

- SSW5 is a wholly state-owned enterprise established in 1958 and is situated at the North-Eastern suburb District) of the Shanghai city. SSW5 has over 40 factories and buildings scattered in between the Sitang River stream and the busy Tongji Road. They have covered a big piece of land and actually formed a small town of its own. its own two railway lines connecting to the Shanghai Central Therefore, SSW5 can make use of the river, main road and railway to transport raw materials in and finished goods out. (refer to Q.1.1)
- is one of the top 5 iron and steel products manufacturers in Shanghai with an annual production volume of 1.3 million tons in 1993. (Q.1.2)
- The major products of SSW5 can be classified into the 1.3 following 12 categories: (Q.1.3)
  - Carbon Construction Steel
- (7) Spring Steel
- (2) Alloy Constructure Steel
- (8) Carbon Tool Steel
- High Speed Tool Steel (3)
- (9) Stainless Steel
- (4)Heat Resisting Steel
- (10) Alloy Tool Steel (11) Super Alloy
- Anchor Chain Steel (5)
- (6) Titanium & Titanium Alloy
- (12) Rearing Steel
- About 90% of SSW5's products are sold domestically and the 1.4 rest are exported to the USA, Japan and other Southeast Asian countries. (Q.1.4)
- SSW5 has granted the "Import/Export Right" by the government 1.5 in 1993, so that it can further explore the overseas markets during the coming 9th Five-Year Plan (1996-2000). However, the Assistant Chief Accountant, Mr Huang Han Bin, has mentioned that because of the old production technology, low productivity and high overheads, the selling prices of SSW5's products are higher than the imported iron and steel products, therefore, the export proportion may be lower than 10% in the next few years. (Q.1.5)

### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

SSW5 has been a wholly state-owned enterprise before and 2.1 There is no plan to transform into a after 1992. shareholding enterprise in the next five years because it is the government policy to keep a macroeconomic control over the steel industry in China. (Q.2.1)

- 2.2 SSW5 is holding some self-financed and small tertiary enterprises (i.e. retailing, restaurant, trading, which are not related to the core business. (Q.2.4)
- The organisation structure of SSW5 can be divided into three major parts, inter alia, Management, Production and Service functions. (Q.2.3)
- The management function is represented by the "Headquarters" 2.4 in which there are 8 departments (all expense centres) including: (Q.2.5)
  - General Manager Office (General Manager) (1)
  - Accounting & Finance Department (Chief Accountant)
  - Production & Control Department (Chief Engineering) (3)
  - Production Technology Department (Deputy-GM) (4)
  - Sales & Marketing Department (Deputy-GM) (5)
  - Personnel & Manpower Department (Deputy-GM)
  - (7) Estate & Development Department (Deputy-GM)
  - (8) Employees Welfare Department (Deputy-GM)
- The production function is composed of 12 manufacturing 2.5 factories and 4 supporting factories which are all treated as separate divisions or profit centres with some interdependencies due to the process production nature. These 16 factories are listed below: (Q.2.5 & 2.9)

#### Manufacturing Factories\* \_\_\_\_\_\_\_

- (1) No.1 Melting & Casting Factory [output goto (3) & (4)]@
- No.2 Melting & Casting Factory [output goto (3) & (4)] (2)
- Initial Rolling Factory [output goto (5), (6) & (7)] (3)
- [output goto (5), (6) & (7)] [output goto (8)] Forge Pressing Factory (4)
- No.1 Refine Rolling Factory (5)
- [output goto (9) & (10)] (6) No.2 Refine Rolling Factory
- [output goto (9),(10) & (11)] (7) No.3 Refine Rolling Factory
- Steel Tube Factory (8)
- [output for sales]
  [output for sales] Cold Drawing Factory (9)
- (10) Strip Drawing Factory
- [output for sales]
- (11) Wire Drawing Factory
- (12) Converter Factory [output for sales]
  - \* Each factory manager has its own functional staff like marketing and sales, purchasing and supply, repair and maintenance, transportation, accounting, personnel, etc. These functional staff are reporting to the corresponding departments in the headquarters as well.

[output for sales]

@ The intermediate outputs of factories (1) to (7) can also be sold externally although it is not the general policy adopted.

### Supporting Factories\*\* \_\_\_\_\_\_

- (13) Durable Material Factory (i.e. bricks)
- (14) Coal Gas Factory
- (15) Electricity Factory
- (16) Oxygen Factory
  - \*\* These supporting factories supply their outputs to the above 12 manufacturing factories and also to the other management and service departments.
- 2.6 The service function is headed by another Deputy-GM and contains the following departments which are all expense centres: (Q.2.5 & 2.9)
  - (1) Purchasing Department
  - (2) Inventory Control Department
  - Transportation Department (3)
  - (4)Repair & Maintenance Department
  - (5) Quality Control Department
  - Computer Department (6)
- 2.7 SSW5 is under the administration of the Shanghai Municipal Government and the Shanghai Metuallurgical Bureau who dictated all planning and control systems of SSW5 before 1992. (Q.2.6 & 2.7)
- SSW5 is a large SOE having 23,000 employees. Mr Huang has said that about 20% of SSW5's employees are redundant but the life-long employment concept still exists. (Q.2.10)

# Since SSW5 is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to SSW5. \_\_\_\_\_\_

### Section 3: Financial Indicators (Q.3.1-8#)

- (historical cost) (Q.3.1) 3.1 Total assets : RMB5,000M
- : RMB2,800M (1992) 3.2 Turnover RMB3,800M (1993)RMB4,500M (1994)

RMB4,800M (1995 forecast) (Q.3.2 & 7)

- 150M (1992) 5.4% of sales 3.3 Income before tax : RMB
  - 190M (1993) 5.0% of sales RMB 170M (1994) - 3.8% of sales\* RMB

- RMB 175M (1995 forecast) (Q.3.5, 6 & 7)
- \* The decrease of profit margin was mainly due to inflation.
- Income tax rate : 33% (before and after 1992) (Q.3.6) 3.4

- 3.5 SSW5 is planning to maintain an average growth rate in turnover from 15% to 20% during 1996 to 2000. Mr Huang is quite optimistic on this forecast since the overall demand of iron and steel products is in parallel with the uprising trend of the economic development in China. (Q.3.7 & 8)
- # Q.3.4 is not applicable to SSW5 because it is neither a holding nor a subsidiary enterprise.

### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 SSW5 signed the first 5-year's ERC (1983-1987) with the Shanghai Municipal Government in 1983. (Q.4.1)
- Based on the actual performance of 1980 to 1982, the following major targets were set in the ERC: (Q.4.2-4~&~6) (1) Profit target RMB10M in 1983 and then 5% annual growth 4.2

  - Handover 50% of target profit to government (2)
  - (3) Income tax of 33%
- There were different forms of ERCs for the state-owned enterprises to choose from and which had different financial and non-financial targets. The chosen format was mutually agreed between the government and SSW5. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. Mr Huang believed that the growth rate of 5% was underestimated and proved by the actual results subsequently. (Q.4.5,7-10)
- The second ERC (1988-1992) increased the profit growth rate 4.5 to 7%. SSW5 achieved the targets all the years. (Q.4.5 &9)
- 4.6 The second ERC was ceased in 1991 and SSW5 has been subject to sales, profit and other taxes. Furthermore, the annual gross wages growth rate cannot exceed the profit growth rate and productivity per employee growth rate. Despite the removal of with the ERC, Mr Huang has said that in the recent years SSW5 still had to agree the output volume and turnover level with the government. (Q.4.12 & 13)

5

### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Very High-High Corporate
  (0.9)" before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 16 production factories were "cost centres" managed by the factory managers. All the other management and service departments were "expense centres" under tight expense budgets.
- After 1992: all the 16 production factories have become "profit centres" managed by the factory managers with more autonomy in management and operation. All the other management and service departments remain "expense centres" whose managers participate in the budgeting process. Mr Huang has said that there would be no significant changes in SSW5's organisation structure in the next few years.

Corporate Planning Influence\* : "Very High-High (1)" to "Medium (2.5)"

Greatest Influence \* By using a 5-point scale -(0) Very High (consistent with the scale High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify (3) Low some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0	-	0.5)
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	$[\Lambda\Gamma]$	(3.6	-	4.0)

- (2) Decentralization (Q.5.1.2)
- Before 1992: the factory managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.

  Therefore, classifying the factories into cost centres were appropriate.

After 1992: the primary profit responsibility lies with the factory managers who initiate the annual budgets and IRCs and get their subordinates (middle and lower management) involved. Obviously, changing into profit centres is reasonable.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- (3) Appointment (Q.5.1.3)
- Before 1992: the general manager and party secretary were appointed by the government, and other senior appointments and major organisational changes required government's approval.
- After 1992: the general manager and party secretary are still appointed by the government. The general manager can appoint all the other senior staff such as the factory managers. The factory managers can decide their own organisation structures and personnel affairs but important changes should be approved by the headquarters. Mr Huang has mentioned that in fact the party secretary was the representative from the government to ensure some sort of macroeconomic policies are under control.

Corporate Planning Influence : "Very High (0.5)" to "Medium (2.5)"

- (4) Interdependencies (Q.5.1.4)
- Before 1992: the transfer prices of internal cross-supplies were determined by the headquarters by using standard cost plus fixed profit margin.
- After 1992: the transfer prices are based on market prices and negotiations are allowed but final decisions are made by the headquarters.

Corporate Planning Influence : "Very High (0.5)" to "High-Medium (2)"

Summary of Corporate Planning Factors	Influence : Before 1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	VH-H (1.0) High (1.5) VH (0.5) VH (0.5)	Medium (2.5) M-L (3.0) Medium (2.5) H-M (2.0)
Overall Planning Influence	VH-H (0.9)	Medium (2.5)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium-Low Corporate (2.6)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long-term planning was initiated, monitored, reviewed and modified by the government while the top management was in consultation only. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the government.
- After 1992: the government has delegated the long term planning and annual budgeting autonomy to the top management but Mr Huang has said that strategic plans still have to be reviewed, discussed and modified with the government.

Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning committee and procedures were in existence to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the factory managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was a top-down process but middle management (i.e. factory managers) did participate in the annual planning & budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the government reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: Long term plans are reviewed by the top management during every year end and significant changes should be discussed with the government and informed the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made but flexible budgets are not used.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	VH-H (1.0) High (1.5) VH-H (1.0) High (1.5)	Medium (2.5) M-L (3.0) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.3)	M-L (2.6)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "Very High-High Corporate
  (0.8)" before 1992 to "High-Medium Corporate (1.7)" after
  1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "Quality" has been the major strategic theme given to and imbedded into the planning and control system. Different types of national and international quality standards have been adopted by the top management.

After 1992: as before 1992 except that factory managers have participated in setting some production and product quality standards. This is very important under the prevailing open market economy environment.

Corporate Planning Influence: "Very High (0.5)" to "Very High-High (1)"

\* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.

### (2) Thrusts (Q.5.3.1 & 4)

Before 1992: technology improvement, efficiency enhancement and capacity expansion have been the major strategic thrusts which were incorporated into long term plans with consultation from the middle or lower management only.

After 1992: as before 1992 but factory managers have been encouraged to make strategic or tactical suggestions to realise these strategic thrusts which are the crucial elements to compete with many strong counterparts all over China.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

#### (3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, transfer price, personnel, incentive scheme, sales and marketing etc.

After 1992: the headquarters has left more freedom to the factory managers to adjust their planning and operation as long as they would not deviate much from the long term plan and annual budget.

Corporate Planning Influence: "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	VH (0.5) VH-H (1.0) VH-H (1.0)	VH-H (1.0) H-M (2.0) H-M (2.0)
Overall Planning Influence	VH-H (0.8)	H-M (1.7)

### 5.4 Long-Term Plans

[Planning Influence changed from "Very High-High Corporate (1)" before 1992 to "Medium Corporate (2.1)" after 1992]

- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the government in terms of production facilities, volume and mix, right to export, product and market development.
- After 1992: the top management has to initiate its own long term plans and compromise with the government who may insist on certain macro-targets such as output volume and mix. The current 5-year planning (1991-1995), includes production differentiation and diversification, production technology and facility enhancement, production capacity expansion, market penetration and diversification, manpower and training, and financial planning.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the government to formulate, evaluate, implement, monitor and review the long term plans. It was a mean for the government to allocate limited resources, such as capital, to SSW5 according to the central plans.
- After 1992: formal planning committee and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. It is a way for the top management to allocate limited resources to different divisions according to the market demand, product profitability and government suggestions.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

(3) Participation (Q.5.4.4 & 6)

Before 1992: the involvement from middle management (i.e. factory managers) was limited to consultation only.

After 1992 : factory mangers are members of the planning committee but they seldom initiate changes but mainly concern the impact on their annual budgets and IRCs which they are measured on.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992: 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employee's representatives during the annual general meeting.

After 1992: the planning committee reviews the 5-year plan every year before the annual planning cycle and significant changes are reported to the government for endorsement and sometimes assistance such as seeking a long term bank loan. A summary of the long term plans is distributed to all members of the planning committee.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 199	2	After 1	992
Central Planning Operation Participation Review & Communication	VH-H (1 VH-H (1	0)	Medium H-M H-M H-M	(2.5) (2.0) (2.0) (2.0)
Overall Planning Influence	VH-H (1	0)	Medium	(2.1)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because SSW5 caters for the capital budgets during the long term planning exercise.

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- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government interfered into the process and provided major targets. Top management had to negotiate and compromise for approval.
- After 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992 : top management initiated the key budgets i.e. sales production volume and mix, labour and materials, then compromised with the factory managers.

  Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different profit and cost centres.
- After 1992: top management provided major guidelines to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins as shown on Appendix A attached.

  Long term plans, special projects, product demands and profitability are considered in this annual resource allocation exercise.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- (3) Participation (Q.5.5.3 & 5)
- Before 1992: middle management i.e. factory managers were asked to discuss and compromise the budgets provided by the top management without much rooms for negotiation and effective communication.

After 1992 : factory managers have to formulate their own budgets and get the lower management involved but top management's expectations should be observed. This change of budgeting style maintains better understandings between the different levels of management at least to work out a set of more realistic budgets which are acceptable by the factories and departments to be measured against. (This favourable comment has been expressed by Mr Huang.)

Corporate Planning Influence : "Very High-High (1)" to "Low (3.5)"

- (4) Review & Communication (0.5.5.6 & 8)
- Before 1992 : annual plans and budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes.

  Annual plans were communicated to middle and lower management in document twice every year.
- After 1992: planning committee reviews the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors. A fixed budget concept is still in force. Other than AGM and budget book, the budget information is further communicated between top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"

Summary of Corporate Planning Influence:

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	High (1.5) High (1.5) VH-H (1.0) H-M (2.0)	M-L (3.0) M-L (3.0) Low (3.5) Low (3.5)
Overall Planning Influence	High (1.5)	Low (3.3)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Low Corporate (3.4)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: major targets set were production volume and mix, and standard costs while qualitative targets such as safety, quality, resource consumption etc. were also defined. Since most of these targets were top down without much negotiations, therefore, factory or department managers did not have much control. The IRC system was started in 1985 during the first ERC (1983-1987) period. The IRCs mainly applied to the production factories.
- After 1992: major target is internal profit to be achieved by the factory managers. Quantitative targets such as production volume and mix, energy consumption, and other qualitative targets like product quality, new product development, production facilities and technology, management techniques, safety etc. are also included but they carry much less weightings than the internal profit. A sample of IRC is shown in section 5.6 of the Data Analysis Set 1.

Corporate Planning Influence : "Very High-High (1)" to "Medium-Low (3)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)

Before 1992 : factory managers negotiated and compromised the given IRC targets during the annual planning cycle.

After 1992 : factory managers have to initiate, quantify and justify the major IRC targets before negotiating with the top management. According to Mr Huang, the factory managers are more proactive in setting the targets in the IRC.

Corporate Planning Influence: "High (1.5)" to "Low (3.5)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: IRCs were reviewed in the middle of the year and amendments could be made when mutually agreed by the top management and factory managers. IRCs were documented and informed to the respective factory managers and their employees.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. Second-tier IRCs are signed between the factory manager and production lines in order to further delegate the planning and control responsibilities. Mr Huang agreed that IRC was an effective way to achieve the short term targets on one hand and improve the budget communication between the different levels of management on the other hand. Furthermore, IRC can link up performance with the incentive scheme as a fair means for resource (i.e. bonus) distribution.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

### (4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the factory managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence : "High (1.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	VH-H (1.0) High (1.5) H-M (2.0) High (1.5)	M-L (3.0) Low (3.5) Low (3.5) Low (3.5)
Overall Planning Influence	High (1.5)	Low (3.4)

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5.7 Management of Interdependencies (Transfer Pricing)
[Planning Influence changed from "Very High Corporate (0.5)"
before 1992 to "High-Medium Corporate (1.7)" after 1992]

(1)	Characteristics (Q.5.9.1-7)				
		Before 1992	After 1992		
1.1	Interdepen-	All 16 production	All 16 production		
	dencies	factories involved	factories involved#		
1.2	Transfer	Standard cost plus	Adjusted market		
	Price Basis	fixed profit margin	price		
1.3	Transfer Price	A little between the	Some negotiations		
	Negotiation	buyer and seller	are allowed		
1.4	Intermediate	Buy and sell available	Buy and sell*		
	Product	in the market	available in market		
1.5	Transfer	All determined by the	Excess over quota		
	Quantity	headquarters	can sell externally		
1.6	Arbitration	Prices and quantities	Mainly determined by		
		all determined by HQ	HQ although negotia-		
			ions are allowed		
1.7	Government	No, except the output	No, only suggest		
	Interference	volumes & selling	volumes & prices of		
		prices of final products	final products		

Corporate Planning Influence : "Very High (0.5)" to "High-Medium (2)"

# Please refer to the organisation structure in section 2.5 above to show the inter-relationships of the 16 production factories.

\* First of all, the internal transfers must satisfy the needs of the manufacturing factories, and then any excess production can be sold to the external customers. Sometimes insufficient internal supplies are made up by purchasing from outside but approval is required from the purchasing department in the headquarters.

### (2) Participation (Q.5.9.8)

Before 1992: nearly all the transfer prices and quantities were determined by the headquarters and the factory managers were consulted sometimes. Any conflicts were arbitrated by the headquarters. Factory managers didn't care much because they were measured by production volume & cost.

After 1992: most of the transfer prices and quantities are still controlled by the headquarters although some negotiations are allowed for the factory managers because they are measured on internal profit. Interference from and arbitration by the the headquarters are quite often. Mr Huang said that it was because the demand and supply of steel products in the market have been quite volatile in the 1990s, so the headquarters, having more information, could make better decisions on transfer quantities and prices.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

### (3) Review (Q.5.9.9-12)

Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management. It was historical cost plus inflation plus profit margin. The transfer prices were reviewed in the middle of the year and some amendments were allowed

After 1992: the market prices have been volatile since 1993, the transfer prices are reviewed monthly. For any changes of plus or minus 5%, transfer prices will be adjusted by the headquarters. Information is available in the market and sufficient to make the changes reflecting reasonable transfer prices.

Corporate Planning Influence : "Very High (0.5)" to "High (1.5)"

Summary of Corporate Planning Influence :

	=====	=======	=====	======
Overall Planning Influence	VH	(0.5)	H-M	(1.7)
Characteristics Participation Review	VH VH VH	(0.5) (0.5) (0.5)	H-M High High	(2.0) (1.5) (1.5)
Factors	Befor	e 1992	After	1992

### Section 6 : Control System

## 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.1)" before 1992 to "Moderate Financial (2)" after 1992]

		======	=====	======	=====
		High	(1.1)	Medium	(2.1)
					<b></b>
1.4	Interactions	H-M	(2.0)	Low	(3.5)
	Roles & functions	H-M	(2.0)	M-L	(3.0)
	3				
1.2	Staffing	VH	(0.5)	VH-H	(1.0)
1.1	Structure	VH	(0.0)*	VH-H	(1.0)
		Before		After 1	
(1)	Organisational Design				
/ - \	0	10 6 7 7 1			

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	C<			-Tight	Financial
Control				Contro	ol

Tight Financial	(0.0 - 1.0)
Financial	(1.1 - 1.5)
Moderate Financial	(1.6 - 2.0)
Moderate Strategic	(2.1 - 2.5)
Strategic	(2.6 - 3.0)
Tight Strategic	(3.1 - 4.0)

(2) Personnel# (Q.6.1.1)

		=====	======	=====	======
		High	(1.4)	M-L	(2.7)
2.6	Termination	VH	(0.0)	VH	(0.5)
2.5	Remuneration	High	(1.5)	M-L	(3.0)
2.4	Evaluation	H-M	(2.0)	Low	(3.5)
2.3	Training	H-M	(2.0)	Low	(3.5)
2.2	Assignment	H-M	(2.0)	Low	(3.5)
2.1	Recruitment	VH-H	(1.0)	H-M	(2.0)
•		Before	1992	After	

# Mr Huang said that since 1992, more delegation has been given to the factory managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the headquarters and the party secretary.

	VH-H	(0.9)	High	(1.2)
				(2.0)
Communication*	VH	(0.5)	VH-H	(1.0)
Qualitative targets	High	(1.5)	High	(1.5)
	VH-H	(1.0)	High	(1.5)
	High		VH-H	(1.0)
		•	VH-H	(1.0)
Budget	VH	•	VH-H	(1.0)
			After	
Control Mechanisms (Q.6				
		Before Budget VH IRC VH Financial targets Quantitative targets VH-H Qualitative targets Communication* VH VH-H	Budget VH (0.5) IRC VH (0.5) Financial targets High (1.5) Quantitative targets VH-H (1.0) Qualitative targets High (1.5) Communication* VH (0.5)	Budget       VH       (0.5)       VH-H         IRC       VH       (0.5)       VH-H         Financial targets       High       (1.5)       VH-H         Quantitative targets       VH-H       (1.0)       High         Qualitative targets       High       (1.5)       High         Communication*       VH       (0.5)       VH-H         VH-H       (0.9)       High

\* The control mechanisms are clearly communicated to the factories and departments through the annual plan, IRC and other enterprise policies, rules and regulations. Mr Huang said that the control style has not been changed so much mainly because of the government's macroeconomic influence and many uncertainties existed in the market.

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.1) High (1.4) VH-H (0.9)	Medium (2.1) M-L (2.7) High (1.2)
Overall Control Influence	High (1.1)	H-M (2.0)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 (1)Precision & detail of VH-H (1.0)(2.0)targets H-M(2) Objective vs subjective VH-H (1.0)targets H-M(2.0)(3) Achieving targets Timeframe VH-H (1.0)H-M(2.0)Stretch built into (4)the targets VH-H (1.0)H-M(2.0)Financial vs non-financial targets (5) High (1.5)H-M (2.0)(6) Manangement influence on setting targets (0.5)(2.0)VH H-M\_\_\_\_\_\_ VH-H (1.0) H-M (2.0)========== \_\_\_\_\_\_

- 6.3 Monitoring Results
  [Control Influence changed from "Tight Financial (0.9)"
  before 1992 to "Tight Financial (0.8)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)
  Factors considered by the headquarters in management control

		Before	1992	After	1992
1.1	Policy	VH	(0.5)	VH	(0.5)
1.2	Frequency	VH	(0.5)	VH-H	(1.0)
1.3	Contents	VH	(0.5)	VH-H	(1.0)
1.4	Compilation	VH	(0.5)	VH-H	(1.0)
1.5	Review	VH	(0.5)	VH-H	(1.0)
1.6	Evaluation	VH	(0.5)	VH-H	(1.0)
1.7	Authorization	VH	(0.5)	VH-H	(1.0)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
		VH-H	(0.7)	High	(1.3)
		======	=====	======	=====

# Mr Huang has mentioned that the monthly condensed report format is unique for each factory. The actuals are compared with the budgets or IRCs. Any variances plus or minus 5% will be highlighted in order to bring the attention to the factory managers and the top management. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

### (2) Performance Measurement (Q.6.4.1-2)

Before 1992: production factories were mainly measured on production volume and cost of production, but other non-financial targets\* (listed below) accounted for for less than 30% of the performance measurement weightings.

After 1992: internal profit becomes the major measurement criterion and similar non-financial targets\* are accounted for less than 30% of the performance measurement weightings. The master budget compiled by the headquarters indicates profit before tax, profit % of sales, profit/sales/production per employee as well. Mr Huang said that financial indicators have been employed more in the last few years in order to meet the overall economic target as expected by the top management and government.

Corporate Control Influence : "Very High-High (1)" to "Very High (0.5)"

- \* Non-financial targets : quality management, new product development, energy consumption, facility maintenance, production safety, production technology, management style, use of computer, environment control, family planning etc.
- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the planning committee holds a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings. Middle management has been involved in determining the measurement criteria during the annual planning process.

Corproate Control Influence : "Very High-High (1)" to "Very High (0.5)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Reporting Requirements Performance Measurement Review & Communication	VH-H VH-H VH-H	(0.7) (1.0) (1.0)	High VH VH	(1.3) (0.5) (0.5)
Overall Control Influence	VH-H ======	(0.9)	VH-H =====	(0.8)
			<i></i> -	

## 6.4 Rewards & Incentives [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.7)" after 1992]

(1)	Incentives* (Q.6.5.1-7,19	5-16,22	-23)		
		Before	1992	After 1	.992
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
1.3	Bonuses - monthly	VH	(0.5)	VH-H	(1.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.8	Redundancy#	Very L	ow(4.0)	H-M	(2.0)
		H-M	(1.6)	H-M	(1.7)
		=====	======	======	=====

<sup>\*</sup> The "basic wages" is reviewed every year depending on grade and seniority without paying regard to qualification and technical skill. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once in each year to combat inflation. The second part is decided by the SSW5 which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the top management and the factory management decides what level of group bonus will be given to the factory. Whereas, the second-tier IRCs agreed between a factory manager and his production lines are used as a basis to distribute that total amount of group bonus to the respective production lines. In turn, it is up to a production line supervisor to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well.

# According to Mr Huang's comment, about 20% employees in SSW5 are redundant. But it is quite difficult to lay off these redundant staff because insufficient employment welfare and benefits have been established in China.

One way to alleviate this problem is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the SSW5's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 50% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was almost impossible.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 50% of total wages. Basic wages has been increased and increments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. Laying off redundant employees is possible but still difficult

Corporate Control Influence : "Very High (0.5)" to "Very High-High (1)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances , pension and other benefits were decided by the headquarters and government.
- After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

### (4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the factory or department managers.

After 1992 : IRC's targets are subject to situation and negotiation very year. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the factory or department managers.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

### Summary of Corporate Control Influence :

Factors	Before :	1992	After :	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH VH-H VH-H	(1.6) (0.5) (1.0) (1.0)	H-M VH-H H-M H-M	(1.7) (1.0) (2.0) (2.0)
Overall Control Influence	VH-H	(1.0) =====	H-M ======	(1.7) ======

### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai No.5 Steel Work (SSW5) belonged to before and after 1992.

· ·		
Planning Influences		After 1992
Organisation Structure*		
Review Process*	High (1.3)	Medium to Low (2.6)
Strategic Themes, Thursts and Suggestions*	Very High to High (0.8)	High to Medium (1.7)
Long-Term Plans* (Resource Allocation)	Very High to High (1.0)	Medium (2.1)
Short-Term Planning/ Budgeting*	High (1.5)	Low (3.3)
Internal Responsibility Contracts#	High (1.5)	Low (3.4)
Management of Inter- dependencies*	Very High (0.5)	High to Medium (1.7)
Overall Planning Influence	=======================================	Medium (2.5)
Control Influence		After 1992
Decentralisation & Control#	Financial (1.1)	Moderate Financial (2.0)
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (2.0)
Monitoring Results*	Tight Financial (0.9)	Tight Financial (0.8)
Rewards & Incentives*	Tight Financial (1.0)	Moderate Financial (1.7)
Overall Control Influence	Tight Financial (1.0)	Moderate Financial (1.6)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning  Influence	Contro	ol Influence	
Influence	  Strategic	Financial	-
High (	Strategic Programmin	ng 0 Financial Programming	0   1
		X	Ī
H/M			
Medium2	1 2	2	2
M/L		0	
	3	3	3
Low 4	Strategic Control	4 Financial Control	4
0 (1.6, 2.5)	) - SSW5 Post-1992	X (1.0, 1.1) - SSW5 Pre-1992	J

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai No.5 Steel Works (SSW5) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

21 July 1995

09.04.96

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 2
Report Date : 7 April 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 2" (4 February 1994).

### Name of SOE: Xiamen Fork Lift Truck Plant (XFLT)

Staff Interviewed: Mr Wang Zhao Liang, Chief Accountant

(No. of years in this enterprise : 4 years)
Mr Huang Tian Qing, Ass. Chief Accountant
(No. of years in this enterprise : 20 years)

Dates of Visits : First Visit - 22 September 1992

Second Visit - 8 June 1993 Third Visit - 15 September 1993 Fourth Visit - 14 September 1994

### Section 1 : History & Background (Q.1.1-5)

1.1 XFLT is a wholly state-owned enterprise established in 1957 specialized in manufacturing fork lift trucks. It is located close to the city centre of Xiamen. As one of the key enterprises in Fujian Province, the plant was conferred a title "Advanced Enterprise" in 1987 by the provincial government. XFLT is the largest fork lift truck manufacturing plant in the Southern China. (Q.1.1)

- 1.2 XFLT is the largest fork lift truck manufacturing plant in the Southern China with an annual production volume of 2,000 trucks in 1993 but could not satisfy the national demands. (Q.1.2)
- 1.3 The major products of XFLT are the 2-14 tons new scissor fork lift trucks, 3-6 tons side loading trucks and 1-2.5 tons electric fork lift trucks, all together in 19 categories. (Q.1.3)
- 1.4 Over 90% of the trucks are sold domestically (60% to Fujian and Guangdong Province), while about 10% of the products are exported to the USA, UK, Canada, Southeast Asia and Hong Kong. (Q.1.4)
- 1.5 XFLT has granted the "Import/Export Right" by the government in 1993, so that it can further explore the overseas markets during the coming 9th Five-Year Plan (1996-2000). The major competitors are the Sino-Japanese joint-ventrues which are exploring the high potential Asian markets. Mr Wang and Mr Huang has mentioned that in order to enhance the production teachnology, product quality and output capacity, XFLT should enter into joint-venture with the western countries, such as Germany. (Q.1.5)

### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 XFLT has been a wholly state-owned enterprise before and after 1992. There is no plan to transform into a shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise. (Q.2.1)
- 2.2 XFLT is holding three self-financed and small tertiary enterprises running the property, tourism and retailing businesses. (Q.2.4)
- 2.3 The organisation structure of XFLT can be divided into six divisions under the direct control of the Factory Manager (FM) who has a Management Office and a Planning & Technology Office directly reporting to him (staff functions). (Q.2.3)
- 2.4 The six divisions are listed as follow: (Q.2.5 & 2.9)
  - (1) Production Division (Deputy-FM)
    - 1.1 Production Management Office
      - 1.1.1 Framework Workshop
      - 1.1.2 Metalwork Workshop

- 1.1.3 Painting Workshop 1.1.4 Assembly Workshop
- 1.1.5 Repair & Maintenance Workshop
- 1.1.6 Testing Centre
- 1.2 Purchasing & Supply Department
- 1.3 Facility Department
- Transportation Department
- Technical Division (Deputy-FM) (2)
  - 2.1 Design Department
  - 2.2 Production Technology Department
  - 2.3 Inspection Department
  - 2.4 Quality Control Department
  - 2.5 Technology Management Department
    - 2.5.1 Technology Information Section
    - 2.5.2 Record Section
    - 2.5.3 Computer Centre
- Economic Division (Chief Economist) (3)
  - Sales & Marketing Department 3.1
  - 3.2 Technical Support Department
- Finance Division (Chief Accountant) (4)
  - 4.1 Accounting Department
  - 4.2 Cost Reuction Department
  - 4.3 Internal Audit Department
  - 4.4 Legal Department
- Administration Division (Deputy-FM)
  - 5.1 Personnel Department
  - 5.2 Education & Training Department
  - 5.3 Building & Facility Department
  - 5.4 Security Department
  - 5.5 Medical Department
  - 5.6 General Affairs Department
    - 5.6.1 Canteen
    - 5.6.2 Nursary
- 2.5 XFLT is under the administration of the Xiamen Municipal Government and the Fujian Provincial Machinery Bureau who dictated all planning and control systems of XFLT before  $(Q.2.6 \times 2.7)$ 1992.
- 2.6 XFLT is a medium SOE having 1,100 employees. Mr Huang has said that about 200 employees have been reduced since 1990s. (0.2.10)
- # Since XFLT is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to XFLT.

#### Section 3 : Financial Indicators (0.3.1-8#)

- : RMB 52M 3.1 Total assets (historical cost) (0.3.1)
- 3.2 Turnover : RMB102M (1992)

RMB120M (1993)

RMB150M (1994)

(1995 forecast) (Q.3.2 & 7) RMB180M

3.3 Income before tax : RMB5.5M (1992) - 5.4% of sales

RMB7.5M

(1993) - 6.3% of sales (1994) - 5.3% of sales\* RMB8.0M

RMB9.0M (1995 forecast) (Q.3.5, 6 & 7)

- \* The decrease of profit margin was mainly due to inflation.
- Income tax rate : 15% (before and after 1992) 3.4 (0.3.6)
- XFLT is entering into a joint-venture with one of the 3.5 largest fork lift truck manufacturers and expect to increase the production capacity to at least five times (10,000 to 20,000 trucks per year) during the period of 1997 to 2000. It is expected that the new XFLT will be the largest fork lift truck plant in China. (Q.3.7 & 8)
- # 0.3.4 is not applicable to XFLT because it is neither a holding nor a subsidiary enterprise.

### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- Since there have been special policies applied to the five 4.1 special economic zones (including Xiamen) in early 1980s, XFLT has not signed any formal ERC with the municipal government. (Q.4.1)
- However, since 1984, XFLT has agreed the following three 4.2 targets with the municipal government :
  - "Income Before Tax" with 10% annual growth rate; (a)
  - handover 10% of the "Income Before Tax" to government; (b)
  - "Income Tax" rate of 15%. (Q.4.2-4 & 6) (c)
- The chosen terms were mutually agreed between the government 4.3 and SSW5. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. Mr Huang believed that the growth rate of 5% was underestimated and proved by the actual results subsequently. (Q.4.5,7-10)

4.5 Since 1992, XFLT has been subject to income tax of 15% only and more income after tax could be retained for business development. (Q.4.12 & 13)

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### Section 5 : Planning System

- 5.1 Organisation Structure [Planning Influence changed from "High Corporate (1.3)" before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992 : all the production workshop were "cost centres" managed by the workshop managers responsible for production volume and cost. All the other service departments were "expense centres" control by expense budgets.
- After 1992: To avoid the setting of internal transfer prices and calculating internal profits, all the workshops are treated as cost centres with higher autonomy in planning and control. All the "expense centres" whose managers participate in the budgeting process Mr Huang has said that there would be significant organisational changes in 1996 after the joint-venture with the German counterpart has taken off.

Corporate Planning Influence\*: "High (1.5)" to "Medium (2.5)"

\* By using a 5-point scale -Greatest Influence Very High (0) (consistent with the scale High (1)(2) used in the questionnaire Medium e.g. 5.4.4 to quantify Low (3) some of the parameters or Least Influence Very Low (4)variables)

Very High	[VH]	(0.0	_	0 5)
	• •	-		
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1	_	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6	_	4.0)

### (2) Decentralization (Q.5.1.2)

Before 1992: the workshop managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.

Therefore, classifying the factories into cost centres were appropriate.

After 1992: although the workshops are still treated as cost cost centres, the workshop managers can initiate the annual budgets and IRCs and compromise with the top management similar to the profit centres.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

### (3) Appointment (Q.5.1.3)

- Before 1992: the factory manager and party secretary were appointed by the government, and other senior appointments and major organisational changes required government's approval. Mr Huang has mentioned that in fact the party secretary was the representative from the government to ensure some sort of macro-economic policies are under control.
- After 1992: the factory manager and party secretary are still appointed by the government. The factory manager can appoint all the other senior staff such as the workshop managers. The workshop managers can decide their own organisation structures and personnel affairs but important changes should be approved by the factory manager.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

### (4) Interdependencies (Q.5.1.4)

Before 1992: all the quantities and costs of internal crosssupplies were determined by the top management after the workshop managers being consulted.

After 1992: the workshops are allowed to negotiate and compromise the internal cross-supply affairs but interference and arbitration were required from the top management.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	High (1.5) High (1.5) VH-H (1.0) VH-H (1.0)	Medium (2.5) Medium (2.5) H-M (2.0) H-M (2.0)
Overall Planning Influence	High (1.3)	Medium (2.3)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "Medium Corporate (2.3)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992 : since Xiamen is one of the five special economic zones, some favourable policies have been given to the SOEs by the central government in terms of lower taxes, free import/export rights and generous land use rights which in some ways have left more freedom to the SOE's planning and control aspects but interferences from the government still existed
- After 1992: in order to speed up the implementation of the "SOE Mechanism Transformation Legislation" enacted in 1992, the Xiamen municipal government issued ten specific additional policies for the SOEs at the end of 1992. These 10 policies explain the different rights that the SOEs in Xiamen could exercise in order to enjoy futher autonomy in planning and controlling their businesses.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992 : long term plans were initiated by the top management after consultation with the middle management.

  Most of the long term plans had to be discussed and compromised with the government. The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

  Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: the middle management was consulted in the long term planning which was almost a top-down process but did involved in the annual planning and budgeting processes actively.
- After 1992: middle management is involved in the formal long term planning process but decisions still rest in the hands of the top management. Workshop and department managers have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the top management reviewed and amended the long term plans with the middle management annually.

  Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: the long term plans are reviewed by the top and middle management twice every year and significant changes are made at the year end and informed the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notify to lower management immediately.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Factors	Influence Before		After	1992
Central Planning Operation Participation Review & Communication	Medium Medium H-M H-M	(2.5) (2.5) (2.0) (2.0)	Low Low M-L M-L	(3.5) (3.5) (3.0) (3.0)
Overall Planning Influence	Medium	(2.3)	Low =====	(3.3)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "Very High-High Corporate
  (0.8)" before 1992 to "High-Medium Corporate (1.8)" after
  1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992 : "Quality" has been the major strategic theme given to and imbedded into the planning and control system. Testing centre, inspection department and quality control department were established to ensure and enhance the product quality.
- After 1992: as before 1992 except that workshop managers have participated in setting some production and product quality standards. The quality control standard has been highly recognised by the government and awards have been granted.

Corporate Planning Influence : "Very High (0.5)" to "High (1.5)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992 : technology improvement, efficiency enhancement and product development have been the major strategic thrusts which were incorporated into long term plans formulated by the government and the top management.
- After 1992 : as before 1992 and in addition capacity expansion (long and short term) is emphasized in order to capture higher market share which is expanding.

Corporate Planning Influence: "Very High-High (1)" to "High (1.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management always made suggestions on the planning and review process such as selling prices, marketing strategies and production quantity and mix. Financial indicators and performance were followed closely by the top management who was quick to make suggestions if they did not match with the overall long and short term plan.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the workshop managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	VH (0.5) VH-H (1.0) VH-H (1.0)	High (1.5) High (1.5) Medium (2.5)
Overall Planning Influence	VH-H (0.8)	H-M (1.8)

- 5.4 Long-Term Plans
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the government in terms of production facilities, volume and mix, right to export, product and market development.
- After 1992: the top management has to initiate its own long term plans and compromise with the government who may insist on certain macro-targets such as output volume and mix. The current 5-year planning (1991-1995), includes production differentiation and diversification, production technology and facility enhancement, production capacity expansion, market penetration and diversification, manpower and training.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the government to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992: formal planning committee and procedures are in existence to get middle management (i.e. workshop managers) involved whose planning, control and evaluation aspects are affected. It is a way for the top management to allocate limited resources to different divisions according to the market demand, product profitability and government suggestions.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the involvement from middle management (i.e. workshop managers) was limited to consultation only
- After 1992: workshop and department mangers are members of the planning committee (i.e. senior management committee) but they seldom initiate changes but mainly concern the impact on their annual budgets and IRCs which they are measured on.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992 : 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the planning committee reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the government for endorsement and sometimes assistance such as seeking a long term bank loan. A summary of the long term plans is distributed to all members of the planning committee.

Corporate Planning Influence : "High (1.5)" to "High-Medium (2)"
Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	High (1.5) High (1.5) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) H-M (2.0)
Overall Planning Influence	High (1.5)	Medium (2.4)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because XFLT caters for the capital budgets during the long term planning exercise.

5.5 Short-Term Plans/Budgets

- [Planning Influence changed from "High-Medium Corporate (2)" before 1992 to "Low Corporate (3.5)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.
- After 1992: top management has the full autonomy in the annual planning and budgeting processes which involve the middle management such as the workshop managers.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the workshop managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: top management provided major guidelines to the workshop managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

## (3) Participation (Q.5.5.3 & 5)

Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.

After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

(4) Review & Communication (Q.5.5.6 & 8)

Before 1992 : annual plans and budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes.

Annual plans were communicated to middle and lower management in term of a budget book.

After 1992: senior management committee reviews the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors. A fixed budget concept is still in force. Other than AGM and budget book, the budget information is further communicated between top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After	1992
Central Planning Operation Participation Review & Communication	 Н-М Н-М Н-М Н-М	(2.0) (2.0) (2.0) (2.0)	Low Low Low Low	(3.5) (3.5) (3.5) (3.5)
Overall Planning Influence	H-M =====	(2.0)	Low =====	(3.5) ======

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Low Corporate (3.4)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: major economic targets set were production quantity and cost control while qualitative targets such as quality and safety had the veto effects on the bonus which was linked up with the IRC performance. The IRC system was started in 1987 and mainly applied to the production workshops.
- After 1992: in addition to the economic and qualitative targets set before, production facilities, technology and inventory management are also measured. IRC system has been extended to the service departments such as technical support, sales and marketing.

  Samples of IRC are shown in section 5.6 of the Data

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: workshop managers negotiated and compromised the given IRC targets during the annual planning cycle.
- After 1992: workshop managers have to initiate, quantify and justify the major IRC targets before negotiating with the top management. According to Mr Huang, the workshop managers are more proactive in setting the targets in the IRC.

Corporate Planning Influence: "High (1.5)" to "Low (3.5)"

(3) Review & Communication (Q.5.6.9-15)

Analysis Set 2.

Before 1992: IRCs were reviewed in the middle of the year and amendments could be made when mutually agreed by the top management and workshop managers. IRCs were

documented and informed to the respective workshop managers and their employees.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. Mr Huang agreed that IRC was an effective way to achieve the short term targets on one hand and improve the budget communication between the different levels of management on the other hand. Furthermore, IRC can link up performance with the incentive scheme as a fair means for resource (i.e. bonus) distribution.

Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"

#### (4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the workshop managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High (1.5)" to "Low (3.5)"

Summary of Corporate Planning Influence:

Factors	Before	1992	After 1	1992
Target Bias Participation Review & Communication Incentive	High High H-M High	(1.5) (1.5) (2.0) (1.5)	Medium Low Low Low	(3.0) (3.5) (3.5) (3.5)
Overall Planning Influence	H-M	(1.6) =====	Low	(3.4)

#### 5.7 Management of Interdependencies (Transfer Pricing)

Since all the departments in the Xiamen Fork Lift Truck (XFLT) are treated as cost centres and the production workshops are measured against production volume and cost, therefore, internal transfer pricing does not exist.

### Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.5)" before 1992 to "Moderate Strategic (2.1)" after 1992]

		======	======	=========
		High	(1.4)	Medium (2.3)
1.4	Interactions	H – M	(2.0)	M-L (3.0)
	Roles & functions	High	(1.5)	Medium (2.5)
	Staffing	VH-H	(1.0)	High (1.5)
	Structure	VH-H	(1.0)*	H-M (2.0)
		Before	1992	After 1992
(1)	Organisational Design	(Q.6.1.1)		

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	C<			-Tight	Financial
Control				Contro	01

Tight Financial	(0.0	-	1.0)
Financial	(1.1	_	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	-	4.0)

(2) Personnel# (Q.6.1.1)

		==========		=====	=====
		H-M	(1.8)	M-L	(2.6)
2.6	Termination	VH	(1.0)	H-M	(2.0)
2.5	Remuneration	H-M	(2.0)	M-L	(3.0)
2.4	Evaluation	${ t Medium}$	(2.5)	M-L	(3.0)
2.3	Training	H-M	(2.0)	M-L	(3.0)
2.2	Assignment	H-M	(2.0)	M-L	(3.0)
2.1	Recruitment	VH-H	(1.0)	High	(1.5)
		Before	1992	After	

# Mr Huang said that since 1992, more delegation has been given to the workshop managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

		======	======	=====	======
		High	(1.2)	High	(1.3)
3.6	Communication*	VH-H	(1.0)	High	(1.5)
3.5	Qualitative targets	High	(1.5)	VH-H	(1.0)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
		Before	1992	After	1992
(3)	Control Mechanisms (Q	2.6.1.2-3, (	2.6.4.8)		

<sup>\*</sup> The control mechanisms are clearly communicated to the workshops and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

#### Summary of Corporate Control Influence :

Factors	Before 1992		After 1992		
Organisational Design Personnel Control Mechanisms	High H-M High	(1.4) (1.8) (1.2)	Medium (2.3) M-L (2.6) High (1.3)		
Overall Control Influence	High	(1.5)	Medium (2.1)		

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Factors affecting the types and styles of control mechanisms : After 1992 Before 1992 (1) Precision & detail of targets VH-H (1.0)H-M (2.0)(2) Objective vs subjective H-M(2.0)VH-H (1.0)targets (3) Achieving targets Timeframe VH-H (1.0)H-M(2.0)(4)Stretch built into the targets VH-H (1.0)H-M(2.0)Financial vs non-(5) financial targets High (1.5)H-M(2.0)(6) Manangement influence (2.0)on setting targets VH (0.5)H-M\_\_\_\_\_ H-M (2.0)VH-H (1.0)

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- 6.3 Monitoring Results
  [Control Influence changed from "Tight Financial (1.0)"
  before 1992 to "Moderate Financial (1.9)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)
  Factors considered by the headquarters in management control

		one mode	~~	III management concre
	F	Before	1992	After 1992
1.1	Policy	VH-H	(1.0)	High (1.5)
1.2	Frequency	VH-H	(1.0)	High (1.5)
1.3	Contents	VH-H	(1.0)	High (1.5)
1.4	Compilation	VH-H	(1.0)	High (1.5)
1.5	Review	VH-H	(1.0)	High (1.5)
1.6	Evaluation	VH-H	(1.0)	High (1.5)
1.7	Authorization	VH-H	(1.0)	High (1.5)
1.8	Feedback	VH-H	(1.0)	H-M (2.0)
1.9	Follow-up	VH-H	(1.0)	H-M (2.0)
1.10	Computerization	H-M	(2.0)	Medium (2.5)
		High	(1.1)	H-M (1.7)
		======	======	==========

# Mr Huang has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. Any variances plus or minus 5% will be highlighted in order to bring the attention to the factory manager. For any serious adverse variances shown on any report, the factory manager or deputy-factory managers will contact the respective workshop manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

#### (2) Performance Measurement (Q.6.4.1-2)

Before 1992: production workshops were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety are accounted for less weightings.

After 1992: production quantity and cost control are still the major economic targets, however, more qualitative targets such as production technology, facilities and inventory are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each workshop or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the planning committee holds a monthly meeting to review the performance reports, to ask the workshop managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual workshop or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992	
Reporting Requirements Performance Measurement Review & Communication	High (1.1) VH-H (1.0) VH-H (1.0)	H-M (1.7) H-M (2.0) H-M (2.0)	
Overall Control Influence	VH-H (1.0)	H-M (1.9)	

- 6.4 Rewards & Incentives
  [Control Influence changed from "Financial (1.2)" before
  1992 to "Moderate Financial (1.8)" after 1992]
- (1)Incentives\* (Q.6.5.1-7,15-16,22-23) Before 1992 After 1992 (2.0)VH-H (1.0)Basic wages H-M1.1 H-M(2.0)1.2 Allowances H-M(2.0)1.3 VH-H (1.0)Bonuses - monthly VH (0.5)Bonuses - annual Medium (2.5) 1.4 (2.0)H-M Other benefits H-M(2.0)1.5 VH-H (1.0)Pension VH-H (1.0)1.6 VH (0.5)H-M1.7 Recognition (intangible) VH-H (2.0)(1.0)H-M(2.0)1.8 Redundancy Very Low(4.0) H-M (1.7)H-M(1.6)======== ==========

\* The "basic wages" is reviewed every year depending on grade and seniority without paying much regard to qualification and technical skill. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Xiamen municipal government at least once in each year to combat inflation. The second part is decided by the XFLT which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the factory manager and the workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well.

One way to alleviate this problem is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the XFLT's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 50-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 45-50% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

#### (3) Participation (Q.6.5.16-17)

Before 1992 : workshop managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided

by the headquarters and government.

After 1992: workshop managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8,13-14,20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees every month via the workshop or department managers
- After 1992 : IRC's targets are subject to situation and negotiation very year. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

  Performance and reward are made known to employees every month via the workshop or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.6) (1.0) (1.0) (1.0)	 H-M High H-M H-M	(1.7) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2)	H-M =====	(1.8)

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Xiamen Fork Lift Truck Plant (XFLT) belonged to before and after 1992.

\_\_\_\_\_ Planning Influences Before 1992 \_\_\_\_\_\_ Organisation Structure\* High (1.3) Medium (2.3) Review Process\* Medium (2.3) Low (3.3) Very High to Strategic Themes, Thursts High to High (0.8) and Suggestions\* Medium (1.8) High (1.5) Long-Term Plans\* Medium (2.4) (Resource Allocation) Short-Term Planning/ High to Budgeting\* Medium (2.0) Low (3.5)(Resource Allocation) Internal Responsibility High to (3.4)Contracts# Medium (1.6) Low Management of Inter-N/A N/Adependencies\* ------\_\_\_\_\_ Overall Planning Influence High to Medium to Low (2.8) Medium (1.6) ========= ========= After 1992 Control Influence Before 1992 \_\_\_\_\_\_ Decentralisation & Moderate Financial (1.5) Strategic (2.1) Control# Agreeing Objectives\* Tight Moderate Financial (2.0) Financial (1.0) Moderate Monitoring Results\* Tight Financial (1.9) Financial (1.0) Rewards & Incentives\* Moderate Financial (1.8) Financial (1.2) \_\_\_\_\_\_ Overall Control Influence Moderate Financial (2.0) Financial (1.2)

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- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning  Influence	Control Influence						
Influence	Strategic	Financial					
High	O Strategic Programmi	ng 0 Financial Programming 0					
H/M Medium		x					
M/L							
	 	0   3   3					
Low	 4 Strategic Control	4 Financial Control 4					
0 (2.0, 2.8	) - XFLT Post-1992	X (1.2. 1.6) - XFLT Pre-1992					

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Xiamen Fork Lift Truck Plant (XFLT) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

7 April 1996 09.04.96

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 3
Report Date : 14 July 1995

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameters;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 3" (23 February 1994).

#### Name of SOE: Guangzhou Friendship Department Store (GFDS)

Staff Interviewed : Mr Zhu Zu Xuan, Deputy-Chairman of Directors

and Deputy General Manager

(No. of years in this enterprise : 25 years)

Mr Ho Li Qian, Deputy-Chief Accountant

(No. of years in this enterprise : 7 years)

Dates of Visists : Frist Visit - 7 July 1993

Second Visit - 29 October 1993

\*

#### Section 1 : History & Background (Q.1.1-5)

- 1.1 GFDS is a wholly state-owned enterprise established in 1959. (refer to Q.1.1)
- 1.2 GFDS is one of the top 5 department stores in Guangzhou with a total shopping area of 15,000 square metres in 1994. (Q.1.2)

- Since 1959, the Chinese government has established many friendshop stores in the big cities in order to provide different Chinese-made export commodities of better quality for the foreigners to purchase by paying either foreign currencies or Reminbi The operation scale of these early friendship stores was rather small because the customers were all foreigners. Then, in 1981, GFDS was opened to the general public including the local Chinese. Now GFDS is selling over 3,000 items of commodities and operating four branches located in other hotels and buildings in Guangzhou other than the main store. (Q.1.3)
- 1.4 All the GFDS's commodities, including the imported ones, are selling locally in Guangzhou without any export. (Q.1.4)
- 1.5 In addition to enhance the quality and variety of the commodities sold, GFDS is planning to develop the supermarket chain, retailing shops, wholesale, import and export, property and tourism businesses maninly on joint-venture basis. (Q.1.5)

#### Section 2: Legal Form & Organisation Structure (Q.2.1-11#)

- GFDS was converted into a private shareholding enterprise in November 1992 by issuing 15% of the total shares to the employees while the government was the majority shareholder holding 85% of the shares. (Q.2.1-2)
- 2.2 The organisation structure of GFDS can be divided into three levels: (Q.2.3 & 5)
  - Board of Directors (BOD)
    - 1.1 Chariman (GM)
    - Deputy Chairman (Deputy-GM[Finance])
      Deputy Chairman (Party Secretary) 1.2
    - 1.3
    - 1.4 Director (Deputy-GM[Sales])
    - 1.5 Director (Deputy-GM[Purchases])
    - 1.6 Director (Labour Union Leader)
  - (2) Headquarters
    - 2.1 General Manager (GM)
    - 2.2 Accounting & Finance Department
    - 2.3 Marketing & Sales Department
    - 2.4 Purchasing Department
    - 2.5 Planning Department
    - 2.6 Personnel Department

    - 2.7 Transportation Department2.8 Service Evaluation Department
    - 2.9 General Affairs Department

- (3) Department Stores
  - 3.1 Cosmetic & Medicine Department
  - Ladies' Wear Department
  - 3.3 Men's Wear Department
  - 3.4 Arts & Craft Department
  - 3.5 Furniture & Appliance Department
  - 3.6 Supermarket Department
- 2.3 GDFS (main store) is holding four branches located in other hotels and buildings in Guangzhou. (Q.2.4)
- GFDS is under the administration of the Guangzhou Municipal 2.4 Government and the Guangzhou First Commerce Bureau who dictated all the planning and control systems of GFDS before the enconomic reforms started in 1979. (Q.2.6)
- 2.5 Since the beginning of 1990, the Bureau has been delegating more planning, control and operating autonomy to GFDS and just scruitinising the major development projects, mainly long term ones, recommended by GFDS. (Q.2.7)
- 2.6 Most of the board members are chief executives managing the headquarters under which there are 6 department stores selling different categories of commodities. The 6 department stores are separate divisions or profit centres having their own functional staff or using the matrix management. (Q.2.9)
- 2.7 GFDS is a medium SOE having a total of 2,300 employees.

# Since GFDS is neither a holding nor a subsidiary enterprise, question Q.2.8 is not applicable to GFDS.

#### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB100M (revaluated 1992) (Q.3.1)

3.2 Turnover : RMB466M (1992)

RMB710M (1993)

RMB900M (1994 forecast) (Q.3.2 & 7)

Income before tax : RMB35M (1992) - 7.5% of sales 3.3

RMB50M (1993) - 7.0% of sales\*

RMB58M (1994) - 6.4% of sales

\* The decrease of profit margin in 1993 was due to inflation and higher sales and related taxes. (Q.3.5, 6 & 7)

3.4 Income tax rate : 15% (Q.3.6)

3.5 GFDS is planning to maintain an average growth rate in turnover from 15% to 20% before 2000 despite the fact that competition in the retailing business is very keen in China. In view of the high input costs and inflation, to keep income before tax at 5% of sales will be considered to be satisfactory. (Q.3.7 & 8)

# Since GFDS is not a holding enterprise and without any export, questions Q3.3 & 4 are not applicable to GFDS.

# Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 GFDS signed first 5-year's ERC (1987-1991) with the Guangzhou Municipal Government in 1987. (Q.4.1)
- 4.2 The major targets set in the ERC were :
  - (1) Profit target RMB10M in 1987 and then 10% annual growth
  - (2) Handover 60% of target profit to government.
  - (3) If actual profit exceeds target, only handover 30% of the excess to government. (Q.4.2-4 & 6)
- 4.3 There were different forms of ERCs for the state-owned enterprises to choose from and which had different financial and non-financial targets. The choosen format was nutually agreed between the government and GFDS. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. Mr Zhu said that the growth rate of 10% was underestimated and proved by the actual results subsequently. (Q.4.5, 7-10)
- 4.5 The second ERC (1992-1996) was terminated in November 1992 when GFDS was transformed into a shareholding enterprise and then onwards, GFDS has been subject to an income tax of 15%. (Q.4.11-13)

(2.1.11 13)

#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 6 department stores were independent "profit centres" and held accountable for their results.

After 1992: the 6 department stores have to formulate their own short term strategies in the annual planning exercise.

Corporate Planning Influence\* : "High-Medium (2)" to "Medium-Low (3)"

\* By using a 5-point scale -Very High (0) Greatest Influence (consistent with the sacle High (1) used in the questionnaire Medium (2) (3) e.g. 5.4.4 to quantify Low some of the parameters or Very Low (4)Least Influence variables)

Very High	[VH]	(0.0	_	0.5)
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.5	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6	_	4.0)

#### (2) Decentralization (Q.5.1.2)

Before 1992: the store managers were responsible for the income and profit as agreed in the annual budget and internal responsibility contracts.

After 1992: the store managers should also decide their own strategies in marketing, purchasing, selling, cost control and personnel.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

#### (3) Appointment (Q.5.1.3)

Before 1992: the chairman, party secretary and a few chief executives were appointed by the government. The general manager appointed the management staff of the department stores.

After 1992: only the chairman and party secretary are appointed by the government. The general manager appoints other senior staff including the store managers who can decide their own organisation structures and personnel affairs but important changes should be approved by the headquarters.

Corporate Planning Influence : "High (1.5)" to "Medium-Low (3)"

#### (4) Interdependencies (Q.5.1.4)

Before 1992: the interactions between the department are minimal because they are selling different categories of commodities. Any conflicts were settled by the headquarters.

After 1992 : similar to 1992 and before but store managers are encouraged to solve the conflicts by themselves before headquarters' arbitration.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

	======	=====	======	=====
Overall Planning Influence	H-M	(2.0)	Low	(3.3)
Responsibility Centre Decentralization Appointment Interdependencies	H-M H-M High Medium	(2.0) (2.0) (1.5) (2.5)	M-L Low M-L Low	(3.0) (3.5) (3.0) (3.5)
Summary of Corporate Planning Factors	Influence : Before 1992		After 1992	

5.2 Review Process (Planning & Budgeting)
[Planning Influence changed from "Medium Corporate (2.1)"
before 1992 to "Low Corporate (3.3)" after 1992]

(1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)

Before 1992 : long term plans were initiated by the top management before discussion and negotiation with the government. Short term planning and budgeting were delegated by the government to the enterprise except agreeing key targets like sales, profit and inventory.

After 1992: significant long term plans are submitted to the government for review or raising capital. Short term planning and budgeting have been completely delegated to the enterprise.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

(2) Operation (Q.5.7.1-5)

Before 1992: formal planning committee and procedures were existed to formulate, evaluate, approve and review the annual plans and budgets for submission to the government. Initiation from the middle management was required.

After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and internal responsibility contracts. Major guidelines are provided by the top management to the store managers to formulate their own budgets and IRCs. They are also involved in the long term planning.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992 : long term planning was a top-down process but middle management (i.e. store managers) did participate in the annual planning & budgeting processes and initiation was required.
- After 1992: middle management is being involved on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the government reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed quarterly between the top and middle management and amendments could be made and communicated to the lower management through the revised budgets and IRCs.
- After 1992 : long term plans are reviewed by the top management during every year end and significant changes should be discussed and approved by the government before informing the employees during the AGM. The annual budgets are reviewed quarterly or monthly between the top and middle management and significant amendments can be made and then notify the lower management.

Corporate Planning Influence: "High-Medium (2) to "Medium-Low (3)"

Summary of Corporate Planning Influence:

Factors	Before	1992	After :	1992
Autonomy Operation Participation Review & Communication	H-M Medium H-M H-M	(2.0) (2.5) (2.0) (2.0)	Low Low M-L M-L	(3.5) (3.5) (3.0) (3.0)
Overall Planning Influence	Medium	(2.1)	Low	(3.3)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High-Medium Corporate
  (1.8)" before 1992 to "Low Corporate (3.2)" after 1992]
- (1) Themes (0.5.2.4-7\*)
- Before 1992: "courteous service attitude to customers" and "reasonable selling prices" were major themes laid down by the top management for employees.
- After 1992: allow the department stores to promote their own themes such as "high quality of commodity" and "comfortable environment for customers" which should not contradict the basic themes.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992 : strategic thrusts decided by the headquarters after discussion with department stores.
- After 1992: department stores are allowed to formulate own strategic thrusts or tactics such as pricing, sales promotion, counter design, display arrangement, delivery and after sales service.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management sometimes made suggestions on specific strategic issues such as commodity varities, prices, promotion tactics, etc.

After 1992: top management has left more freedom to the department stores to adjust their strategies and tactics as long as they do not deviate from the basic themes, thrusts and budgets.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Theme Thrust Suggestions	High H-M H-M	(1.5) (2.0) (2.0)	Medium Low Low	(2.5) (3.5) (3.5)
Overall Planning Influence	H-M	(1.8) =====	Low	(3.2)

#### 5.4 Long-Term Plans

[Planning Influence changed from "High-Medium Corporate (1.8)" before 1992 to "Medium Corporate (2.5)" after 1992]

- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: the early 5-year long term plans before the economic reform started in 1979 focused on the commodity varieties and prices dictated by the government. Top management participated in the long term planning negotiations since the early 1980s.
- After 1992: the top management has to initiate the long term plans of which some have to discuss with the government for assistance such as source of finance for large capital projects.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was responsible to the government to formulate, evaluate, implement, monitor and review the long term plans.
- After 1992 : formal planning committee and procedures are existed to get middle management (i.e. store managers) involved whose planning, control and evaluation aspects are affected.

Corporate Planning Influence: "High-Medium (2)" to "Medium (2.5)

#### (3) Participation (Q.5.4.4 & 6)

Before 1992: the involvement from middle management (i.e. store managers) was limited to consultation.

After 1992: store mangers are members of the planning committee but they seldom initiate changes but mainly concern the annual budgets and IRCs which they are measured on.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992 : 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employees during the annual general meeting.

After 1992: the planning committee reviews the 5-year plan every year before the annual planning cylce and significant changes are reported to the government A booklet summarised the long term plans is distributed to all members of the planning committee.

Corporate Planning Influence : "High-Medium (2)" to "High-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After 1992
Central Planning Operation Participation Review & Communication	High H-M High H-M	(1.5) (2.0) (1.5) (2.0)	Medium (2.5) Medium (2.5) H-M (2.0) M-L (3.0)
Overall Planning Influence	H-M ======	(1.8)	Medium (2.5)

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "Medium Corporate (2.4)"
  before 1992 to "Low Corporate (3.4)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the planning autonomy to the top manageemnt but specific suggestions may be provided i.e. commodity varieties and prices
- After 1992 : government has completely delegated the short term planning autonomy to the enterprise.
- Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management initiated the key budgets and discussed and compromised with the store managers.
- After 1992: top management provide major guidelines to store store managers for intitiating their own budgets.
- Corporate Planning Influence: "Medium (2.5)" to "Medium-Low (3)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992 : store managers were asked to discuss and comprise the key budgets with the top management before working out the details.
- After 1992: store managers have to formulate their own budgets and get the lower management involved formulating the details.
- Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"
- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans/budgets were reviewed quarterly and amendments made in line with the changing environmental factors. Annual plans & budgets were documented and copied to every department.
- After 1992: planning committee reviews the annual plans and budgets monthly and amendments are made in view of the fast changing market economy.

  Budget information is futher communicated in the monthly performance reporting.
- Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992	
Central Planning Operation Participation Review & Communication	Medium (2.5) Medium (2.5) H-M (2.0) Medium (2.5)	Low (3.5) M-L (3.0) Low (3.5) Low (3.5)	
Overall Planning Influence	Medium (2.4)	Low (3.4)	

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "Medium Corporate (2.5)"
  before 1992 to "Low Corporate (3.1)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)

Before 1992: major targets set were sales, profit & foreign exchange created.

After 1992: major targets are similar but some emphasis on qualitative targets such as service quality, discipline, decoration, display, sanity, day-to-day operation and security.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)

Before 1992 : store managers negotiated and compromised the given IRC targets during the annual planning cycle.

After 1992: store managers have to initiate, quantify and justify the major IRC targets before negotiating with the top management.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: IRCs were reviewed twice every year and amendments could be made when mutually agreed by the top management and store managers. IRCs were documented and informed to respective departments & employees.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect attainable targets.

Second-tier IRCs are signed between the store manager and sales sections/counters in order to further delegate the planning and control responsibilities.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

(4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the economic targets set in the IRCs which were not difficult to attain.

After 1992: both the economic (90%) and qualitative (10%) targets are linked up with the bonus so the store managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "Medium (2.5)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	H-M (2.0) H-M (2.0) Medium (2.5) Medium (2.5)	M-L (3.0) M-L (3.0) Low (3.5) M-L (3.0)
Overall Planning Influence	Medium (2.5)	Low (3.1)

#### 5.7 Management of Interdependencies (Transfer Pricing)

Because the 6 department stores in GFDS are selling different categories of commodities with very minimal interactions, therefore, internal transfer pricing does not exist.

\_\_\_\_\_\_

### Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Moderate Financial (2)" before 1992 to "Strategic (3)" after 1992]

		======	=====	======	=====
		H-M	(2.0)	Low	(3.1)
1.4	Interactions	H-M	(2.0)	M-L	(3.0)
1.3	Roles & functions	Medium	(2.5)	Low	(3.5)
	Staffing	H-M	(2.0)	Low	(3.5)
	Structure	High	(1.5)*	Medium	
		Before		After :	
(1)	Organisational Design#				

# Mr Zhu said that since the late 1980s, more delegation has been given to the store managers in deciding their own divisional structures, staffing and their roles and functions, and interactions between their sub-units.

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very	Low(4)	Low(3)	Med	dium(2)	High(1)	Ver	y High(0)
Tight Cont	_	<				-Tight Contro	
Final Mode: Mode: Strat	t Financial ncial rate Financ rate Strate tegic t Strategic	ial gic	(1.1 (1.6 (2.1 (2.6	- 1.0) - 1.5) - 2.0) - 2.5) - 3.0) - 4.0)			
(2)	Personnel@	(Q.6.1.1)				_	
2.2 2.3 2.4 2.5	Recruitmen Assignment Training Evaluation Remunerati Terminatio	on		M-L M-L Medium	(2.0) (3.0) (3.0) (2.5) (2.5)	After M-L VL Low Low Low H-M	(3.0) (4.0) (3.5) (3.5) (3.5)
				Medium	(2.3)	Low	(3.3)

@ Mr Zhu further mentioned that since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

		======	======	======	=====
		H-M	(1.8)	M-L	(2.7)
3.5	Qualitative targets	H-M	(2.0)	M-L	(3.0)
	Quantitative targets		(2.0)	M-L	(3.0)
	Financial targets		(1.0)	H-M	(2.0)
3.2	IRC	H-M	(2.0)	M-L	(3.0)
3.1	Budget	H-M	(2.0)	Medium	(2.5)
		Before	1992	After :	
(3)	Control Mechanisms*	(Q.6.1.2-3,	Q.6.4.8)		

\* Mr Zhu expressed that as long as the department stores can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility for strategy development to the stores without much interference. This change in control style was mainly because of the government's macroeconomic influence and many uncertainties existed in the market.

Summary of Corporate Control Influence :

Factors	Before 1992		After	1992
Organisational Design Personnel Control Mechanisms	H-M Medium H-M	(2.0) (2.3) (1.8)	Low M-L	(3.1) (3.3) (2.7)
Overall Control Influence	H-M ======	(2.0)	M-L ====	(3.0)

## 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Moderate Strategic (2.2)" before 1992 to "Tight Strategic (3.1)" after 1992]

Factors affecting the types and styles of control mechanisms:

		=======	=====	======	=====
		Medium	(2.2)	Low	(3.1)
	on setting targets	Medium	(2.5)	Low	(3.5)
(6)	Manangement influence		,	_	
(5)	Financial vs non- financial targets	Medium	(2.5)	Low	(3.5)
	the targets	Medium	(2.5)	Low	(3.5)
(4)	Timeframe Stretch built into	H-M	(2.0)	Medium	(2.5)
(3)	targets Achieving targets	H-M	(2.0)	M-L	(3.0)
(2)	Objective vs subjective	** **	(0.0)	N/ T	(2.0)
(1)	Precision & detail of targets	High	(1.5)	Medium	(2.5)
(1)	Duration ( datail of	Before 1	L992	After 1	.992

- 6.3 Monitoring Results [Control Influence changed from "Moderate Financial (1.6)" before 1992 to "Strategic (2.7)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)

Factors considered by the headquarters in management control

		Before :	1992	After 1992
1.1	Policy	VH-H	(1.0)	H-M (2.0)
1.2	Frequency	H-M	(2.0)	Medium (2.5)
1.3	Contents	VH-H	(1.0)	H-M (2.0)
1.4	Compilation	High	(1.5)	H-M (2.0)
1.5	Review	H-M	(2.0)	Medium (2.5)
1.6	Evaluation	Medium	(2.5)	M-L (3.0)
1.7	Authorization	VH-H	(1.0)	H-M (2.0)
1.8	Feedback	Medium	(2.5)	Low $(3.5)$
1.9	Follow-up	Medium	(2.5)	M-L (3.0)
1.10	Computerization	H-M	(2.0)	Medium (2.5)
		H-M	(1.8)	Medium (2.5)
		=======	=====	=========

# Mr Zhu has mentioned that for any serious advverse variances shown on the monthly report, the general or deputy-general managers will contract the respective store managers to dig out the underlining reasons or ask them to perform investigation immediately.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: department stores were mainly measured on the financial targets such as sales, profit and foreign exchange created.
- After 1992: other than the previous financial targets, a set of qualitative targets such as service quality, discipline, decoration, display, sanity, day-to-day operation and security are also measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication\* (Q.6.4.3-7, Q.6.4.9-12))
- Before 1992: the top management reviewed the performance report monthly and discuss with store managers for corrective actions.

After 1992: the planning committee reviews the performance report monthly. Infrequent adverse variances can be tolerated if store managers can take remedial tactics or strategies to correct the unfavourable conditions and meet the budget at the year end.

Corporate Control Influence: "High-Medium (2)" to "Low (3.5)"

\* Mr Zhu said that it was expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the effect of advertisement).

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Reporting Requirements Performance Measurement Review & Communication	H-M (1.8) VH-H (1.0) H-M (2.0)	Medium (2.5) H-M (2.0) Low (3.5)
Overall Control Influence	H-M (1.6)	M-L (2.7)

# 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.5)" before 1992 to "Moderate Strategic (2.2)" after 1992]

		=======	=====	======	=====
	•	H-M	(1.8)	Medium	(2.2)
	•				
1.8	Redundancy	H-M	(2.0)	Medium	(2.5)
	Recognition (intangible)	H-M	(2.0)	Medium	•
	Pension	VH	(0.5)	VH-H	(1.0)
	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual		•		
		H-M	(2.0)	Medium	
1.3	Bonuses - monthly	H-M	(2.0)	Medium	(2.5)
1.2	Allowances	Medium	(2.5)	Medium	(2.5)
1.1	Basic wages	Medium	(2.5)	H-M	(2.0)
		Before 1		After 1	
(1)	Incentives* (Q.6.5.1-7,1				

<sup>\*</sup> The "basic wages" is reviewed annually depending on grade and seniority without paying regards to qualification and technical skill. Every point increase on the basic pay scale is RMB10-20, therefore, it is no substantial enough to catch up with the inflation. Obviously, the "bonus" is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The firest part is determined by the Manpower Bureau of the Guangzhou government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the GFDS which may include housing, meals, travel, education, attendance, overtime, festival gifts etc.

The calculation of "bonus" is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to his or her subordinates according to individual performance, such as the sales achieved by a salesgirl in a certain month.

The "bonus" for the management and administrative staff in the headquarters is linked up with the average bonus of the employees in all department stores, and is based on their performance and grades as well.

- (2) Performance Orientation# (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and took over 50% of total wages. Basic wages was low and depended on seniority. Too many types of allowances all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 50% of total wages. Basic wages has been increased and increaments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. Pension is partly contributed by the government. Laying off redundant employees is easier after implementing the employment contract system.

Corporate Control Influence: "High (1.5)" to "Medium (2.5)"

# Mr Zhu said that unlike Beijing and Shanghai, the labour market in Guangzhou is rather free which means employees can choose new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the terms of the employment contracts. GFDS has fully implemented the "employment contract system" since 1992 and the "big rice pot" or "three iron bowls" concept has been abolished.

(3) Participation (Q.6.5.16-17)

Before 1992 : store managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances , pension and other benefits were decided by headquarters and government.

After 1992: store managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. Pension policy is still decided by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

(4) Review & Communication (Q.6.5.8, 13-14, 20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees on a monthly basis.

After 1992: IRC's targets are reviewed twice every year and can be modified. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies. Performance and reward are made known to employees every month.

Corporate Control Influence : "High (1.5)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Incentives Performance Orientation Participation Review & Communication	H-M (1.8) High (1.5) VH-H (1.0) High (1.5)	Medium (2.2) Medium (2.5) H-M (2.0) H-M (2.0)
Overall Control Influence	High (1.5)	Medium (2.2)

### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Friendship Department Store (GFDS) belonged to before and after 1992.

\_\_\_\_\_\_

Planning Influences	Before 1992	After 1992
Organisation Structure*	High to Medium (2.0)	Low (3.3)
Review Process*	Medium (2.1)	Low (3.3)
Strategic Themes, Thursts and Suggestions*	High to Medium (1.8)	Low (3.2)
Long-Term Plans* (Resource Allocation)	High to Medium (1.8)	Medium (2.5)
Short-Term Planning/ Budgeting* (Resource Allocation)	Medium (2.4)	Low (3.4)
Internal Responsibility Contracts#	Medium (2.5)	Low (3.1)
Management of Inter- dependencies*		
Overall Planning Influence	Medium (2.1)	
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Moderate Financial (2.0)	Strategic (3.0)
Agreeing Objectives*	Moderate Strategic (2.2)	Tight Strategic (3.1)
Monitoring Results*	Moderate Financial (1.6)	Strategic (2.7)
Rewards & Incentives*	Financial (1.5)	Moderate Strategic (2.2)
Overall Control Influence	Moderate Financial (1.8)	Strategic (2.8)

\* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
# Additional parameters used to measure the planning and control

influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning  Influence	   	Contr	ol Inf	luence		
Influence	Strategic	-3			Financ	ial
High (	Strategic	Programming	g 0 1	Financial	Programming	0
н/м			1			1
Medium2	2		2	x		2
3	3	0	3			3
Low 4 0 (2.8, 3.1)	Strategio	-3	42		al Control -1 GFDS Pre-199	4 0

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Friendship Department Store (GFDS) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Moderate Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of strategic control style as described by Goold's and Campbell's Strategic Style.

09.04.96 31 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

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Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 4
Report Date : 5 April 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

- (1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);
- (2) identify the **factors** affecting each planning and control parameters;
- (3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;
- (4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 4" (1 March 1994).

\_\_\_\_\_\_

#### Name of SOE: Guangzhou Dongshan Department Store (GDDS)

Staff Interviewed: Mr Chen Hang, Deputy-Chairman of BOD and

Deputy General Manager

(No. of years in this enterprise : 26 years)

Dates of Visists : Frist Visit - 10 July 1993

Second Visit - 30 October 1993

## Section 1 : History & Background (Q.1.1-5)

- 1.1 GDDS is a wholly state-owned enterprise established in 1956. (refer to Q.1.1)
- 1.2 GFDS is one of the top 5 department stores in Guangzhou with a total shopping area of 8,416 square metres in 1994. (0.1.2)
- 1.3 The commodities sold by GDDS has been increased from 1,000 items in the 1980s to about 3,000 items in 1994. (Q.1.3)

- All the GDDS's commodities, including the imported ones, are 1.4 selling locally in Guangzhou without any export.
- 1.5 Other than the main store, GDDS has no other branches in Guangzhou but he board of directors is planning to erect a new building adjacent to the present one. The long term plan is to increase total shopping space to over 15,000 square metres in 1997. (Q.1.5)

# Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 GDDS was converted into a private shareholding enterprise in December 1992 by issuing 20% of the total shares to the employees while the government was the majority shareholder holding 80% of the shares. (Q.2.1 & 2)
- 2.2 The organisation structure of GFDS can be divided into three levels: (0.2.3 & 5)
  - Board of Directors (BOD) (1)
    - 1.1 Chariman (GM)
    - Deputy Chairman (Deputy-GM[Finance]) 1.2
    - 1.3 Deputy Chairman (Party Secretary)
    - 1.4 Director (Deputy-GM[Sales])
    - Director (Deputy-GM[Purchases])
      Director (Deputy-GM[Planning])
      Director (Deputy-GM[Personnel]) 1.5
    - 1.6
    - 1.7
    - Director (Labour Union Leader) 1.8
    - Director (First Commerce Bureau Representative) 1.9
  - (2) Headquarters
    - 2.1 General Manager (GM)
    - 2.2 Accounting & Finance Department
    - 2.3 Marketing & Sales Department
    - Purchasing Department 2.4
    - Planning Department 2.5
    - 2.6 Personnel Department
    - 2.7 Transportation Department
    - 2.8 Service Evaluation Department
    - 2.9 General Affairs Department
  - Department Stores (3)
    - Cloth Department 3.1
    - 3.2 Clothing & Fashion Department
    - 3.3 Knit Wear Department.
    - 3.4 Furniture Department
    - 3.5 Electricity Appliance Department
    - 3.6 Houseware Department
    - 3.7 Watch & Clock Department
    - 3.8 Arts & Craft Department

- 3.9 Chinaware Department
- 3.10 Stationery & Toy Department
- 3.11 Consumables Department
- 3.12 Food Department
- 2.3 GDDS is neither a holding nor a subsidiary enterprise.
- 2.4 GDDS is under the administration of the Guangzhou Municipal Government and the Guangzhou First Commerce Bureau who dictated all the planning and control systems of GFDS before the enconomic reforms started in 1979. (Q.2.6)
- 2.5 Since the beginning of 1990, the Bureau has been delegating more planning, control and operating autonomy to GDDS and just scruitinising the major development projects, mainly long term ones, recommended by GDDS. (Q.2.7)
- 2.6 Most of the board members are chief executives managing the headquarters under which there are 12 department stores selling different categories of commodities. The 12 department stores are separate divisions or profit centres having their own functional staff or using the matrix management. (Q.2.9)
- GDDS is a medium SOE having a total of 950 employees.

# Since GDDS is neither a holding nor a subsidiary enterprise, question Q.2.8 is not applicable to GDDS.

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### Section 3: Financial Indicators (Q.3.1-8#)

: RMB45M (revaluated 1992) (Q.3.1) 3.1 Total assets

: RMB230M (1992) 3.2 Turnover

RMB400M (1993)

RMB600M (1994 forecast) (Q.3.2 & 7)

Income before tax : RMB 14M (1992) - 6.1% of sales 3.3

RMB 22M (1993) - 5.5% of sales\* RMB 30M (1994) - 5.0% of sales

\* The decrease of profit margin in 1993 was due to inflation and higher sales and related taxes. (Q.3.5, 6 & 7)

- Income tax rate : 15% (Q.3.6) 3.4
- GDDS is planning to maintain an average growth rate in 3.5 turnover from 15% to 20% before 2000 despite the fact that competition in the retailing business is very keen in China. In view of the high input costs and inflation, to keep income before tax at 5% of sales will be considered to be satisfactory. (Q.3.7 & 8)

# Since GDDS is not a holding enterprise and without any export, questions Q3.3 & 4 are not applicable to GDDS.

## Section 4: Econmic Responsibility Contract System (ERCS) (0.4.1-13)

- 4.1 GDDS signed first 5-year's ERC (1987-1991) with the Guangzhou Municipal Government in 1987. (Q.4.1)
- 4.2 The major targets set in the ERC were :
  - (1) "Income Before Tax" with 6% annual growth rate;
  - (2) handover 55% of targeted profit to government; and
  - (3) if actual profit exceeds target, only handover 16.5% of the excess to government. (Q.4.2-4 & 6)
- 4.3 There were different forms of ERCs for the state-owned enterprises to choose from and which had different financial and non-financial targets. The choosen format was nutually agreed between the government and GDDS. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. Mr Chen said that the growth rate of 6% was underestimated and proved by the actual results subsequently. (Q.4.5, 7-10)
- 4.5 The second ERC (1992-1996) was terminated in December 1992 when GDDS was transformed into a shareholding enterprise and then onwards, GDDS has been subject to an income tax of 15%. (Q.4.11-13)

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### Section 5 : Planning System

- 5.1 Organisation Structure [Planning Influence changed from "High-Medium Corporate (2)" before 1992 to "Low Corporate (3.1)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 12 department stores were independent "profit centres" and held accountable for their results.
- After 1992: the 12 department stores have to formulate their own short term strategies in the annual planning exercise.
- Corporate Planning Influence\* : "High-Medium (2)" to "Medium-Low (3)"

\* By using a 5-point scale - Very High Greatest Influence (0) (consistent with the sacle High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) Least Influence some of the parameters or (4)Very Low variables)

Very High (0.0 - 0.5)[VH] Very High-High [VH-H] (0.6 - 1.0)High (1.1 - 1.5)[H] High-Medium [H-M](1.6 - 2.0)Medium [M] (2.1 - 2.5)Medium-Low (2.5 - 3.0)[M-L]Low  $[\Gamma]$ (3.1 - 3.5)[VL] (3.6 - 4.0)Very Low

### (2) Decentralization (Q.5.1.2)

Before 1992: the store managers were responsible for the income and profit as agreed in the annual budget and internal responsibility contracts.

After 1992: the store managers should also initiate their own strategies in marketing, purchasing, selling, cost control and personnel.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

#### (3) Appointment (Q.5.1.3)

Before 1992: the chairman, party secretary and a few chief executives were appointed by the government. The general manager appointed the management staff of the department stores.

After 1992: only the chairman and party secretary are appointed by the government. The general manager appoints other senior staff including the store managers who can decide their own organisation structures and personnel affairs but important changes should be approved by the headquarters.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

### (4) Interdependencies (Q.5.1.4)

Before 1992: the interactions between the department are minimal because they are selling different categories of commodities. Any conflicts were settled by the headquarters.

After 1992 : similar to 1992 and before but store managers are encouraged to solve the conflicts by themselves before headquarters' arbitration.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Factors	Influence Before 1		After 1	.992
Responsibility Centre Decentralization Appointment Interdependencies	H-M H-M High Medium	(2.0) (2.0) (1.5) (2.5)	M-L M-L Low	(3.0) (3.0) (3.0) (3.5)
Overall Planning Influence	H-M	(2.0)	Low	(3.1)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "Medium Corporate (2.1)"
  before 1992 to "Low Corporate (3.1)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992 : long term plans were initiated by the top management before discussion and negotiation with the government. Short term planning and budgeting were delegated by the government to the enterprise except agreeing key targets like sales, profit and inventory.
- After 1992: significant long term plans are submitted to the government for review or raising capital. Short term planning and budgeting have been completely delegated to the enterprise.

Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992 : formal planning committee and procedures were existed to formulate, evaluate, approve and review the annual plans and budgets for submission to the government. Initiation from the middle management was required.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and internal responsibility contracts. Major guidelines are provided by the top management to the store managers to formulate their own budgets and IRCs. They are being consulted in the long term planning.

Corporate Planning Influence: "Medium (2.5)" to "Medium-Low (3)"

(3) Participation (Q.5.7.6-8)

Before 1992: long term planning was a top-down process but middle management (i.e. store managers) did participate in the annual planning & budgeting processes and initiation was required.

After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

(4) Review & Communication (5.7.9-14, 5.8.8-11)

Before 1992: the government reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed quarterly between the top and middle management and amendments could be made and communicated to the lower management through the revised budgets and IRCs.

After 1992 : long term plans are reviewed by the top management during every year end and significant changes should be discussed and approved by the government before informing the employees during the AGM. The annual budgets are reviewed quarterly or monthly between the top and middle management and significant amendments can be made and then notify the lower management.

Corporate Planning Influence : "High-Medium (2) to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After	1992
Autonomy Operation Participation Review & Communication	H-M Medium H-M H-M	(2.0) (2.5) (2.0) (2.0)	Low M-L M-L M-L	(3.5) (3.0) (3.0) (3.0)
Overall Planning Influence	Medium	(2.1)	Low =====	(3.1)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High-Medium Corporate
  (1.8)" before 1992 to "Low Corporate (3.2)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "courteous service attitude to customers" and "reasonable selling prices" were major themes laid down by the top management for employees.
- After 1992: allow the department stores to promote their own themes such as "high quality of commodity" and "comfortable environment for customers" which should not contradict the basic themes.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992 : strategic thrusts decided by the headquarters after discussion with department stores.
- After 1992 : department stores are allowed to formulate own strategic thrusts or tactics such as pricing, sales promotion, counter design, display arrangement, delivery and after sales service.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management sometimes made suggestions on specific strategic issues such as commodity varities, prices, promotion tactics, etc.
- After 1992: top management has left more freedom to the department stores to adjust their strategies and tactics as long as they do not deviate from the basic themes, thrusts and budgets.

Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After	1992
Theme Thrust Suggestions	High H-M H-M	(1.5) (2.0) (2.0)	Medium Low Low	n (2.5) (3.5) (3.5)
Overall Planning Influence	H-M	(1.8)	Low =====	(3.2)

# 5.4 Long-Term Plans [Planning Influence changed from "High Corporate (1.5)" before 1992 to "Medium Corporate (2.4)" after 1992]

- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: the early 5-year long term plans before the economic reform started in 1979 focused on the commodity varieties and prices dictated by the government. Top management participated in the long term planning negotiations since the early 1980s.
- After 1992: the top management has to initiate the long term plans of which some have to discuss with the government for assistance such as source of finance for large capital projects.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(2) Operation (Q.5.4.3 & 5)

Before 1992: the top management was responsible to the government to formulate, evaluate, implement, monitor and review the long term plans.

After 1992 : formal planning committee and procedures are existed for the top management to formulate, evaluate, implement, monitor and review the long term plans.

Corporate Planning Influence: "High-Medium (2)" to "Medium (2.5)

(3) Participation (Q.5.4.4 & 6)

Before 1992: the formulation of long term plans was a top-down approach with litte involvement from the department store manager.

After 1992 : the involvement from middle management (i.e. store managers) is limited to consultation.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

## (4) Review & Communication (Q.5.4.7 & 9)

Before 1992 : 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employees during the annual general meeting.

After 1992: the planning committee reviews the 5-year plan every year before the annual planning cylce and significant changes are reported to the government A booklet summarised the long term plans is distributed to all members of the planning committee.

Corporate Planning Influence : "High-Medium (2)" to "High-Low (3)"

## Summary of Corporate Planning Influence :

Factors	Before	1992	After 1992
Central Planning Operation Participation Review & Communication	High H-M VH H-M	(1.5) (2.0) (0.5) (2.0)	Medium (2.5) Medium (2.5) High (1.5) M-L (3.0)
Overall Planning Influence	 High ======	(1.5) ======	Medium (2.4)

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Low Corporate (3.5)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992: government has devolved the planning autonomy to the top manageemnt but specific suggestions were provided i.e. commodity varieties and prices
- After 1992 : government has completely delegated the short term planning autonomy to the enterprise.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management initiated the key budgets and discussed and compromised with the store managers.
- After 1992: top management provide major guidelines to store store managers for intitiating their own budgets.
- Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992 : store managers were asked to discuss and comprise the key budgets with the top management before working out the details.
- After 1992: store managers have to formulate their own budgets and get the lower management involved formulating the details.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans/budgets were reviewed quarterly and amendments made in line with the changing environmental factors. Annual plans & budgets were documented and copied to every department.
- After 1992: planning committee reviews the annual plans and budgets monthly and amendments are made in view of the fast changing market economy.

  Budget information is futher communicated in the monthly performance reporting.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	Low Low Low Low	(3.5) (3.5) (3.5) (3.5)
Overall Planning Influence	H-M	(2.0)	Low	(3.5)

5.6 Internal Responsibility Contracts (IRC)
[Planning Influence changed from "Medium Corporate (2.3)"
before 1992 to "Low Corporate (3.4)" after 1992]

(1) Target Bias (Q.5.6.1-6\*)

Before 1992 : major targets set were sales, profit & foreign exchange created.

After 1992: major targets are similar but some emphasis on qualitative targets such as service quality, discipline, decoration, display, sanity, daily operation, security, after sales service.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)

Before 1992 : store managers negotiated and compromised the given IRC targets during the annual planning cycle.

After 1992: store managers have to initiate, quantify and justify the major IRC targets before negotiating with the top management.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: IRCs were reviewed twice every year and amendments could be made when mutually agreed by the top management and store managers. IRCs were documented and informed to respective departments & employees.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect attainable targets.

Second-tier IRCs are signed between the store manager and sales sections/counters in order to further delegate the planning and control responsibilities.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

(4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the economic targets set in the IRCs which were not difficult to attain.

After 1992: both the economic (70%) and qualitative (30%) targets are linked up with the bonus so the store managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	H-M (2.0) H-M (2.0) Medium (2.5) Medium (2.5)	M-L (3.0) Low (3.5) Low (3.5) Low (3.5)
Overall Planning Influence	H-M (2.3)	Low (3.4)

### 5.7 Management of Interdependencies (Transfer Pricing)

Because the 12 department stores in GDDS are selling different categories of commodities with very minimal interactions, therefore, internal transfer pricing does not exist.

\_\_\_\_\_

### Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Moderate Financial (2)" before 1992 to "Strategic (2.8)" after 1992]

		=====	======	======	=====
		H-M	(1.9)	M-L	(2.6)
1.4	inceraccions	11-14	(2.0)	141-17	(3.0)
1.4	Interactions	H - M	(2.0)	M-L	(3.0)
1.3	Roles & functions	H-M	(2.0)	M-L	(3.0)
	Staffing	H-M	(2.0)	Medium	(2.5)
	Structure	High	(1.5)*	H-M	(2.0)
		Before		After 1	
( - /	0194112040201142 2002911			7 £ L	000
(1)	Organisational Design#	(0.6.1.1	)		

# Mr Chen said that since the late 1980s, more delegation has been given to the store managers in deciding their own divisional structures, staffing and their roles and functions, and interactions between their sub-units.

 $\star$  By using a 5-point scale which is exactly the same used in the questionnaire :

Very Low(4)	Low(3)	Medium(2)	High(1)	Very High(0)
Tight Strates	gic<			-Tight Financial Control
Tight Financi Financial Moderate Fina Moderate Stra Strategic Tight Strateg	ncial tegic	(0.0 - 1.0) $(1.1 - 1.5)$ $(1.6 - 2.0)$ $(2.1 - 2.5)$ $(2.6 - 3.0)$ $(3.1 - 4.0)$		
(2) Personne	el@ (Q.6.1.1	) Before :	1992	After 1992

	•	======	======	=====	=====
		Medium	(2.3)	Low	(3.2)
_					
2.6	Termination	VH-H	(1.0)	H-M	(2.0)
2.5	Remuneration	Medium	(2.5)	Low	(3.5)
2.4	Evaluation	Medium	(2.5)	Low	(3.5)
2.3	Training	M-L	(3.0)	Low	(3.5)
	Assignment	M-L	(3.0)	Low	•
			· ·		(3.5)
2.1	Recruitment	H-M	(2.0)	M-L	(3.0)
		Before	1992	After :	1992

@ Mr Chen further mentioned that since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

	H-M	(1.8)	M-L	(2.6)
alitative targets	H-M	(2.0)	M-L	(3.0)
antitative targets	H-M	(2.0)	Medium	(2.5)
nancial targets	VH-H	(1.0)	H-M	(2.0)
AC	H-M	(2.0)		(3.0)
ıdget	H-M	(2.0)	Medium	
	1101011 110011011111111111111111111111		ntrol Mechanisms* (Q.6.1.2-3, Q.6.4.8) Before 1992	Before 1992 After 1

\* Mr Chen expressed that as long as the department stores can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility for strategy development to the stores without much interference. This change in control style was mainly because of the government's macroeconomic influence and many uncertainties existed in the market.

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	H-M (2.0) Medium (2.3) H-M (1.8)	M-L (2.6) Low (3.2) M-L (2.6)
Overall Control Influence	H-M (2.0)	M-L (2.8)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Moderate Strategic (2.1)" before 1992 to "Strategic (2.8)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 (1) Precision & detail of VH-H (1.0)H-M (2.0)targets (2) Objective vs subjective Medium (2.5) targets H-M(2.0)(3) Achieving targets Medium (2.5) Timeframe H-M(2.0)(4)Stretch built into (3.5)the targets Medium (2.5)Low (5) Financial vs nonfinancial targets (3.0)(2.5)M-LMedium (6) Manangement influence on setting targets Medium (2.5)M-L(3.0)(2.8)Medium (2.1) M-L ========= =========

- 6.3 Monitoring Results
  [Control Influence changed from "Moderate Financial (1.6)"
  before 1992 to "Moderate Strategic (2.5)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)

Factors considered by the headquarters in management control

	_	Before :	1992	After 1992
1.1	Policy	VH-H	(1.0)	H-M (2.0)
1.2	Frequency	H-M	(2.0)	Medium (2.5)
1.3	Contents	VH-H	(1.0)	H-M (2.0)
1.4	Compilation	High	(1.5)	H-M (2.0)
1.5	Review	H-M	(2.0)	Medium (2.5)
1.6	Evaluation	Medium	(2.5)	M-L (3.0)
1.7	Authorization	VH-H	(1.0)	H-M (2.0)
1.8	Feedback	Medium	(2.5)	M-L (3.0)
1.9	Follow-up	Medium	(2.5)	M-L (3.0)
1.10	Computerization	H-M	(2.0)	Medium (2.5)
		H-M	(1.8)	Medium (2.5)
		======	=====	========

# Mr Chen has mentioned that for any serious advverse variances shown on the monthly report, the general or deputy-general managers will contract the respective store managers to dig out the underlining reasons or ask them to perform investigation immediately.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: department stores were mainly measured on the financial targets such as sales, profit and foreign exchange created.
- After 1992: other than the previous financial targets, a set of qualitative targets such as service quality, discipline, decoration, display, sanity, daily operation and security are also measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication\* (Q.6.4.3-7, Q.6.4.9-12))
- Before 1992: the top management reviewed the performance report monthly and discuss with store managers for corrective actions.

After 1992: the planning committee reviews the performance report monthly. Infrequent adverse variances can be tolerated if store managers can take remedial tactics or strategies to correct the unfavourable conditions and meet the budget at the year end.

Corporate Control Influence : "High-Medium (2)" to "Medium-Low (3)"

\* Mr Chen said that it was expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the effect of advertisement).

Summary of Corporate Control Influence :

Factors	Before	1992	After 3	L992
Reporting Requirements Performance Measurement Review & Communication	H-M VH-H H-M	(1.8) (1.0) (2.0)	Medium H-M M-L	(2.5) (2.0) (3.0)
Overall Control Influence	H-M ======	(1.6)	Medium	(2.5)

# 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.5)" before 1992 to "Moderate Strategic (2.2)" after 1992]

		=======	=====	======	=====
		H-M	(1.8)	Medium	(2.2)
1.8	Redundancy	H-M	(2.0)	meatum	(2.5)
		H-M		Medium	
1.7	Recognition (intangible)	H-M	(2.0)	Medium	(2.5)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	H-M	(2.0)	Medium	
1.2	Allowances	Medium	(2.5)	Medium	(2.5)
	Basic wages	Medium	(2.5)	H-M	(2.0)
		Before 1		After 1	
(1)	Incentives* (Q.6.5.1-7,19			- 5	000
			\		

<sup>\*</sup> The "basic wages" is reviewed annually depending on grade and seniority without paying regards to qualification and technical skill. Every point increase on the basic pay scale is RMB10-20, therefore, it is no substantial enough to catch up with the inflation. Obviously, the "bonus" is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The firest part is determined by the Manpower Bureau of the Guangzhou government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the GDDS which may include housing, meals, travel, education, attendance, overtime, festival gifts etc.

The calculation of "bonus" is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to his or her subordinates according to individual performance, such as the sales achieved by a salesgirl in a certain month.

The "bonus" for the management and administrative staff in the headquarters is linked up with the total monthly sales performan

- (2) Performance Orientation# (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and took over 55-65% of total wages. Basic wages was low and depended on seniority. Too many types of allowances all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for 50% of total wages. Basic wages has been increased and increaments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. Pension is partly contributed by the government. Laying off redundant employees is easier after implementing the employment contract system.

Corporate Control Influence: "High (1.5)" to "Medium (2.5)"

# Mr Chen said that unlike Beijing and Shanghai, the labour market in Guangzhou is rather free which means employees can choose new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the terms of the employment contracts. GDDS has fully implemented the "employment contract system" since 1992 and the "big rice pot" or "three iron bowls" concept has been abolished.

- (3) Participation (Q.6.5.16-17)
- Before 1992 : store managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances , pension and other benefits were decided by headquarters and government.
- After 1992: store managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. Pension policy is still decided by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8, 13-14, 20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees on a monthly basis.
- After 1992: IRC's targets are reviewed twice every year and can be modified. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies. Performance and reward are made known to employees every month.

Corporate Control Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 199	2 After	1992
Incentives Performance Orientation Participation Review & Communication	High (1 VH-H (1	<b>-</b>	m (2.2) m (2.5) (2.0) (2.0)
Overall Control Influence	 High (1	5) Mediu	m (2.2)

### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Dongshan Department Store (GDDS) belonged to before and after 1992.

\_\_\_\_\_\_

Planning Influences		After 1992
Organisation Structure*		
Review Process*	Medium (2.1)	Low (3.1)
Strategic Themes, Thursts and Suggestions*	High to Medium (1.8)	Low (3.2)
Long-Term Plans* (Resource Allocation)	High (1.5)	Medium (2.4)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium (2.0)	Low (3.5)
Internal Responsibility Contracts#	Medium (2.3)	Low (3.4)
Management of Inter- dependencies*		
Overall Planning Influence	Medium (2.0)	Low (3.1)
Control Influence	Before 1992	After 1992
	Moderate Financial (2.0)	
Agreeing Objectives*	Moderate Strategic (2.1)	Strategic (2.8)
Monitoring Results*	Moderate Financial (1.6)	Moderate Strategic (2.5)
Rewards & Incentives*	Financial (1.5)	Moderate Strategic (2.2)
Overall Control Influence	Moderate Financial (1.8)	Strategic (2.6)

\* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study. # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning  Influence	Cont	crol Influence
Incluence	Strategic	Financial
High C	Strategic Programmi	ing 0 Financial Programming 0
1		
н/м		
Medium2	?	<sup>1</sup> X <sup>1</sup>
M/L		
3	0	3
Low 4	Strategic Control	4 Financial Control 4
0 (2.6, 3.1)	- GFDS Post-1992	X (1.8, 2.0) - GFDS Pre-1992

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Dongshan Department Store (GDDS) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Moderate Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of strategic control style as described by Goold's and Campbell's Strategic Style.

5 April 1996 09.04.96

## UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

\_\_\_\_\_\_\_

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 5
Report Date : 30 April 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 5" (7 March 1994).

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#### Name of SOE: Beijing Electrostatic Equipment Factory (BEEF)

Staff Interviewed: Mr Quo Zhong Mao/Chief Accountant

(No. of years in this enterprise: 31 years)

Miss Li Xiao Min/Cost Accountant

(No. of years in this enterprise: 7 years)

Dates of Visits : First Visit - 22 May 1993

Second Visit - 30 August 1993 Third Visit - 3 September 1994

### Section 1 : History & Background (Q.1.1-5)

1.1 BEEF is a wholly state-owned enterprise established in 1964 and specialized in manufacturing electrostatic equipment for various industrial uses. It is located in the southern district of Beijing, the capital of China, and is not far away fromt he "heart" of Beijing city (i.e. the Forbidden Palace) by taking a bus for about 15 minutes. (Q.1.1)

- 1.2 BEEF is one of the largest electrostatic equipment manufacturers in China but is competing with its strong counterparts in Dalian, Shanghai and Fuzhou. (Q.1.2)
- 1.3 BEEF is currently producing the following five types of products which are all sold domestically in China:
  - 1.3.1 Electrostatic Precipitators
  - 1.3.2 Electrostatic Air Separation Percipitators
  - 1.3.3 Electrostatic Spray Equipment
  - 1.3.4 Disc Electrostatic Power Spraying Equipment
  - 1.3.5 Electrostatic Transformer (Q.1.3)
- 1.4 Nearly all the BEEF's products are sold domestically. (Q.1.4)
- 1.5 To enhance the product quality and diversify the product range are the product strategies of BEEF on one hand, and to explore the overseas' markets is an important marketing strategy on the other hand. (Q.1.5)

### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 BEEF has been a wholly state-owned enterprise before and after 1992. There is no plan to transform into a shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise. (Q.2.1)
- 2.2 BEEF is neither a holding or subsidiary enterprise. (Q.2.4)
- 2.3 The organisation structure of BEEF can be divided into four divisions under the direct control of the Factory Manager. (Q.2.3)
- 2.4 The six divisions are listed as follow: (Q.2.5 & 2.9)
  - (1) Production Division (Chief Engineer)
    - 1.1 Production Workshop No.1\*
    - 1.2 Production Workshop No.2\*
    - 1.3 Production Workshop No.3\*
    - 1.4 Production Workshop No.4\*
    - 1.5 Research & Development Department
    - 1.6 Quality Control Department
    - 1.7 Repair & Maintenance Department
  - (2) Operation Division (Deputy-FM)
    - 2.1 Sales & Marketing Department
    - 2.2 Purchasing Department
    - 2.3 Supply (Inventory) Department

- (3) Finance Division (Chief Accountant)
  - 3.1 Accounting & Finance Department
  - 3.2 Planning Department
- (4) Administration Division (Deputy-FM)
  - 4.1 Personnel Department
  - 4.2 Security & Estate Department
  - 4.3 General Affairs Department
    - 4.3.1 Education & Training
    - 4.3.2 Medical
    - 4.3.3 Canteen
- \* All the 4 production workshops are classified as "profit centres" and they have signed Internal Responsibility Contracts (IRC) with the factory manager.
- 2.5 BEEF is under the administration of the Beijing Municipal Government and the Beijing Instrument Bureau. In 1983, the Bureau was transformed into a quasi-government body called Beijing International Instrument Corporateion (BIIC) as an initail step to delegate the governing role to this self-regulated institution composed of all the electronic instrument manufacturing industries in Beijing.

Since then, more autonomy in terms of planning an control decisions has been authorised by the Beijing Government to the BIIC and turning into this decade, BIIC's major roles played for its subordinate enterprises are (1) appointing the factory manager and the communist party secretary; (2) maintaining a macoreconomic control or balance on the 5-year's plans suggested by its enterprises; and (3) acting as a bridge or facilitator between the government and its enterprises in policy matters such as capital invetment, import and export autonomy, taxation, legal form transformation etc. (Q.2.6 & 2.7)

2.6 BEEF is a small SOE having 600 employees. (Q.2.10)

# Since BEEF is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to BEEF.

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#### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB 25M (historical cost) (Q.3.1)

3.2 Turnover : RMB 15M (1992) RMB 12M (1993)

RMB 17M (1994)

RMB 18M (1995 forecast) (Q.3.2 & 7)

3.3 Income before tax: RMB1.5M (1992) - 10.0% of sales RMB1.1M (1993) - 9.2% of sales RMB 0M\* (1994)

RMB 0M\* (1994) RMB 0M\* (1995 forecast) (Q.3.5, 6 & 7)

- \* The breakeven situation was mainly due to inflation and low selling prices.
- 3.4 Income tax rate : 33% (Q.3.6)
- 3.5 Both the sales and profit has been deteriorating because of the following reasons: (Q.3.7 & 8)
  - (1) before a new product was launched in the market, a competitive product had been available to the potential customers in mide-1993;
  - (2) the market economy policy allows head to head competition from the other three major compititors in Dalin, Shanghai and Fuzhou; and
  - (3) the market penetration and diversification strategies are not vigorous enough.

# Q.3.4 is not applicable to BEEF because it is neither a holding nor a subsidiary enterprise.

## Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 BEEF entered into an ERC with the Beijing Municipal Government in 1992. It was a standing contract without duration (time limit) specified but subject to review by both parties every year. (Q.4.1)
- 4.2 The terms and conditions of this contract were similar to the "Policy No.180)" recommended by the Inland Revenue Dpeartment under which BEEF has to undertake a "Profit Before Tax" (PBT) of RMB1 million for the four years from 1992 to 1995 inclusive. (Q.4.2 & 4)
- 4.3 This PBT base was determined according to the average annual profit of the last three years before 1992 and it would be subject to review in 1996. On this PBT target, an income tax of 33% was levied which was less than the standard income tax rate of 55% for the state-owned enterprises in Beijing by that time. (Q.4.3)
- 4.4 Another favourable term provided for BEEF was to deduct the bank loan repayment from the PBT before income tax assessment. (Q.4.6)

- 4.5 Since the financial performance has been deteriorating as from 1993, BIIC requested BEEF to achieve the breakeven (i.e. PBT = RMB 0) in 1994 and 1995. (Q.4.5)
- 4.6 The top management did participate in the negotiation with the government and BIIC in setting the above targets. The chosen terms were mutually agreed among the BIIC, government and BEEF. (Q.4.7-10)
- 4.7 Mr Quo has mentioned that in view of the current product and market position and potential, the top management believe that the PBT targets would be positive figures after 1995. The terms and conditions of the informal ERC would not be changed significantly in the next few years. (Q.4.12 & 13)

### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Very High-High Corporate
  (0.9)" before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 4 production workshops were "cost centres" managed by the workshop managers. All the other management and service departments were "expenses centres" under tight expense budgets.
- After 1992: it went to some length in 1993 to convert the 4 production workshops into "profit centres" managed by the workshop managers with higher autonomy in management and operation. All the other management and service departments remain "expense centres" whose managers participate in the budgeting process Mr Quo has said that there would be no significant changes in BEEF's organisation structure in the next few years.

Corporate Planning Influence\*: "Very High-High (1)" to "Medium (2.5)"

\* By using a 5-point scale -(0) Greatest Influence Very High (consistent with the scale High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify (3) Low some of the parameters or Very Low (4)Least Influence variables)

[VH]	(0.0	_	0.5)
[VH-H]	(0.6	-	1.0)
[H]	(1.1	-	1.5)
[H-M]	(1.6	-	2.0)
[M]	(2.1	-	2.5)
[M-L]	(2.6	-	3.0)
[L]	(3.1	-	3.5)
[VL]	(3.6	-	4.0)
	[VH-H] [H] [H-M] [M] [M-L] [L]	[VH-H] (0.6 [H] (1.1 [H-M] (1.6 [M] (2.1 [M-L] (2.6 [L] (3.1	[VH-H] (0.6 - [H] (1.1 - [H-M] (1.6 - [M] (2.1 - [M-L] (2.6 - [L] (3.1 -

### (2) Decentralization (Q.5.1.2)

Before 1992: the workshop managers were responsible for the production volumes and costs as given in the annual budgets and internal responsibility contracts (IRCs) with the top management.

Therefore, classifying the factories into cost centres were appropriate.

After 1992: the primary profit responsibility lies with the workshop managers who initiate the annual budgets and IRCs and get their subordinates (middle and lower management) involved. Obviously, changing into profit centres is reasonable.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

(3) Appointment (Q.5.1.3)

Before 1992: the factory manager and party secretary were appointed by the BIIC, and other senior appointments and major organisational changes required BIIC's approval.

After 1992: the factory manager and party secretary are still appointed by the BIIC. The factory manager can appoint all the other senior staff such as the workshop managers. The workshop managers can suggest changes in organisation structure and personnel affairs to the factory manager for approval. Mr Quo has mentioned that in fact the party secretary was the representative from the government/BIIC to ensure some sort of macroeconomic policies are under control.

Corporate Planning Influence : "Very High (0.5)" to "High-Medium (2)"

(4) Interdependencies (Q.5.1.4)

Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production without any profit margin.

After 1992: the transfer prices are based on standard cost plus 10% across the board. Although the transfer prices may be lower than the market prices, nevertheless, they provide a profit margin to the workshop or a buffer to cover the underestimateion of inflation rates in setting the standard cost.

Corporate Planning Influence : "Very High (0.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Responsibility Centre Decentralization Appointment Interdependencies	VH-H High VH VH	(1.0) (1.5) (0.5) (0.5)	Medium (2.5) M-L (3.0) H-M (2.0) H-M (2.0)	
Overall Planning Influence	VH-H	(0.9)	Medium (2.4)	

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the BIIC while the top management was in consultation only. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the BIIC.
- After 1992: BIIC has delegated the long term planning and annual budgeting autonomy to the top management but Mr Quo has said that strategic plans still have to be reviewed, discussed and modified with BIIC.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- (2) Operation (Q.5.7.1-5)
- Before 1992 : formal planning meetings were held between BIIC and the top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.

After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the workshop managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992 : long term planning was top-down process but middle management (i.e workshop managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: BIIC reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the top management during every year end and significant changes should be discussed with BIIC and informed the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notify to lower management immediately.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	VH-H (1.0) High (1.5) VH-H (1.0) High (1.5)	H-M (2.0) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.3)	Medium (2.4)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "Very High-High Corporate
  (0.8)" before 1992 to "High-Medium Corporate (2)" after
  1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "economic efficiency" and "cost reduction" were the major strategic themes given to and imbedded into the planning and control system.
- After 1992: "product and market developments" have been added for all the employees to observe and keep in mind when they are performing their duties.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.
- After 1992: to provide the management with relevant information for quality control, the finance division is developing a "quality control accounting" system which is based on cost and benefit analysis.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

### (3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, transfer price, personnel, incentive scheme, sales and marketing etc.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the workshop managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After 3	1992
Theme Thrust Suggestions	VH VH-H VH-H	(0.5) (1.0) (1.0)	High H-M Medium	(1.5) (2.0) (2.5)
Overall Planning Influence	VH-H	(0.8)	H-M ======	(2.0)

# 5.4 Long-Term Plans [Planning Influence changed from "High Corporate (1.5)" before 1992 to "Medium Corporate (2.4)" after 1992]

### (1) Central Planning (Q.5.4.2,4 & 8)

Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the BIIC in terms of production facilities, volume and mix, product and market development.

After 1992: the top management has to initiate its own long term plans and compromise with the BIIC who may insist on certain macro-targets such as output volume and mix.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the BIIC to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. workshop managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1991-1995), includes competitive edge, research and development, product and market development and cost reduction program.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979
  started to allow BEEF to participate in the 5year's planning with the BIIC and the municipal
  government but specific directives and suggestions
  were always coming from the top by using the term
  "macroeconomic control and adjustment" as an excuse
- After 1992: BEEF has to formulate their own long term strategic plan since 1990. For capital expenditure below RMB5M, BEEF can decide on its own. For amount in between RMB5-20M, approval from BIIC is required. For amount over RMB20M, approval must be sought from the Beijing Commission of Economic Reform.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992: 5-year long term plan was reviewed annually by the BIIC with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the BIIC for endorsement and sometimes assistance such as seeking a long term bank loan.

Corporate Planning Influence : "High (1.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	High (1.5) High (1.5) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) H-M (2.0)
Overall Planning Influence	High (1.5)	Medium (2.4)

<sup>\*</sup> The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because BEEF caters for the capital budgets during the long term planning exercise.

5.5 Short-Term Plans/Budgets
[Planning Influence changed from "High-Medium Corporate (2)"
before 1992 to "Medium-Low Corporate (3)" after 1992]

- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.
- After 1992: top management has higher autonomy in the annual planning and budgeting processes which involve the middle management such as the workshop managers.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992 : top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the workshop managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: top management provided major guidelines to the workshop managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (3) Participation (Q.5.5.3 & 5)
- Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes.

  Annual plans were communicated to middle and lower management in written forms.
- After 1992: senior management committee reviews the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors.

  A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence:

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	M-L M-L M-L M-L	(3.0) (3.0) (3.0) (3.0)
Overall Planning Influence	H-M ======	(2.0)	M-L =====	(3.0)

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- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.4)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: The IRC system was started in 1993 and mainly applied to the production workshops. Before 1992, production workshops were given certain targets such as production quantity and costs.
- After 1992: major economic target is internal profit while quality and safety have the veto effects on the bonus which was linked up with the IRC performance. Other qualitative factors, such as production, quality, inventory and safety management, are also emphasized.

A sample of IRC is shown in section 5.6 of the Data Analysis Set 5.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: workshop managers are given the production quantity and cost targets without much negotiation.
- After 1992: workshop managers negotiate and compromise the IRC targets with the general management during the annual planning cycle.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets given to the workshop managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective workshop managers and their employees.

Corporate Planning Influence : "High (1.5)" to "Medium (2)"

(4) Incentive (Q.5.6.16)

Before 1992 : the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the workshop managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High (1.5)" to "Low (3.5)"

### Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	High (1.5) VH-H (1.0) High (1.5) High (1.5)	Medium (2.5) H-M (2.0) H-M (2.0) Low (3.5)
Overall Planning Influence	High (1.4)	Medium (2.5)

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "Very High Corporate (0.5)"
  before 1992 to "High-Medium Corporate (1.7)" after 1992]
- (1) Characteristics (Q.5.9.1-7) Before 1992 After 1992 1.1 Production & service Production & service Interdepenworkshops involved workshops involved dencies standard cost plus 1.2 Transfer standard cost (histori-Price Basis cal + inflation) fixed profit margin Transfer Price Very little between 1.3 Some negotiations Negotiation buyer and seller are allowed Intermediate Some buy and sell are Some buy & sell are 1.4 available in market Product available in market 1.5 Transfer All determined by the Excess service can be sold externally Quantity top management Arbitration Mainly determined by Prices and quantities 1.6 top management but all determined by top negotiations allowed management 1.7 Government No, except the output No, only suggest volumes & selling volumes & prices of Interference

Corporate Planning Influence: "Very High (0.5)" to "High-Medium (2)"

prices of final products final products

- (2) Participation (Q.5.9.8)
- Before 1992: nearly all the transfer prices and quantities were determined by the top management and the workshop managers were consulted sometimes. Any conflects were arbitrated by the factory manager. Workshop managers didn't care much because they were measured by production volume and cost.
- After 1992: most of the transfer prices and quantities are still controlled by the top management although some negotiations are allowed for the workshop managers because they are measured on internal profit. Interference from and arbitration by the factory manager are quite often.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

- (3) Review (Q.5.9.9-12)
- Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management. It was historicial cost plus inflation. The transfer prices were reviewed in the middle of the year and some amendments were allowed.

After 1992: the standard cost plus a fixed profit margin is used for setting the transfer prices which are reviewed quarterly.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After	After 1992	
Characteristics Participation Review	VH VH VH	(0.5) (0.5) (0.5)	H-M High High	(2.0) (1.5) (1.5)	
Overall Planning Influence	VH =====	(0.5)	H-M =====	(1.7)	

### Section 6 : Control System

6.1 Decentralisation & Control [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Financial (1.9)" after 1992]

Organisational Design (Q.6.1.1) (1) Before 1992 After 1992 VH (0.5)\* VH-H (1.0) Structure 1.1 (1.0)High (1.5)Staffing VH-H 1.2 Roles & functions H-M(2.0)M-L(3.0)1.3 M-L(3.0)1.4 Interactions High (2.0)High (1.4) Medium (2.1)

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	C<			-Tight	Financial
Control				Contro	ol

=========

=========

Tight Financial	(0.0	_	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1		2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	_	4.0)

		=====		==========
		H-M	(1.6)	Medium (2.3)
2.6	Termination	VH	(0.5)	H-M (1.0)
	Remuneration	High	(1.5)	Medium (2.5)
	Evaluation	H-M	(2.0)	Medium (2.5)
2 3	Training	H-M	(2.0)	M-L (3.0)
2.2	Assignment	H – M	(2.0)	M-L (3.0)
	Recruitment	VH-H	(1.0)	High (1.5)
_		Before		After 1992
(2)	Personnel# (Q.6.1.1)			- 5: - 5000
(2)	Damaanna]# /0 ( 1 1)			

# Mr Quo said that since 1992, more delegation has been given to the workshop managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

(3)	Control Mechanisms (Q.6	5.1.2-3,	Q.6.4.8)		•
		Before	1992	After	1992
3.1	Budget	VH-H	(1.0)	High	(1.5)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.5	Qualitative targets	High	(1.5)	VH-H	(1.0)
3.6	Communication*	VH-H	(1.0)	High	(1.5)
		High	(1.2)	High	(1.3)
		======	======	======	======

\* The control mechanisms are clearly communicated to the workshops and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1. H-M (1. High (1.	6) Medium (2.3)
Overall Control Influence	High (1.	

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1.0)" before 1992 to "Moderate Financial (1.6)" after 1992]

Facto	ors affecting the types a	nd styles Before 1		mechani After 1	
(1)	Precision & detail of				
	targets	VH-H	(1.0)	High	(1.5)
(2)	Objective vs subjective				
	targets	VH-H	(1.0)	High	(1.5)
(3)	Achieving targets				>
	Timeframe	VH-H	(1.0)	High	(1.5)
(4)	Stretch built into		()		()
	the targets	VH-H	(1.0)	H-M	(2.0)
(5)	Financial vs non-	' 1	/\	** 1	/a = \
>	financial targets	High	(1.5)	High	(1.5)
(6)	Manangement influence		(0 5)	24' 1	/a = \
	on setting targets	VH	(0.5)	Migh	(1.5)
			·		(1 6)
		VH-H	(1.0)	H-M	(1.6)
		=======	=====	======	=====

## 6.3 Monitoring Results [Control Influence changed from "Tight Financial (1.0)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

	_	Before	1992	After :	1992
1.1	Policy	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
		VH-H	(1.0)	H-M	(1.7)
		======	======	=====	=====

# Mr Quo has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the factory manager. For any serious adverse variances shown on any report, the factory manager or deputy-factory managers will contact the respective workshop manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production workshops were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety are accounted for less weightings.
- After 1992: internal profit and production volume are the major economic targets, however, more qualitative targets such as production technology, facilities and inventory are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each workshop or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the workshop managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual workshop or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Reporting Requirements Performance Measurement Review & Communication	High (1.1) VH-H (1.0) VH-H (1.0)	H-M (1.7) H-M (2.0) H-M (2.0)
Overall Control Influence	VH-H (1.0)	H-M (1.9)

6.4 Rewards & Incentives
[Control Influence changed from "Financial (1.2)" before
1992 to "Moderate Financial (1.8)" after 1992]

		======	======	=====	=====
		H-M	(1.6)	H-M	(1.7)
1.8	Redundancy	Very Lo	JW (4.0)	H-M	(2.0)
			• •		(2.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	High	(2.5)
1.3	Bonuses - monthly	VH	(0.5)	VH-H	(1.0)
	Allowances	H-M	(2.0)	H-M	(2.0)
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
		Before		After	
(1)	Incentives* (Q.6.5.1-7,1	•		_	

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Beijing municipal government at least once in each year to combat inflation. The second part is decided by the BEEF which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the factory manager and the workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the BEEF's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 40-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992 : bonus is mainly determined according to IRCs and accounts for less than 30-40% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992: workshop managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by the headquarters and government.
- After 1992: workshop managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

#### (4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the workshop or department managers

After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the workshop or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.6) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.7) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2) =====	 H-M ======	(1.8)
=======================================	======	========	======	======

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Electrostatic Equipment Factory (BEEF) belonged to before and after 1992.

Planning Influences	Before 1992	After 1992
Organisation Structure*	Very High to High (0.9)	Medium (2.4)
Review Process*	High (1.3)	Medium (2.4)
Strategic Themes, Thursts and Suggestions*	Very High to High (0.8)	High to Medium (2.0)
Long-Term Plans* (Resource Allocation)	High (1.5)	Medium (2.4)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium (2.0)	Medium to Low (3.0)
Internal Responsibility Contracts#	High (1.4)	Medium (2.5)
Management of Inter- dependencies*	Very High (0.5)	High to Medium (1.7)
Overall Planning Influence	High (1.2)	Medium (2.3)
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.4)	Moderate
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (1.6)
Monitoring Results*	Tight Financial (1.0)	Moderate Financial (1.9)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.8)
Overall Control Influence	Financial (1.2)	Moderate Financial (1.8)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning	Contro	ol Influence
Influence	  Strategic	Financial
High (	Strategic Programmin	ng O Financial Programming O
-		x
H/M		·
Medium2	l 2	·22
M/L		0
3	3	3 3
Low	 	4 Financial Control 4
0 (1.8, 2.3)	- BEEF Post-1992	X (1.2. 1.2) - BEEF Pre-1992

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Electrostatic Equipment Factory (BEEF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

30 April 1996

## UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 6

Report Date : 12 May 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 6" (15 June 1994).

## Name of SOE: Shanghai Measuring Instrument & Cutting Tool Works (SMCW)

Staff Interviewed: Mr Tao Yi Seng/Chief Accountant

(No. of years in this enterprise : 31 years)

Mr Ju Wei Ya/Ass. Chief Accountant

(No. of years in this enterprise : 25 years)

Dates of Visits : First Visit - 17 September 1992

Second Visit - 7 September 1993 Third Visit - 12 September 1994 Fourth Visit - 10 February 1995

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#### Section 1: History & Background (Q.1.1-5)

1.1 SMCW is a wholly state-owned enterprise established in 1966 and is manufacturing measuring and cutting tools for various industrial and private users. It is located in the southwest suburb district of Shanghai of a distance about 25 km from the city centre. (Q.1.1)

- 1.2 SMCW is one of the largest measuring and cutting tools manufacturers in China and is competing with many counterparts in other provinces especially those small enterprises in Guangdong. The overall demand of the products is lower than the supply and as a result inventory has been built up. (Q.1.2)
- SMCW is currently producing the following three types of 1.3 products:
  - 1.3.1 Measuring Tools
  - 1.3.2 Cutting Tools
  - 1.3.3 Measuring Instruments (Q.1.3)
- SMCW's products are 75% sold domestically and 25% exported 1.4 to 30 overseas countries. (0.1.4)
- The overall demand of measuring and cutting products is lower than the supply in China, and as a result SMCW's inventory has been built up. SMCW has been actively undertaking marketing and sales strategies to promote sales 1.5 and reduce the capital tied up in stock. The production and sales ratio was 1:0.94 in 1994, but the major problem is the delay in collecting accounts receivable. (Q.1.5)

#### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- SMCW has been a wholly state-owned enterprise before and 2.1 after 1992. There is no plan to transform into a shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise. (Q.2.1)
- SMCW is neither a holding nor subsidiary enterprise. (Q.2.4) 2.2
- The organisation structure of SMCW is based on functional 2.3 basis under the direct control of the Factory Manager who has an Enterprise Management Office. (Q.2.3)
- The organisation structure is listed as follow: (Q.2.5 & 2.9) 2.4
  - Production Deputy-Factory Manager (1)
    - Production Workshop No.1 (Cutting Tools)\*
    - 1.2 Production Workshop No.2 (Measuring Tools-Caliper)
      1.3 Production Workshop No.3 (Measuring Tools-Others)
      1.4 Production Workshop No.4 (Measuring Instruments)

    - 1.5 Production Workshop No.5 (Chibao New Factory)
    - 1.6 Production Support Workshop@
      - 1.6.1 Materials Preparation
      - 1.6.2 Heat Treatment

- 1.6.3 Electroplating
- 1.6.4 Tools
- 1.6.5 Machine Repairs
- (2) Chief Engineer
  - 2.1 Production Planning Department
  - 2.2 Research & Development Department
  - 2.3 Quality Control Department
  - 2.4 Inspection Department
  - 2.5 Safety & Technology Department
  - 2.6 Energy & Facility Department
- (3) Purchasing & Sales Deputy-Factory Manager
  - 3.1 Purchasing & Supply Department
  - 3.2 Marketing & Sales Department\*
- (4) Chief Accountant
  - 4.1 Accounting & Finance Department
  - 4.2 Internal Audit Department
- (5) Personnel Deputy-Factory Manager
  - 5.1 Manpower & Wages Department
  - 5.2 Personnel Department
- (6) General Affairs Deputy-Factory Manager
  - 6.1 Estate & Development Department
  - 6.2 Security Department
  - 6.3 Administration Department
    - 6.3.1 Education & Training
    - 6.3.2 Medical
- (7) Communist Party Office & Trade Union Office
- (8) Tertiary Enterprises
  - 8.1 Canteen
  - 8.2 Sales Outlets (retail shops)
  - 8.3 Engineering & Consultancy
  - 8.4 Retailing
  - 8.5 Restaurant
  - 8.6 Employee Quarters
  - 8.7 Motel
  - 8.8 Nursary & Kidnergarten etc.
- \* All the 5 production workshops and the sales department have signed Internal Responsibility Contracts (IRCs) with the factory manager. The 5 production workshops are mainly based on good production and efficiency to determine bonus. The bonuses for the sales department are linked up with the turnover and cash received from sales.

- @ After fulfilling the internal requirements, the production support workshop can provide its repair and maintenance services to the outsiders. Therefore, it is an independent profit centre by itself having 100 employees. Half of the external profit made can be retained by the workshop.
- 2.5 SMCW is under the administration of the Shanghai Mechanical Equipment and Instrument Bureau. In 1992, the Bureau was transformed into a semi-governmental body called Shanghai Mechanical Equipment & Instrument Corporation. The corporation now oversees the major development and projects, mainly long term ones, recommended by SMCW.

Furthermore, the corporation regulates and suggests the product pricing policy for the enterprises within its industry although the ultimate price ranges are determined by the enterprises themselves through regular meetings. In addition, the corporation arranges capital to finance the approved projects or investments for the enterprises under its umbrella. Another important function of the corporation is to provide market information for its industry to produce the right products and sell to the right markets at the right time. (Q.2.6 & 2.7)

2.6 SMCW is a medium SOE having 1,550 employees. One-third of the employees are involved in the direct production and 350 employees are working in the 14 tertiary enterprises. All the employees have signed employment contracts with duration from one to three years. (Q.2.10)

# Since SMCW is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to SMCW.

Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB 108M (historical cost) (Q.3.1)

3.2 Turnover : RMB 44M (1992)

RMB 71M (1993)

RMB 102M (1994)

RMB 140M (1995 forecast) (Q.3.2 & 7)

3.3 Income before tax: RMB 5.9M (1992) - 13.5% of sales

(Q.3.5, 6 & 7) RMB 6.5M (1993) - 9.2% of sales

RMB 7.7M (1994) - 7.6% of sales

RMB 3.3M (1995) - 2.4% of sales

3.4 Income tax rate : 55% before 1995

33% from 1995 (Q.3.6)

- 3.5 Both the sales and profit has been deteriorating because of the following reasons: (Q.3.7 & 8)
  - (1) The reduction of profit margin is mainly due to the inflation of input materials, wages and overheads. In addition, the total long and short term bank loan amounted to RMB120 million and had to pay RMB13 million interest in 1994.
  - (2) The accounts receivable and payable at the end of 1995 were RMB85 million and RMB65 million respectively indicating a significant amount of bad and doubtful debts but without any provision. In fact, about RMB6.5 million of bad debts was identified in 1995 and reported to the Shanghai State Assets Administration Bureau. The income before tax in 1995 would be greatly reduced because of this bad debts was written off at the year end.

# Q.3.4 is not applicable to SMCW because it is neither a holding nor a subsidiary enterprise.

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### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 SMCW entered into the first ERC with the Shanghai Mechanical Equipment & Instrument Bureau and the Shanghai Finance Bureau in 1988. It was a 5-year contract which terms and conditions were subject to review by both parties every year. (Q.4.1) [Details of the ERC are shown in section 4 of the Data Analysis 6.]
- 4.2 This first ERC was based on the "Three Guarantees and One Linkage" concept which means the contractee (SMC) had to quarantee: (Q.4.2 & 4)
  - (1) income tax handed over to the government;
  - (2) technology improvement;
  - (3) foreign exchange created from export; and

the total remuneration payable to the employees was linked up with the overall economic (or financial) performance.

- 4.3 The following basic targets for 1988 were determined according to the actual performance in 1987:
  - (1) Profit before income tax = RMB6,350,000
  - (2) Income tax handed over (55%) = RMB3,494,000 (zero growth rate for 5 years)
  - (3) Foreign exchange from export = (not available)

- (4) If income tax exceeds RMB3,494,000 by less than 5%, then 70% of the excess will be refunded to SMCW.
- (5) If income tax exceeds RMB3,494,000 by more than 5%, then 80% of the excess (over 5%) will be refunded to SMCW. (Q.4.3)
- 4.4 Other targets such as sales tax, loan repayment, technology improvement, fixed assets increase and new product sales were also determined. (Q.4.6)
- 4.5 SMCW achieved all the basic (financial) targets and most of the other targets in all the 5 years. (Q.4.5, 4.9, 4.10)
- 4.6 The top management did participate in the negotiation with the government and bureau in setting the above targets. The chosen terms were mutually agreed among the three parties. (0.4.7-8)
- 4.7 Due to the fact that some controversial problems, such as the determination of initial targets and subsequent growth rates and the short term behaviour of the enterprise management, have been encountered since the implementation of ERC system in the mid-1980s, many state-owned enterprises are now very careful in renewing their ERCs. Under this circumstance, SMCW signed the second ERC just for two years as from 1993 to 1994 with similar terms and conditions as the first one. Eventually, all the major targets have been achieved. Instead of entering into another ERC, the Corporation would just agree the basic (financial) targets with SMCW on an annual basis. (Q.4.12 & 13)

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#### Section 5 : Planning System

# 5.1 Organisation Structure [Planning Influence changed from "Very High-High Corporate (0.8)" before 1992 to "Medium Corporate (2.3)" after 1992]

- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 4 production workshops were "cost centres" managed by the workshop managers. All the other management and service departments were "expenses centres" under tight expense budgets.
- After 1992: it went to some length in 1993 to convert the 4 production workshops into "profit centres" managed by the workshop managers with higher autonomy in management and operation. All the other management and service departments remain "expense centres" whose managers participate in the budgeting process

Corporate Planning Influence,\* : "Very High-High (1)" to "Medium (2.5)"

\* By using a 5-point scale -Very High (0) Greatest Influence (1) (consistent with the scale High used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0	-	0.5)
Very High-High	[VH-H]	(0.6	_	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6	-	4.0)

#### (2) Decentralization (Q.5.1.2)

Before 1992: the workshop managers were responsible for the production volumes and costs as given in the annual budgets and internal responsibility contracts (IRCs) by the top management.

Therefore, classifying the factories into cost centres were appropriate.

After 1992: the primary profit responsibility lies with the workshop managers who initiate the annual budgets and IRCs and get their subordinates (middle and lower management) involved. Obviously, changing into profit centres is reasonable.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

#### (3) Appointment (Q.5.1.3)

Before 1992: the factory manager and party secretary were appointed by the Bureau, and other senior appointments and major organisational changes required Bureau's approval.

After 1992: the factory manager and party secretary are still appointed by the Bureau. The factory manager can appoint all the other senior staff such as the workshop managers. The workshop managers can suggest changes in organisation structure and personnel affairs to the factory manager for approval.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

(4) Interdependencies (Q.5.1.4)

Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production without any profit margin.

After 1992: the transfer prices are based on market prices less discounts to provide for some profit margins. The top management still interfere into the setting of transfer prices.

Corporate Planning Influence: "Very High (0.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence:

Factors	Before :	1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	VH-H VH-H VH VH	(1.0) (1.0) (0.5) (0.5)	Medium (2.5) Medium (2.5) H-M (2.0) H-M (2.0)
Overall Planning Influence	VH-H	(0.8)	Medium (2.3)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium-Low Corporate (2.6)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the Bureau while the top management was in consultation only. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the Bureau.
- After 1992: Bureau has delegated the long term planning and annual budgeting autonomy to the top management but Mr Tao has said that strategic plans still have to be reviewed, discussed and modified with the Bureau

Corporate Planning Influence : "Very High (0.5)" to "High-Medium (2)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between the Bureau and top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the workshop managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was top-down process but middle management (i.e workshop managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the top management during every year end and significant changes should be discussed with the Bureau and informed to the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notified to the lower management immediately.

Corporate Planning Influence, : "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	VH High High High	(0.5) (1.5) (1.5) (1.5)	H-M (2.0) M-L (3.0) M-L (3.0) Medium (2.5)	
Overall Planning Influence	High	(1.3)	M-L (2.6)	

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High Corporate (1.2)"
  before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992 : "improve efficiency" and "increase profit" were the major strategic themes given to and imbedded into the planning and control system.
- After 1992: "product development" and "enhance management" have been added for all the employees to observe and keep in mind when they are performing their duties.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.
- After 1992 : to observe the recent laws and regulations enacted in the last few years and related to improving the state-owned enterprise's autonomy and efficiency are to be complied with.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, selling price, personnel, incentive scheme, sales and marketing etc.
- After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the workshop managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Theme Thrust Suggestions	High (	1.0) 1.5) 1.0)	H-M (2.0) Medium (2.5) Medium (2.5)	
Overall Planning Influence	High (	1.2)	Medium (2.3)	

- 5.4 Long-Term Plans
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of production facilities, volume and mix, product and market development.
- After 1992: the top management has to initiate its own long term plans and compromise with the Bureau who may insist on certain macro-targets such as output volume and mix.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5),
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. workshop managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1991-1995), includes competitive edge, research and development, product and market development and new production plant.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979 started to allow SMCW to participate in the 5-year's planning with the Bureau and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse
- After 1992: SMCW has to formulate their own long term strategic plans which are submitted to the Bureau for review and approval. Some projects involved significant capital investment require financial arrangement by the Bureau.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992 : 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the Bureau for endorsement and sometimes assistance such as seeking long term bank loan.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After 1992
Central Planning Operation Participation Review & Communication	_	(1.5) (1.5) (1.5) (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High	(1.5)	Medium (2.5)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because SMCW caters for the capital budgets during the long term planning exercise.

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Low Corporate (3.5)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.
- After 1992: top management has the full autonomy in the annual planning and budgeting processes which involve the middle management such as the workshop managers.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the workshop managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: top management provided major guidelines to the workshop managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

(3) Participation (Q.5.5.3 & 5)

Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.

After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

(4) Review & Communication (Q.5.5.6 & 8)

Before 1992: annual plans and budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes.

Annual plans were communicated to middle and lower management in written forms.

After 1992: top and middle management review the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors.

A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	 H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0) (2.0)	Low Low Low Low	(3.5) (3.5) (3.5) (3.5)
Overall Planning Influence	H-M	(2.0)	Low =====	(3.5) ======

- 5.6 Internal Responsibility, Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium-Low Corporate (2.6)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: The IRC system was started in 1991 and mainly applied to the production workshops. Before 1992, production workshops were given certain targets such as production mix, quantities, and costs.
- After 1992: major economic targets are equivalent standard hour, product mix and overheads while quality and safety have the veto effects on the bonus which was linked up with the IRC performance.

Samples of IRC are shown in section 5.6 of the Data Analysis Set 6.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: workshop managers were given the production quantity and cost targets without much negotiation.
- After 1992: workshop managers negotiate and compromise the IRC targets with the general management during the annual planning cycle.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets given to the workshop managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective workshop managers and their employees.

Corporate Planning Influence,: "High (1.5)" to "Medium (2.5)"

(4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the workshop managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

#### Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	VH-H (1.0) VH-H (1.0) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) M-L (3.0)
Overall Planning Influence	High (1.3)	M-L (2.6)

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "Very High Corporate (0.7)"
  before 1992 to "High Corporate (1.3)" after 1992]
- (1) Characteristics (Q.5.9.1-7)

		- <b>\~</b>	
		Before 1992	After 1992
1.1	Interdepen-	Production & service	Production & service
	dencies	workshops involved	workshops involved
1.2	Transfer	standard cost (histori-	market price less
	Price Basis	cal + inflation)	internal discount
1.3	Transfer Price	Very little between	Some negotiations
	Negotiation	buyer and seller	are allowed
1.4	Intermediate	Some buy and sell are	Some buy & sell are
	Product	available in market	available in market
1.5	Transfer	All determined by the	Excess service can
	Quantity	top management	be sold externally
1.6	Arbitration	Prices and quantities	Mainly determined by
		all determined by top	top management but
		management	negotiations allowed
1.7	Government	No, except the output	No, only suggest
	Interference	volumes & selling	volumes & prices of
		prices of final products	final products

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

(2) Participation (Q.5.9.8)

Before 1992: nearly all the transfer prices and quantities were determined by the top management and the workshop managers were consulted sometimes. Any conflects were arbitrated by the factory manager. Workshop managers didn't care much because they were measured by production volume and cost.

After 1992: most of the transfer prices and quantities are still controlled by the top management although some negotiations are allowed for the workshop managers because they are measured on internal profit. Interference from and arbitration by the factory manager are quite often.

Corporate Planning Influence : "Very High (0.5)" to "Very High-High (1)"

(3) Review (Q.5.9.9-12)

Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management. It was historicial cost plus inflation. The transfer prices were reviewed in the middle of the year and some amendments were allowed.

After 1992: the market price less internal discount is used for setting the transfer prices which are reviewed quarterly.

Corporate Planning Influence: "Very High-High (1)" to "High (1.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Characteristics Participation Review	VH (	0.5) 0.5) 1.0)	High VH-H High	(1.5) (1.0) (1.5)
Overall Planning Influence	VH-H (	0.7)	High	(1.3)

#### Section 6 : Control System

## 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.3)" before 1992 to "Moderate Financial (2)" after 1992]

Organisational Design (Q.6.1.1) (1) Before 1992 After 1992 High (1.5) (0.5)\*1.1 Structure VH High (1.5)1.2 Staffing VH-H (1.0)Medium (2.5) Roles & functions 1.3 High (1.5)1.4 Interactions H-M(2.0)High (1.3) Medium (2.1) ======== =========

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very High(0)
Tight Strateg	ic<			-Tight Financial
Control				Control

Tight Financial	(0.0	_	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	_	3.0)
Tight Strategic	(3.1	_	4.0)

(2)	Personnel# (Q.6.1.1)			
		<sup>'</sup> Before	1992	After 1992
2.1	Recruitment	VH	(0.5)	High (1.5)
2.2	Assignment	High	(1.5)	Medium (2.5)
2.3	Training	H-M	(2.0)	M-L (3.0)
2.4	Evaluation	H-M	(2.0)	M-L (3.0)
2.5	Remuneration	High	(1.5)	M-L (3.0)
2.6	Termination	VH-H	(1.0)	High (1.5)
		High	(1.4)	Medium (2.4)
		======	======	========

# Mr Tao said that since 1992, more delegation has been given to the workshop managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

		=====	======	=====	======
		High	(1.1)	High	(1.5)
3.6	Communication*	VH-H	(1.0)	H-M	(2.0)
3.5	Qualitative targets	VH-H	(1.0)	High	(1.5)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
		Before	1992	After	1992
(3)	Control Mechanisms (	Q.6.1.2-3,	Q.6.4.8)		

\* The control mechanisms are clearly communicated to the workshops and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

#### Summary of Corporate Control Influence :

fore 1992	After 1992
gh (1.3) gh (1.4) gh (1.1)	Medium (2.1) Medium (2.4) High (1.5)
gh (1.3)	H-M (2.0)
_	

## 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.6)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 Precision & detail of (1) VH-H (1.0) High (1.5) targets (2) Objective vs subjective (1.0) High (1.5) VH-H targets Achieving targets (3) High (1.5) Timeframe VH-H (1.0) (4) Stretch built into VH-H High (1.5) the targets (1.0) (5) Financial vs non-financial targets H-M (2.0) High (1.5)Manangement influence (6) High (1.5) on setting targets VH (0.5) \_\_\_\_\_ H-M (1.6) VH-H (1.0) ========= =========

6.3 Monitoring Results
[Control Influence changed from "Tight Financial (1)" before
1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

Refore 1992
After 1992

		Before 1992		After 1992	
1.1	Policy	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
		VH-H	(1.0)	H-M	(1.7)
		==========		======	====

# Mr Tao has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the factory manager. For any serious adverse variances shown on any report, the factory manager or deputy-factory managers will contact the respective workshop manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production workshops were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: production volume, efficiency and overheads are the major economic targets, however, more qualitative targets such as production technology, facilities and quality are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each workshop or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the workshop managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual workshop or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control, Influence:

Factors	Before 1992		After 1992	
Reporting Requirements Performance Measurement Review & Communication	High VH-H VH-H	(1.1) (1.0) (1.0)	H-M H-M H-M	(1.7) (2.0) (2.0)
Overall Control Influence	VH-H	(1.0)	H-M	(1.9)

6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

		===========		======	=====
		H-M	(1.6)	H-M	(1.7)
1.8	Redundancy	Very Low	(4.0)	H-M	(2.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	VH	(0.5)	VH-H	(1.0)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
		Before 1		After 1	
(1)	Incentives* (Q.6.5.1-7,15-16,22-23)				

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once in each year to combat inflation. The second part is decided by the SMCW which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the factory manager and the workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the SMCW's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 40-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992 : bonus is mainly determined according to IRCs and accounts for less than 20-30% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992: workshop managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by the headquarters and government.
- After 1992: workshop managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

(4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the workshop or department managers

After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the workshop or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1	992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.6) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.7) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2) =====	H-M =====	 (1.8) ======

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Measuring Instrument & Cutting Tool Works (SMCW) belonged to before and after 1992.

\_\_\_\_\_\_

Planning Influences	Before 1992	After 1992
Organisation Structure*	Very High to High (0.8)	Medium (2.3)
Review Process*	High (1.3)	Medium to Low (2.6)
Strategic Themes, Thursts and Suggestions*	High (1.2)	Medium (2.3)
Long-Term Plans* (Resource Allocation)	High (1.5)	Medium (2.5)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium (2.0)	Low (3.5)
Internal Responsibility Contracts#	High (1.3)	Medium to Low (2.6)
Management of Inter- dependencies*	Very High to High (0.7)	High (1.3)
Overall Planning Influence	==========	=========
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.3)	Moderate
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (1.6)
Monitoring Results*	Tight Financial (1.0)	Moderate Financial (1.9)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.8)
Overall Control Influence	Financial (1.1)	Moderate Financial (1.8)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning	Control Influence			
Influence	Strategic	Financial		
High (	Strategic Programming			
H/M Medium2	)	X		
M/L		0		
Low	Strategic Control	3 3 4 4 Financial Control 4		
0 (1.8, 2.4)	1	2		

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Measuring Instrument & Cutting Tool Works (SMCW) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

12 May 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

\_\_\_\_\_\_

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 7
Report Date : 24 May 1996

\_

Based on the case writing (data transcription) of each state-owned enterprise investigated during the period from 1992 to 1995, the following description is to :

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 7" (30 April 1995).

#### Name of SOE: Guangzhou Nan Fang Flour Mill (GNFF)

Staff Interviewed: Mr Cheng Qi Chang/Chief Accountant

(No. of years in this enterprise : 26 years)

Mr Lai Ping/Managing Director

(No. of years in this enterprise : 11 years)

Dates of Visits : First Visit - 11 December 1993

Second Visit - 11 August 1994

#### Section 1: History & Background (Q.1.1-5)

1.1 GNFF was established as a wholly state-owned enterprise in 1960 and was converted into a shareholding enterprise in October 1992 having a paid-up capital of RMB82 million (13 million shares). (Q.1.1)

- 1.2 It is one of the largest flour mills in China having four flour manufacturing workshops, one processed food plant and three supporting workshops. It also has its own shipping port (for 10,000 tons of ships) and railways system for transporting the raw materials and finished products out respectively. (Q.1.2)
- 1.3 GNFF is currently producing the following three classes (12 brand names of products) of flour: (Q.1.3)
  - 1.3.1 Higher Class for making high quality bread & noddle
  - 1.3.2 Middle Class for making bread, bun, noddle & cakes
  - 1.3.3 Lower Class for making sauce, battery and pastry.

Apart from the above three classes of flour products, GNFF has a production line imported from Italy manufacturing 1 ton of bread per day mainly to test the quality of the flour produced on one hand and diversify the business sales on the other hand.

The by-proudct is the shell of the wheat which, after grinding, is a kind of high demanding foodstaff for the livestock. It is sold to the government desginated liverstock farms.

- 1.4 GNFF's products are 95% sold domestically and 5% exported to Vietnam, Macau and Hong Kong. (Q.1.4)
- 1.5 GNFF has maintained a customer information filing system and visited the existing and potential customers periodically to obtain feedback on quality and services in order to increase the sales outlets and market share. GNFF always promulgates high product quality in order to explore the overseas markets in Southeast Asia, South America and Europe. (Q.1.5)

#### Section 2: Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 GNFF has been a wholly state-owned enterprise since 1960 and it was converted into a private shareholding enterprise in October 1992 by issuing 16% of the authorized shares to the employees. The local government is the majority shareholder by holding 84% of the shares. (Q.2.1 & 2.2)
- 2.2 GNFF is neither a holding nor subsidiary enterprise. (Q.2.4)
- 2.3 Under the Board of Directors, the organisation structure of GNFF is based on functional basis led by the General Manager who has an Enterprise Management Office. (Q.2.3)

2.4 The organisation structure is listed as follow: (Q.2.5 & 2.9)

Board of Directors :

Chairman (also the Managing Director)

Vice-Chairman - General Manager

- Party Secretary

Directors - Deputy-General Manager (Chief Engineer)
Deputy-General Manager (Chief Economist)
Finance Manager (Chief Accountant)
A Government Representative (Guangzhou Food & Oil Bureau)

#### Factory Management :

- (1) Production Department (headed by Chief Engineer)
  - 1.1 No.1 Flour Workshop
  - 1.2 No.2 Flour Workshop
  - 1.3 No.3 Flour Workshop
  - 1.4 No.4 Flour Workshop
  - 1.5 Pastry Workshop
  - 1.6 Raw Material Workshop
  - 1.7 Repair & Maintenance Workshop
  - 1.8 Energy & Power Workshop
  - 1.9 Production Planning
  - 1.10 Research & Technology
  - 1.11 Quality Control
  - 1.12 Inspection
- (2) Sales Department (headed by Chief Economist)
- (3) Accounting & Finance Department (headed by Chief Accountant)
- (4) Purchasing Department
- (5) Personnel Department
- (6) General Affairs Department
  - 6.1 Safety & Security
  - 6.2 Transportation
  - 6.3 Education & Training
  - 6.4 Medical
  - 6.5 Canteen
  - 6.6 Housing
- (7) Planning & Development Department
  - 7.1 Information
  - 7.2 Computer
  - 7.3 Filing
- (8) Communist Party Office
- (9) Fully-Owned Subsidiaries
  - 9.1 Guangzhou Anshin Transportation Company
  - 9.2 Guangzhou Yuanchun Food Godown
  - 9.3 Guangzhou Livestock Foodstaff Factory
  - 9.4 GNFF Research & Development Laboratory
- (10) Other Subsidiaries & Associate Companies
  - 10.1 Guangzhou Commercial Import & Export Trading Company Limited

- 10.2 China Jia Guangzhou International Auction Company Limited
- 10.3 Fanyu Lijiang Resort Garden (Hotel)
- 10.4 Guangzhou Noodle Product Factory
- (11) Joint-Ventures
  - 11.1 Hong Kong Nanxin Trading Company
  - 11.2 Guangzhou Nanfang (Hong Kong) Flour Company Limited
  - 11.3 Spainish Lasi Islands Flour Company Limited
- 2.5 GNFF is under the administration of the Guangzhou Food and Oil Bureau. Since the economic reforms started in 1979, the government and Bureau have delegated the following autonomy to GNFF: (Q.2.6 & 2.7)
  - 1981 instead of following strictly the orders and directives from the Bureau and acting as a production cost centre, GNFF obtained its own production autonomy and retained profit after tax for development purposes.
  - 1983 started the economic responsibility targets system and employees' remuneration was linked up with economic performance and individual performance.
  - 1985 started the "Factory Manager Responsibility System" and delegated more operation and management autonomy to the factory general manager.
  - 1990 signed the ERC with the local government and integrated the responsibilities, rights and benefits of the enterprise.
  - Since 1992, the Bureau has delegated the planning and control responsibilities to the top management of GNFF to run their own business. Furthermore, the investment autonomy has been delegated and raising capital for project investment can be arranged by the Bureau and GNFF together.
- 2.6 GNFF is a medium SOE having 940 working and 300 retired employees. All the employees have signed employment contracts with duration from one to ten years. (Q.2.10)
- # Since GNFF is neither a holding nor a subsidiary enterprise, questions Q.2.8 and Q.2.11 are not applicable to GNFF.

#### Section 3: Financial Indicators (Q.3.1-8#)

- 3.1 Total assets : RMB 236M (1993) \* (Q.3.1)
  - \* The total assets (fixed + current) have been revaluated once when changing into shareholding in October 1992.
- 3.2 Turnover : RMB 320M (1992)

RMB 370M (1993)

RMB 260M (1994)

RMB 400M (1995 forecast) (Q.3.2 & 7)

3.3 Income before tax : RMB 30M (1992) - 9.4% of sales (Q.3.5, 6 & 7) RMB 33M (1993) - 8.9% of sales

RMB 33M (1993) - 8.9% of sales RMB 15M (1994) - 5.8% of sales RMB 20M (1995) - 5.0% of sales

3.4 Income tax rate : 55% (before October 1992)

15% (from October 1992) (Q.3.6)

- 3.5 Both the sales and profit has been deteriorating because of the following reasons: (Q.3.7 & 8)
  - (1) The significant financial performance decline in 1994 (vs budgeted sales of RMB400M) was mainly due to the effects resulted from the macro-economic policies implemented by the government in July 1993, and also the high input inflation i.e. wheat (27%), electricity (18%), wages (30%) and packaging (40%).
  - (2) Before 1994, GNFF was exempted from sales tax, but as from January 1994, GNFF's sales has been subject to 13% of VAT. As a result, pricing policy have not been well planned to capture the changes in sales demand and supply.
- # Q.3.4 is not applicable to GNFF because it is neither a holding nor a subsidiary enterprise.

### Section 4: Econmic Responsibility Contract System (ERCS) (0.4.1-13)

- 4.1 GNFF entered into the first ERC with the Guangzhou Finance Bureau in 1988. It was a 3-year contract (1988-1990) which terms and conditions were subject to review by both parties every year. (Q.4.1) [Details of the ERC are shown in section 4 of the Data Analysis 7.]
- 4.2 The first year sales and profit targets set was based on the previous three years (1985-1987) and substantial negotiation. (Q.4.3)

- 4.3 The first year target profit was set at RMB13.5 million with an annual growth rate of 7%. The income tax for the traget profit level was 55% and any excess profit over the target would be subject to 35% income tax. (Q.4.2 & 4)
- 4.4 The first ERC set the following quantitative targets over the 3 years: (Q.4.6)
  - (1) total flour proudction quantities with annual growth rates:
  - (2) industrial output values with annual growth rates;
  - (3) net profit before tax with annual growth rates; and
  - (4) net asset value increase with annual growth rates.

The ERC also stipulated the following management (qualitative) targets as well:

- (1) enterprise grading promotion awarded by the government
   (i.e. from third class to second class);
- (2) labour production efficiency (i.e. output value per worker);
- (3) net profit before tax per employee;
- (4) quality product awards;
- (5) new products development;
- (6) energy and material consumptions;
- (7) technology improvement;
- (8) safety production;
- (9) management techniques;
- (10) manpower training; and
- (11) employees remuneration and welfare improvement.
- 4.5 The adoption of ERC seperated the management autonomy out from the government and defined the duties, rights and benefits between the government and the enterprise. It made GNFF to be really a self-operating, self-financing, self-developing and sel-regulating enterprise and to initiate the motivation of the management and workers.

To facilitate the attainment of the above targets, GNFF has set up regular meetings between the top and middle management; and also guidelines for decision-making procedures. As a result, GNFF achieved all the quantitative targets in all the 3 years. (Q.4.5, 9 & 10)

4.6 The top management did participate in the negotiation with the Finance Bureau in setting the above targets. The chosen terms were mutually agreed by both parties. (Q.4.7 & 8)

4.7 Subsequently, the second 3-year ERC (1991-1993) was signed with similar terms and conditions as shown above. This second ERC was ceased in October 1992 when GNFF was transformed into a shareholding enterprise and subject to income tax of 15%. Now the only major target agreed with the Guangzhou Food & Oil Bureau is the annual profit before income tax which is also the measuring yardstick for the factory manager under the "Factory Manager Responsibility System". (Q.4.12 & 13)

#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "High-Medium Corporate
  (1.9)" before 1992 to "Medium-Low Corporate (2.9)" after
  1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 5 production workshops and 3 supporting workshops were "cost centres" managed by the workshop managers. All the other management and service departments were "expenses centres" under expense budgets control.
- After 1992: it went to some length in 1992 to convert the 5 production workshops and 3 supporting workshops into "profit centres" and "semi-profit centres" respectively managed by the workshop managers with higher autonomy in management and operation. All the other management and service departments remain "expense centres" whose managers participate in the budgeting process.

Corporate Planning Influence\* : "High-Medium (2)" to "Medium-Low (3)"

* By using a 5- (consistent w used in the c e.g. 5.4.4 to	ith the so uestionnai	ale	Very High High Medium Low	(0) (1) (2) (3)	Greatest Influence
some of the p	arameters	or	Very Low	(4)	Least Influence
variables)					
Very High	[VH]	(0.0	- 0.5)		
Very High-High	[VH-H]	(0.6	- 1.0)		
High .	[H]	(1.1	- 1.5)		
High-Medium	[H-M]	(1.6	- 2.0)		
Medium	[M]	(2.1	- 2.5)		
Medium-Low	[M-L]	(2.6	- 3.0)		
Low	[L]	(3.1	- 3.5)		
Very Low	[VL]	(3.6	- 4.0)		

- (2) Decentralization (Q.5.1.2)
- Before 1992: the workshop managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) between the top management and workshop managers. Therefore, classifying the factories into cost centres were appropriate.
- After 1992: the primary profit responsibility lies with the workshop managers who initiate the annual budgets and IRCs and get their subordinates (middle and lower management) involved. Obviously, changing into profit centres is reasonable.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (3) Appointment (Q.5.1.3)
- Before 1992: the general manager and party secretary were appointed by the Bureau. The general manager could appoint the other senior staff and recommended major organisational changes for Bureau's endorsement.
- After 1992: the chairman and party secretary are appointed by the Bureau whereas the BOD can appoint the top top management such as the general and deputy managers. The general manager can appoint all the other senior staff such as the workshop managers. The workshop managers can suggest changes in organisation structure and personnel affairs to the factory manager for approval.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

- (4) Interdependencies (Q.5.1.4)
- Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost after the workshop managers being consulted.
- After 1992: the transfer prices are based on the standard cost plus or market prices less discounts to provide for some profit margins. Most of the transfer prices setting are still determined by the Enterprise Management Office.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Responsibility Centre Decentralization Appointment Interdependencies	H-M H-M Medium VH-H	(2.0) (2.0) (2.5) (1.0)	M-L M-L Low H-M	(3.0) (3.0) (3.5) (2.0)
Overall Planning Influence	H-M	(1.9) =====	M-L	(2.9)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Medium-Low Corporate (2.9)" after
  1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term plans were initiated, monitored, reviewed and modified by the Bureau while the top management was in consultation only. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the Bureau.
- After 1992: the government and Bureau have delegated the long term planning and annual budgeting autonomy to the borad of directors and top management but Mr Cheng said that strategic issues and annual profit target are still have to be discussed with the Bureau.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between the Bureau and top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the workshop managers to formulate their own budgets and IRCs. The Staff and Worker Representatives Committee is involved in making decision of both long term and annual planning exercises.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was top-down process but middle management (i.e workshop managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: through the Staff and Worker Representatives
  Committee, the middle management is involved in the
  long term planning. They have to discuss with the
  lower management in formulating their own annual
  budgets and IRCs although some specific suggestions
  and directions are coming from the board and top
  management during the negotiation.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the board and top management during year end and significant changes should be discussed with the Bureau and informed to the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notified to the lower management immediately.

Corporate Planning Influence : "Medium-High (2)" to "Medium-Low (3)"

Summary of Corporate Planning Factors	Influence Before 1		After 1	.992
Central Planning Operation Participation Review & Communication	VH-H H-M High H-M	(1.0) (2.0) (1.5) (2.0)	Medium M-L M-L M-L	(2.5) (3.0) (3.0) (3.0)
Overall Planning Influence	H-M	(1.6)	M-L	(2.9)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: in 1990, GNFF has engaged Guangzhou Scientific
  Research Laboratory to suggest means to improve the
  operation and management systems. A policy-book
  was published in October 1991. Wholistic concept,
  stringent management control, business advancement
  and harmony working environment were suggested in
  in this policy publication.
- After 1992: the above four themes are under implementation and expanded into different planning and control systems in order to improve the total quality of management.

Corporate Planning Influence: "High-Medium (2)" to "Medium (2.5)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand. A Total Quality Management Committee" was established in 1988 to set up policies for management control.
- After 1992 : the following 4 quality thrusts are promulgated :
  - to formulate quality management policies;
  - 2. to plan for product quality innovation;
  - 3. to design quality responsibility system; and
  - 4. to collect quality control and cost information.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management always made suggestions on the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix in order to ensure the "profit before income tax" as agreed with the Bureau could be achieved.

After 1992: after the promotion of the legislation in 1992, the top management still sometimes make suggestions on the above issues. Despite this fact, the top management has given some freedom to the workshop managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	H-M (2.0) High (1.5) VH-H (1.0)	Medium (2.5) Medium (2.5) H-M (2.0)
Overall Planning Influence	High (1.5)	Medium (2.3)

- 5.4 Long-Term Plans
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Medium-Low Corporate (2.9)" after
  1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of production facilities, volume and mix, product and market development.
- After 1992: the board of directors has to initiate its own long term plans and compromise with the Bureau who may insist on certain macro-targets such as sales and profit targets.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

- (2) Operation (Q.5.4.3 & 5),
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine feasible long term plans acceptable to both sides.
- After 1992 : formal planning meetings and procedures are in existence to get middle management (i.e. workshop managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1991-1995), includes sources of capital, research and development, product and market development, production capacity, joint-venture, computerisation and manpower development.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979 started to allow GNFF to participate in the 5-year's planning with the Bureau and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse
  - After 1992: GNFF has to formulate their own long term strategic plans which are submitted to the Bureau for review and approval. Some projects involved significant capital investment require financial arrangement by the Bureau.
  - Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
  - (4) Review & Communication (Q.5.4.7 & 9)
  - Before 1992 : 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.
  - After 1992: the board of directors reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the Bureau for endorsement and sometimes assistance such as seeking long term bank loan.
  - Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After 199	
Central Planning Operation Participation Review & Communication	High High High H-M	(1.5) (1.5) (1.5) (2.0)	M-L M-L Medium M-L	(3.0) (3.0) (2.5) (3.0)
Overall Planning Influence	H-M	(1.6)	M-L	(2.9)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because GNFF caters for the capital budgets during the long term planning exercise.

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "Medium Corporate (2.5)"
  before 1992 to "Low Corporate (3.5)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992: government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. sales and profit
- After 1992: top management has the full autonomy in the annual planning and budgeting processes which involve the middle management such as the workshop managers.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the workshop managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: after transforming into a shareholding enterprise, reference has also been made to the 5-year plan especially to estimate what the sales potential will be from the new product and market situation. Top management provides major guidelines to the workshop managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

(3) Participation (Q.5.5.3 & 5)

Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.

After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

(4) Review & Communication (0.5.5.6 & 8)

Before 1992: annual plans and budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes.

Annual plans were communicated to middle and lower management in written forms.

After 1992: top and middle management review the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors.

A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)	Low (3.5) Low (3.5) Low (3.5) Low (3.5)
Overall Planning Influence	Medium (2.5)	Low (3.5)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Medium-Low Corporate (2.6)" after
  1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: the IRC system was started in 1989 and mainly applied to the production workshops. The major quantitative targets were production quantities, mix and costs.
- After 1992: IRC system has been extended to the supporting workshop and two service departments. The major economic target set is internal profit, whereas the equivalent standard hour is used for one supporting department. The wages and bonus are linked up with the IRC performance.

  Samples of IRC are shown in section 5.6 of the Data Analysis Set 7.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: workshop managers had to compromised with the top management on the production and cost targets.
- After 1992: workshop managers negotiate and agree the IRC targets with the top management during the annual planning cycle.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets agreed with the workshop managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective workshop managers and their employees.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

#### (4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so both the workshop managers and their subordinates are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

#### Summary of Corporate Planning Influence :

Factors	Before	1992	After :	1992
Target Bias Participation Review & Communication Incentive	High High High H-M	(1.5) (1.5) (1.5) (2.0)	Medium Medium Medium M-L	(2.5) (2.5)
Overall Planning Influence	H-M ======	(1.6) =====	M-L ======	(2.6)

#### 5.7 Management of Interdependencies (Transfer Pricing)

Since each flour production workshop of GNFF is independent in manufacturing its own products without any transfer to other factories, the transfer pricing is not applicable. The transfer of some flour products to the pastry workshop for manufacturing bread, the services provided by the supporting workshops (i.e. raw material treatment, repair and maintenance, energy and power), and the transportation services provided by the vehicle fleet do involve transfer prices which are all determined according to the standard or market prices as fixed by the Enterprise Management Office and Accounting Department on a quarterly basis.

Section 6 : Control System

## 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Financial (2)" after 1992]

(1) Organisational Design (Q.6.1.1)

		Before 1	.992	After 1	.992
1.1	Structure	VH	(0.5)*	VH-H	(1.0)
1.2	Staffing	High	(1.5)	H-M	(2.0)
1.3	Roles & functions	High	(1.5)	Medium	(2.5)
1.4	Interactions	H-M	(2.0)	M-L	(3.0)
		High	(1.4)	Medium	(2.1)
		======	:====	======	=====

\* By using a 5-point scale which is exactly the same used in the questionnaire :

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	.c<			-Tight	Financial
Control				Contro	ol

Tight Financial	(0.0	_	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	-	4.0)

			======	=========
		H-M	(1.6)	Midium (2.5)
2.6	Termination	High	(1.5)	H-M (2.0)
	Remuneration		(1.5)	Medium (2.5)
	Evaluation	H-M	(2.0)	M-L (3.0)
2 3	Training	H-M	(2.0)	M-L (3.0)
2.2	Assignment	High	(1.5)	Medium (2.5)
	Recruitment	VH-H	(1.0)	H-M (2.0)
0 1	Do mari i barant	Before		After 1992
(2)	Personnel# (Q.6.1.1)	f <b>5</b> . <b>5</b>	1000	7.51 1.000
/ - \	711 /0 1			

# Mr Cheng said that since 1992, more delegation has been given to the workshop managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

		======	=====	=====	======
		High	(1.1)	High	(1.5)
3.6	Communication*	VH-H	(1.0)	H-M	(2.0)
3.5	Qualitative targets	VH-H	(1.0)	High	(1.5)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
		Before		After	1992
(3)	Control Mechanisms (Q	.6.1.2-3,	2.6.4.8)		

\* The control mechanisms are clearly communicated to the workshops and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.4) H-M (1.6) High (1.1)	Medium (2.1) Medium (2.5) High (1.5)
Overall Control Influence	High (1.4)	H-M (2.0)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Fact	ors affecting the types a	and styles Before		mechani After 1	
(1)	Precision & detail of targets	VH-H	(1.0)	H-M	(2.0)
(2)	Objective vs subjective				
(3)	targets Achieving targets	VH-H	(1.0)	H-M	(2.0)
	Timeframe	VH-H	(1.0)	H-M	(2.0)
(4)	Stretch built into the targets	VH-H	(1.0)	H-M	(2.0)
(5)	Financial vs non- financial targets	High	(1.5)	H-M	(2.0)
(6)	Manangement influence	птдп	(1.5)	H-M	(2.0)
	on setting targets	VH	(0.5)	M-M	(2.0)
		VH-H	(1.0)	H-M	(2.0)
		======	=====	======	=====

# 6.3 Monitoring Results [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

		Before	1992	After 1	L992
1.1	Policy	VH-H	(1.0)	H-M	(2.0)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	H-M	(2.0)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	VH-H	(1.0)	High	(1.5)
		VH-H	(1.0)	H-M	(1.7)
		======	=====	======	=====

# Mr Cheng has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the factory manager. For any serious adverse variances shown on any report, the factory manager or deputy-factory managers will contact the respective workshop manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production workshops were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: production volume and internal profit are the major economic targets, however, more qualitative targets such as production technology, facilities and quality are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each workshop or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the workshop managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual workshop or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Reporting Requirements Performance Measurement Review & Communication	High VH-H VH-H	(1.1) (1.0) (1.0)	H-M H-M H-M	(1.7) (2.0) (2.0)
Overall Control Influence	VH-H ======	(1.0)	H-M =====	(1.9)

### 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

		======		======	=====
		H-M	(1.7)	H-M	(1.8)
1.8	Redundancy	Very Lo	ow(4.0)	Medium	(2.5)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	. H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	VH-H	(1.0)	H-M	(2.0)
1.2	Allowances	H-M	(2.0)	VH-H	(1.0)
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
		Before	1992	After 1	.992
(1)	Incentives* (Q.6.5.1-7,1	5-16,22	-23)		

\* Since 1994, GNFF has unified the basic wages and bonus together which is ddetermined by two elements i.e. post wages (include allowance) and ability wages. Each post has five to six grades according to technical skill assessed annually. The ability wages include the actual performance which may be assessed according to the IRC on a monthly basis. The poor performance of an individual in a group may be transferred out for education and training or other assignments or even leave the enterprise.

Some jobs, such as the packing workers in the flour production workshops and the dock carriers, have employed the "piece rate" wages system. Furthermore, canteen staff's wages are based on its own operating income.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Guangzhou municipal government at least once in each year to combat inflation. The second part is decided by the GNFF which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the factory manager and the workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well.

One way to alleviate the redundant employees is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 40-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992 : bonus is mainly determined according to IRCs and accounts for less than 30-40% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : workshop managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided

by the top management and government.

After 1992: workshop managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8,13-14,20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees every month via the workshop or department managers
- After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

  Performance and reward are made known to employees every month via the workshop or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.7) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.8) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2)	H-M =====	(1.8)

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Guangshou Nan Fang Flour Mill (GNFF) belonged to before and after 1992.

Planning Influences	Before 1992	
Organisation Structure*	High to Medium (1.9)	Medium to Low (2.9)
Review Process*		Medium to Low (2.6)
Strategic Themes, Thursts and Suggestions*	High (1.5)	Medium (2.3)
Long-Term Plans* (Resource Allocation)	High to Medium (1.6)	Medium to Low (2.9)
Short-Term Planning/ Budgeting* (Resource Allocation)	Medium (2.5)	Low (3.5)
Internal Responsibility Contracts#	High (1.6)	Medium to Low (2.6)
Management of Inter- dependencies*	N/A	N/A
Overall Planning Influence	H-M (1.8)	M-L (2.8)
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.4)	Moderate
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (2.0)
Monitoring Results*	Tight Financial (1.0)	Moderate Financial (1.9)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.8)
Overall Control Influence	Financial (1.2)	Moderate Financial (1.9)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning  Influence	Contro	ol Influence
Influence	Strategic	Financial
High (	Strategic Programmin	ng O Financial Programming O
H/M Medium2	 	x
M/L		
3		0 3   
Low 4	 	 4 Financial Control 4 20
0 (1.9, 2.8)	- GNFF Post-1992	X (1.2, 1.8) - GNFF Pre-1992

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Nan Fang Flour Mill (GNFF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

24 May 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 8
Report Date : 31 May 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameters;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 8" (23 May 1995).

Name of SOE: Guangzhou Nan Fang Building Group Co. Ltd. (GNFB)

Staff Interviewed: Mr Zheng Jian Zhong/Assistant General Mgr.

(No. of years in this enterprise : 12 years)
Mr Shaw Tim/Accounting & Finance Manager
(No. of years in this enterprise : 13 years)

Dates of Visists : Frist Visit - 10 December 1993

Second Visit - 13 August 1994

#### Section 1 : History & Background (Q.1.1-5)

1.1 The predecessor of GNFB was the privately owned Da Xin Department Store established in 1918 and was burnt down during the Second World War in 1938. Then the building was rebuilt and named Nan Fang Building in 1954. Its first four floors (6,000 square metres) were used to engage in selling general merchandise, named Xi Ti Department Stores, and in 1973, changed into GDFB. (refer to Q.1.1)

- 1.2 GNFB is one of the top 5 department stores in Guangzhou with a total shopping area of 22,600 square metres selling 80,000 kinds of commodities in 1994. (Q.1.2)
- 1.3 Turning into the 1990s, under the guidance of the Guangzhou Municipal Commercial Management Committee, GNFB has been undertaking new trials, from having only one department store to a large synthetic group enterprise with 16 strategic business units including retailing, tourism, catering, import and export trade and joint venture businesses. (Q.1.3)
- 1.4 About 10% of the commodities sold by GNFB are imported and most of the commodities are sold locally. After gaining the "import and export right" in April 1984, GNFB has successively set up trade ties with some countries and regions. (Q.1.4)
- 1.5 Since 1993, GNFB's development plans have been to explore Xi Ti business district by using joint-venture captial, to establish a lot of chain shops and co-selling centres, to develop cargohouse and super wholesale market, to enter into the real estate market and financial market, to build up transnational corporation, and to develop overseas market. GNFB is transforming into a modernised business organisation, which has the first class goods, service, selling concept, quality of staff and business diversification. (Q.1.5)

#### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 GNFB was converted into a private shareholding enterprise in 1992 by issuing 25% of the authorized shares to the employees while the government was the majority shareholder holding 75% of the shares. (Q.2.1 & 2)
- 2.2 The organisation structure of GNFB can be divided into three levels: (Q.2.3 & 5)
  - (1) Board of Directors (BOD)
    - 1.1 Chairman (GM) \*
    - 1.2 Deputy Chairman (Party Secretary) \*
    - 1.3 12 Directors -

Deputy Party Secretary

Deputy General Manager of Sales

Deputy General Manager of Purchasing

Deputy General Manager of Administration

Deputy General Manager of Planning & Development Assistant General Manager (also head of Finance) Chairman of Labour Union

Secretary of Disciplinary Committee General Manager of Nan Feng Shopping Mall General Manager of Underground Shopping Mall General Manager of Guang Ke Long Superstore Head of the Legal Department

- They are appointed the government bу as representatives to the board of directors.
- Headquarters (under the General Manager) (2)
  - General Manager Office (Assistant GM) 2.1.1 Internal Audit 2.1

    - 2.1.2 Compliance
    - 2.1.3 Legal Advice
    - Computer Centre 2.1.4
  - Finance Department (Assistant GM)
  - 2.3 Marketing & Sales Department (Deputy GM)
  - 2.4 Purchasing Department (Deputy GM)
  - 2.5 Planning & Development Department (Deputy GM)
  - 2.6 Administration Department (Deputy GM)
    - 2.6.1 Personnel
    - 2.6.2 Information & Record
    - 2.6.3 Business Centre
    - 2.6.4 Power & Supply
    - 2.6.5 Repair & Maintenance
    - 2.6.6 Security & Safety
    - 2.6.7 Environmental Protection
    - 2.6.8 Education & Training
    - 2.6.9 Medical
    - 2.6.10 Canteen@
    - 2.6.11 Nursary@
    - 2.6.12 Resort House@
    - 2.6.13 Transportation@
  - @ GNFB has been considering to convert these business units into self-financed profit centres (or tertiary enterprises) which can provide services both internally and externally.
- Department Stores (under the GM Office)# (3)
  - Man's Clothing
  - 3.2 Lady's Clothing
  - 3.3 Children World
  - 3.4 Electrical Appliances
  - 3.5 Audio Visual Appliances
  - 3.6 Clocks & Watches
  - Gold & Jewelry 3.7
  - 3.8 Furniture
  - 3.9 Comestics
  - 3.10 Famous Brand Square
  - 3.11 Gifts & Delicated Goods
  - 3.12 Sportsware
  - 3.13 Wines & Drinks
  - 3.14 Chocolate & Candies3.15 Supermarket

  - 3.16 Coffee Hall

- \* Each department store is an independent profit centre usually having one manager, two deputy managers and some supporting staff for purchasing, marketing, accounting, personnel and transportation functions. They are reporting to and are supported by the respective departments in the headquarters. Each store has entered into Internal Responsibility Contracts (IRC) with the General Manager.
- (4) Subsidiaries (uner the GM Office)@
  - 4.1 Nanfeng shopping Mall
  - 4.2 Underground Shopping Mall
  - 4.3 Nansheng Shopping Mall
  - 4.4 Nantong shopping Mall
  - 4.5 Taishan Co-selling Shop
  - 4.6 24-Hour Convenient Shop
  - 4.7 Guang Ke Long Superstore
  - 4.8 Nanfang Storage & Transportation Company
  - 4.9 Nanfang Wholesale & Trading Company
  - 4.10 Nanfang Import & Export Company
  - 4.11 Zhuhai Nanxin Industrial Co. Ltd.
  - 4.12 Nanjiang Garment Manufacturing Company
  - 4.13 Nangiao Food Manufacturing Company
  - 4.14 Ye Ming Zhu Hotel
  - 4.15 Pu Ti Yuen Hotel
  - 4.16 Red House Restaurant
  - 4.17 Nanfang Real Estate Development Company
  - @ Each subsidiary or joint-venture is an independent venture or business unit with its own management staff who are reporting to and supported by the respective departments in the headquarters.
- 2.3 GNFB is holding the above 17 subsidiaries. (Q.2.4 & 8)
- 2.4 GNFB is under the administration of the Guangzhou Municipal Government and the Guangzhou First Commerce Bureau who dictated all the planning and control systems of GNFB before the enconomic reforms started in 1979. (Q.2.6)
- 2.5 Since the beginning of 1990, the Bureau has been delegating more planning, control and operating autonomy to GNFB and just scruitinising the major development projects, mainly long term ones, recommended by GNFB. (Q.2.7)
- 2.6 Most of the board members are chief executives managing the headquarters and subsidiaries as explained in 2.2 above. (Q.2.9)
- 2.7 GNFB is a large SOE having a total of 4,000 employees in 1994. (Q.2.10 & 11)

#### Section 3: Financial Indicators (Q.3.1-8#)

- 3.1 Total assets : RMB155M (revaluated 1992) (0.3.1)
- 3.2 Turnover : RMB 685M (1992) RMB1,050M (1993)

RMB1,300M (1994) (Q.3.2 & 7)

3.3 Income before tax : RMB21M (1992) - 3.1% of sales RMB26M (1993) - 2.5% of sales\*

RMB31M (1994) - 2.4% of sales\*

\* The decrease of profit margin in 1993 and 1994 was due to

high inflation, higher sales and related taxes (i.e. 17% of VAT and other urban development taxes) and macro-economic policies implemented by the government to cool down the overheated economy since July 1993. (Q.3.5, 6 & 7)

- 3.4 Income tax rate : 15% (Q.3.6)
- 3.5 GNFB is planning to maintain an average growth rate in turnover from 20%-30% before 2000 despite the fact that competition in the retailing business is very keen in China. In view of the high input costs and inflation, to keep income before tax at 3%-5% of sales will be considered to be satisfactory. (Q.3.7 & 8)
- # Information for Q.3.3 & 4 was not available.

### Section 4: Econmic Responsibility Contract System (ERCS) (0.4.1-13)

- 4.1 GNFB signed first 5-year's ERC (1987-1991) with the Guangzhou Municipal Government in 1987. (Q.4.1)
- 4.2 The major targets set in the ERC were :
  - (1) Profit target RMB10M in 1987 and then 6% annual growth
  - (2) Handover 55% of target profit to government.
  - (3) If actual profit exceeds target, only handover 16.5% of the excess to government. (Q.4.2-4 & 6)
- 4.3 There were different forms of ERCs for the state-owned enterprises to choose from and which had different financial and non-financial targets. The choosen format was mutually agreed between the government and GNFB. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. Mr Zheng said that the growth rate of 6% was underestimated and proved by the actual results subsequently. (Q.4.5, 7-10)

4.5 The second ERC (1992-1996) was terminated at the end of 1992 when GNFB was transformed into a shareholding enterprise and then onwards, GNFB has been subject to an income tax of 15%. (Q.4.11-13)

#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Medium Corporate (2.1)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the department stores and subsidiaries were independent "profit centres" and held accountable for their results based on the IRCs.
- After 1992: the department stores and subsidiaries have to formulate their own short term strategies in the annual planning and budgeting process

Corporate Planning Influence\* : "High-Medium (2)" to "Medium-Low
(3)"

\* By using a 5-point scale - Very High (0) Greatest Influence (consistent with the sacle High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) \/ some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0 - 0.5)
Very High-High	[VH-H]	(0.6 - 1.0)
High	[H]	(1.1 - 1.5)
High-Medium	[H-M]	(1.6 - 2.0)
Medium	[M]	(2.1 - 2.5)
Medium-Low	[M-L]	(2.5 - 3.0)
Low	[L]	(3.1 - 3.5)
Very Low	[VL]	(3.6 - 4.0)

(2) Decentralization (Q.5.1.2)

Before 1992: the store and subsidiary managers were responsible for the income and profit as agreed in the annual budget and internal responsibility contracts.

After 1992: the store and subsidiary managers should also decide their own strategies in marketing, purchasing, selling, cost control and personnel.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

#### (3) Appointment (Q.5.1.3)

Before 1992: the chairman, party secretary and a few chief executives were appointed by the government. The general manager appointed the management staff of the department stores and subsidiaries.

After 1992: only the chairman and party secretary are appointed by the government. The chairman appoints all the chief executives including the store and subsidiary managers who can decide their own organisation structures and personnel affairs but important changes should be approved by the headquarters.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

#### (4) Interdependencies (Q.5.1.4)

Before 1992: the interactions between the department and subsidiaries are minimal because they are selling different categories of commodities. Any conflicts were settled by the headquarters.

After 1992 : similar to 1992 and before but store and subsidiary managers are encouraged to solve the conflicts by themselves before headquarters' arbitration.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Factors	Influence :		After :	1992
Responsibility Centre Decentralization Appointment Interdependencies	H-M Medium High Medium	(2.0) (2.5) (1.5) (2.5)	M-L Low M-L Low	(3.0) (3.5) (3.0) (3.5)
Overall Planning Influence	Medium	(2.1) =====	Low	(3.3)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "Medium Corporate (2.1)"
  before 1992 to "Low Corporate (3.4)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term plans were initiated by the top management before discussion and negotiation with the government. Short term planning and budgeting were delegated by the government to the enterprise except agreeing key targets like sales, profit and inventory.
- After 1992: significant long term plans are submitted to the government for review or raising capital. Short term planning and budgeting have been completely delegated to the enterprise.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning committee and procedures were existed to formulate, evaluate, approve and review the annual plans and budgets for submission to the government. Initiation from the middle management was required for the budgets but not the long term plans which was finally determined by government.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and internal responsibility contracts. Major guidelines are provided by the top management to the store and subsidiary managers to formulate their own budgets and IRCs. They are also involved in the long term planning during the annual planning review before starting the budget cycle.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992 : long term planning was a top-down process but middle management (i.e. store managers) did participate in the annual planning & budgeting processes and initiation was required.

After 1992: middle management is being involved on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiation in order to meet the profit target.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the government reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed quarterly between the top and middle management and amendments could be made and communicated to the lower management through the revised budgets and IRCs.
- After 1992 : long term plans are reviewed by the BOD during every year end and significant changes should be discussed with the government before informing the employees during the AGM. The annual budgets are reviewed quarterly or monthly between the top and middle management and significant amendments can be made and then notify the lower management.

Corporate Planning Influence : "High-Medium (2) to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 19	92	After 1	.992
Autonomy Operation Participation Review & Communication	Medium ( H-M (	2.0) 2.5) 2.0) 2.0)	Low Low Low M-L	(3.5) (3.5) (3.5) (3.0)
Overall Planning Influence	Medium (	2.1)	Low ======	(3.4)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "Medium Corporate (2.2)"
  before 1992 to "Low Corporate (3.2)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992 : "sincerity", "efficiency", "aggressiveness" and "thoughtfulness" were the 4 major strategic themes laid down by the top management for employees.
- After 1992: in addition to the above 4 strategic themes, GNFB is creating its enterprise civilization/corporate culture and to be a first class enterprise.
- Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"
- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992 : service and commodity quality are the major thrusts promulgated by the top management after discussion with department stores.
- After 1992 : "commodity", "service", "environment", "management" "sales & marketing" and "quality of employee" are the 6 areas to strive for first class.
- Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"
- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management sometimes made suggestions on specific strategic issues such as commodity varities, prices, promotion tactics, etc. in order to enhance economic efficiency.
- After 1992: suggestions/actions have been made on "customer service", "service quality assurance", "public relations & promotion", "retail networking" and "management information & control" in order to realise the first class enterprise image.
- Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	H-M (2.0) Medium (2.5) H-M (2.0)	M-L (3.0) Low (3.5) M-L (3.0)
Overall Planning Influence	Medium (2.2)	Low (3.2)

#### 5.4 Long-Term Plans

[Planning Influence changed from "High-Medium Corporate (1.8)" before 1992 to "Medium Corporate (2.5)" after 1992]

- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: the early 5-year long term plans before the economic reform started in 1979 focused on the commodity varieties and prices dictated by the government. Top management participated in the long term planning negotiations since the early 1980s.
- After 1992: the board of directors has to initiate the long term plans of which some have to discuss with the government for assistance such as source of finance for large capital projects.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992 : the top management was responsible to the government to formulate, evaluate, implement, monitor and review the long term plans.
- After 1992 : formal planning committee and procedures are existed to get middle management (i.e. store managers) involved whose planning, control and evaluation aspects are affected. The time span of long term planning is extended to 15 years to be formulated by the board of directors.

Corporate Planning Influence: "High-Medium (2)" to "Medium (2.5)

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the involvement from middle management (i.e. store managers) was limited to consultation.

After 1992: store and subsidiary managers are members of the planning committee but they seldom initiate changes but mainly concern the annual budgets and IRCs which they are measured on.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992 : 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employees during the annual general meeting.

After 1992: the planning committee reviews the 5-year plan every year before the annual planning cylce and significant changes are reported to the government. Details of the long term plans are made known to various levels of management through meetings and internal documentation.

Corporate Planning Influence : "High-Medium (2)" to "High-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992
Central Planning Operation Participation Review & Communication	High H-M High H-M	(1.5) (2.0) (1.5) (2.0)	Medium (2.5) Medium (2.5) H-M (2.0) M-L (3.0)
Overall Planning Influence	H-M	(1.8)	Medium (2.5)

- 5.5 Short-Term Plans/Budgets [Planning Influence changed from "Medium Corporate (2.4)" before 1992 to "Low Corporate (3.5)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the planning autonomy to the top manageemnt but specific suggestions may be provided i.e. commodity varieties and prices
- After 1992: government has completely delegated the short term planning autonomy to the board of directors as long as satisfactory profit level can be maintained.
- Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management initiated the key budgets and discussed and compromised with the store managers.
- After 1992: board of directors provides major guidelines to store and subsidiary managers for intitiating their own budgets which are subject to negotiation.
- Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992 : store managers were asked to discuss and comprise the key budgets with the top management before working out the details.
- After 1992: store and subsidiary managers have to formulate their own budgets and get the lower management involved formulating the details which affect their performance and rewards directly.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans/budgets were reviewed quarterly and amendments made in line with the changing environmental factors. Annual plans & budgets were documented and copied to every department.
- After 1992: planning committee reviews the annual plans and budgets monthly and amendments are made in view of the fast changing market economy.

  Budget information is futher communicated in the monthly performance reporting.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	Medium (2.5) Medium (2.5) H-M (2.0) Medium (2.5)	Low (3.5) Low (3.5) Low (3.5) Low (3.5)
Overall Planning Influence	Medium (2.4)	Low (3.5)

5.6 Internal Responsibility Contracts (IRC)
[Planning Influence changed from "Medium Corporate (2.3)"
before 1992 to "Low Corporate (3.4)" after 1992]

(1) Target Bias (Q.5.6.1-6\*)

Before 1992: major targets set were sales, profit & foreign exchange created.

After 1992: major targets are similar but more emphasis on qualitative targets such as service quality, discipline, decoration, display, sanity, day-to-day operation and security in accordance with the strategic themes and thrusts.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)

Before 1992: store managers negotiated and compromised the given IRC targets during the annual planning cycle.

After 1992: store and subsidiary managers have to initiate, quantify and justify the major IRC targets before negotiating with the top management.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: IRCs were reviewed twice every year and amendments could be made when mutually agreed by the top management and store managers. IRCs were documented and informed to respective departments & employees.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect attainable targets.

  Second-tier IRCs are signed between the store manager and sales sections/counters in order to further delegate the planning and control responsibilities.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (4) Incentive (Q.5.6.16)
- Before 1992: the bonus was determined by the accomplishment of the economic targets set in the IRCs which were not difficult to attain.
- After 1992: both the economic and qualitative targets are linked up with the bonus so the store managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	H-M (2.0) H-M (2.0) Medium (2.5) Medium (2.5)	M-L (3.0) Low (3.5) Low (3.5) Low (3.5)
Overall Planning Influence	Medium (2.3)	Low (3.4)

#### 5.7 Management of Interdependencies (Transfer Pricing)

Because the department stores, branches and subsidiaries in GNFB are selling different categories of commodities and services with very minimal interactions, therefore, internal transfer pricing does not exist.

#### Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Moderate Strategic (2.2)" before 1992 to "Strategic (3)" after 1992]

		======	======	=====	======
		Medium	(2.3)	Low	(3.1)
1.4	Interactions	Medium	(2.5)	Low	(3.5)
	Roles & functions	Medium	(2.5)	Low	(3.5)
	Staffing	Medium	(2.5)	M-L	(3.0)
	Structure	High	(1.5)*	Mediu	n (2.5)
		Before	1992	After	
(1)	Organisational Design#				

# Mr Zhu said that since the late 1980s, more delegation has been given to the store managers in deciding their own divisional structures, staffing and their roles and functions, and interactions between their sub-units.

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very High(0)
Tight Strategi	.C<			Fight Financial
Control			(	Control

Tight Financial	(0.0	-	1.0)
Financial	(1.1	_	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	_	3.0)
Tight Strategic	(3.1	-	4.0)

#### (2) Personnel@ (Q.6.1.1)

		======	=====	======	=====
		Medium	(2.3)	Low	(3.2)
2.6	Termination	High	(1.5)	Medium	(2.5)
			•		•
2.5	Remuneration	H-M	(2.0)	M-L	(3.0)
2.4	Evaluation	Medium	(2.5)	Low	(3.5)
	Training		(3.0)	Low	(3.5)
	Assignment	M-L	(3.0)	Low	(3.5)
			· · ·		
2.1	Recruitment	H-M	(2.0)	M-L	(3.0)
		Before	1992	After 1	992

@ Mr Zheng further mentioned that since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

		======	======	========
		H-M	(1.9)	M-L (2.8)
3.5	Qualitative targets	Medium	(2.5)	M-L (3.0)
	Quantitative targets		(2.0)	M-L (3.0)
3.3	Financial targets	High	•	Medium (2.5)
3.2	IRC	High	(1.5)	Medium (2.5)
3.1	Budget	H-M	(2.0)	M-L (3.0)
		Before	1992	After 1992
(3)	Control Mechanisms*	(Q.6.1.2-3,	Q.6.4.8)	

\* Mr Zheng expressed that as long as the department stores can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility for strategy development to the stores without much interference. This change in control style was mainly because of the government's macroeconomic influence and many uncertainties existed in the market.

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	Medium (2.3) Medium (2.3) H-M (1.9)	Low (3.1) Low (3.2) M-L (2.8)
Overall Control Influence	Medium (2.2)	M-L (3.0)

#### 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Moderate Strategic (2.2)" before 1992 to "Tight Strategic (3.1)" after 1992]

Factors affecting the types and styles of control mechanisms : After 1992 Before 1992 Precision & detail of (1) Medium (2.5) (1.5)targets High (2) Objective vs subjective (3.0)(2.0)M-L targets H-MAchieving targets (3) Medium (2.5) (2.0)Timeframe H-MStretch built into (4)(3.5)Medium (2.5)Low the targets Financial vs non-(5) financial targets (3.5)(2.5)Low Medium Manangement influence (6) on setting targets Medium (2.5)Low (3.5)(3.1)Medium (2.2)Low ========= =========

- 6.3 Monitoring Results
  [Control Influence changed from "Moderate Financial (1.6)"
  before 1992 to "Strategic (2.7)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)

Factors considered by the headquarters in management control

		Before :	1992	After 1	.992
1.1	Policy	VH-H	(1.0)	H-M	(2.0)
1.2	Frequency	H-M	(2.0)	Medium	(2.5)
1.3	Contents	VH-H	(1.0)	H-M	(2.0)
1.4	Compilation	High	(1.5)	H-M	(2.0)
1.5	Review	H - M	(2.0)	Medium	(2.5)
1.6	Evaluation	Medium	(2.5)	M-L	(3.0)
1.7	Authorization	VH-H	(1.0)	H-M	(2.0)
1.8	Feedback	Medium	(2.5)	Low	(3.5)
1.9	Follow-up	Medium	(2.5)	M-L	(3.0)
1.10	Computerization	H-M	(2.0)	Medium	(2.5)
		H-M	(1.8)	Medium	(2.5)
		======	=====	======	=====

# Mr Zheng has mentioned that for any serious adverse variances shown on the monthly report, the general or deputy-general managers will contract the respective store managers to dig out the underlining reasons or ask them to perform investigation immediately.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992 : department stores were mainly measured on the financial targets such as sales, profit and foreign exchange created.
- After 1992: other than the previous financial targets, a set of qualitative targets such as service quality, discipline, decoration, display, sanity, day-to-day operation and security are also measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication\* (Q.6.4.3-7, Q.6.4.9-12))
- Before 1992: the top management reviewed the performance report monthly and discuss with store managers for corrective actions.

After 1992: the planning committee reviews the performance report monthly. Infrequent adverse variances can be tolerated if store managers can take remedial tactics or strategies to correct the unfavourable conditions and meet the budget at the year end.

Corporate Control Influence : "High-Medium (2)" to "Low (3.5)"

\* Mr Zheng said that it was expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the effect of advertisement).

Summary of Corporate Control Influence :

Factors	Before	1992	After :	1992
Reporting Requirements Performance Measurement Review & Communication	H-M	(1.8)	Medium	(2.5)
	VH-H	(1.0)	H-M	(2.0)
	H-M	(2.0)	Low	(3.5)
Overall Control Influence	H-M	(1.6)	M-L	(2.7)
	======	=====	======	=====

# 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.5)" before 1992 to "Moderate Strategic (2.2)" after 1992]

		=======	=====	======	=====
	•	H-M	(1.8)	Medium	(2.2)
1.8	Redundancy	H-M	(2.0)	Medium	(2.5)
	Recognition (intangible)	H-M	(2.0)	Medium	
	Pension	VH	(0.5)	VH-H	•
			•		1 :
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	H-M	(2.0)	Medium	(2.5)
	Allowances	Medium	(2.5)	Medium	
			•		
1 1	Basic wages	Medium	(2.5)	H-M	(2.0)
		Before 1	992	After 1	992
(1)	Incentives* (Q.6.5.1-7,1)	5-16,22-2	23)		

<sup>\*</sup> The "basic wages" is reviewed annually depending on grade and seniority without paying regards to qualification and technical skill. Every point increase on the basic pay scale is RMB10-20, therefore, it is no substantial enough to catch up with the inflation. Obviously, the "bonus" is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The firest part is determined by the Manpower Bureau of the Guangzhou government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the GNFB which may include housing, meals, travel, education, attendance, overtime, festival gifts etc.

The calculation of "bonus" is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to his or her subordinates according to individual performance, such as the sales achieved by a salesgirl in a certain month.

The "bonus" for the management and administrative staff in the headquarters is linked up with the average bonus of the employees in all department stores, and is based on their performance and grades as well.

- (2) Performance Orientation# (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and took over 50% of total wages. Basic wages was low and depended on seniority. Too many types of allowances all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 50% of total wages. Basic wages has been increased and increaments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. Pension is partly contributed by the government. Laying off redundant employees is easier after implementing the employment contract system.

Corporate Control Influence: "High (1.5)" to "Medium (2.5)"

# Mr Zheng said that unlike Beijing and Shanghai, the labour market in Guangzhou is rather free which means employees can choose new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the terms of the employment contracts. GNFB has fully implemented the "employment contract system" since 1992 and the "big rice pot" or "three iron bowls" concept has been abolished.

- (3) Participation (Q.6.5.16-17)
- Before 1992: store managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by headquarters and government.
- After 1992: store managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. Pension policy is still decided by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8, 13-14, 20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees on a monthly basis.
- After 1992 : IRC's targets are reviewed twice every year and can be modified. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies. Performance and reward are made known to employees every month.

Corporate Control Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Incentives Performance Orientation Participation Review & Communication	H-M (1.8) High (1.5) VH-H (1.0) High (1.5)	Medium (2.2) Medium (2.5) H-M (2.0) H-M (2.0)
Overall Control Influence	High (1.5)	Medium (2.2)

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Nan Fang Building Group Co. Ltd. (GDFB) belonged to before and after 1992.

Planning Influences	Before 1992	
Organisation Structure*		Low (3.3)
Review Process*	Medium (2.1)	Low (3.4)
Strategic Themes, Thursts and Suggestions*	Medium (2.2)	Low (3.2)
Long-Term Plans* (Resource Allocation)	High to Medium (1.8)	Medium (2.5)
Short-Term Planning/ Budgeting* (Resource Allocation)	Medium (2.4)	Low (3.5)
Internal Responsibility Contracts#	Medium (2.3)	Low (3.4)
Management of Inter- dependencies*		
Overall Planning Influence	==========	Low (3.2)
	Before 1992	
Decentralisation & Control#	Moderate Strategic (2.2)	
Agreeing Objectives*	Moderate Strategic (2.2)	Tight Strategic (3.1)
Monitoring Results*	Moderate Financial (1.6)	Strategic (2.7)
Rewards & Incentives*	Financial (1.5)	Moderate Strategic (2.2)
Overall Control Influence	Moderate Financial (1.9)	
· · ·		

<sup>\*</sup> All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.

# Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

					<b></b>		
	Planning Influence	· 	Control	Infl	uence		
		Strategic	.2			Financ	ial
	High (	Strategic	Programming	0 F	inancial	Programming	0
	H/M Medium2	2		-2			2
	M/L			X			
		3	0	3			3
	Low 4	Strategio	Control	4	Financia	l Control	4
(	0 (2.8, 3.2)	- GNFB Post	1992 X	(1.9,	2.1) - 0	NFB Pre-199	2

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Moderate Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of strategic control style as described by Goold's and Campbell's Strategic Style.

31 May 1996

#### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

: Professor Clive Emmanuel Supervisor

: Joseph Yau Shiu Wing (Hong Kong) Student

: "The Responsibility Accounting in China Research Title

- Towards An Exploratory Framework"

Report Title : Case Analysis 9 : 15 June 1996 Report Date

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

identify the factors affecting each planning and control (2) parameter;

quantify as objective as possible the degree of planning or control influence on each factor and parameter; (3)

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 9" (26 August 1995).

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#### Name of SOE: Beijing Chunshu Rectifier Factory (BCRF)

Staff Interviewed: Mr He Gao Hua/Chief Accountant

(No. of years in this enterprise : 13 years)

Dates of Visits : First Visit

First Visit - 13 August Second Visit - 30 August 1994 Third Visit - 12 September 1995

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#### Section 1: History & Background (Q.1.1-5)

- BCRF is a state-owned enterprise established in 1960. the earliest specialized factory in manufacturing power semiconductor devices and electornic convertor and equipment (0.1.1)in China.
- BCRF is a key enterprise under the administration of the 1.2 Ministry of Electronics Industry as well as in the Power Convertor Industry in China. Compared with the other competitors in Shanghai, Xian and Qingdao, BCRF has the most varieties and types of convertor products. (Q.1.2)

- BCRF is currently producing the following two major 1.3 categories of convertor products of which over 95% are sold domestically in China:
  1.3.1 Power Semiconductor Devices

  - Convertor Equipment (Q.1.3) 1.3.2
- Less than 5% of BCRF's products are exported to the 1.4 Southeast Asian countries and nearly all the raw materials and components are produced in China. (Q.1.4)
- 1.5 It is the government's policy to be self-satisfied the demands in this industry without any imported products from Therefore, BCRF's major marketing strategy is to overseas. penetrate and explore the domestic markets. Since the late 1980s, BCRF has been importing international advanced technology from the UK, USA and Japan in manufacturing its various types of products. While making effort in research and deevelopment, BCRF has pursued modern management in order to produce high quality, multi-applicable, reasonable price and prompt delivered power semiconductor devices and convertor equipment for every end-user. (Q.1.5)

#### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- BCRF has been a wholly state-owned enterprise before and 2.1 There is no plan to transform into after 1992. shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise.
- 2.2 BCRF is neither a holding or subsidiary enterprise.
- The organisation structure of BCRF can be divided into 8 divisions under the direct control of the Factory Manager 2.3 who has an Enterprise Management Office. (Q.2.3)
- The 8 divisions are listed as follow: (Q.2.5 & 2.9) 2.4
  - (1) Production Division (Deputy Factory Manager)
    - Production Workshop No.1 Power Semincontor 1.1 Devices
    - Production Workshop No.2 Convertor Devices 1.2
    - Production Workshop No.3 Convertor Equipment 1.3 Assembly
    - Production Workshop No.4 Fabrication & 1.4 Processing
    - Production Workshop No.5 Materials Handling
  - Technical Support Division (Chief Engineer) (2)
    - 2.1 Production Planning Department

- 2.2 Production Technology Department
- Environment & Safety Department 2.3
- No.1 Product Design Department 2.4
- 2.5 No.2 Product Design Department
- Power & Energy Department 2.6
- 2.7 Computer & Information Department
- (3) Quality Control Division (Deputy FM)
  - 3.1 Quality Management Department
  - 3.2 Product Inspection Department
  - Repair & Maintenance Department
- (4) Marketing & Sales Division (Chief Economist)
  - Marketing Department
  - 4.2 Sales Department
- Purchasing & Supply Division (Deputy FM) (5)
  - 5.1 Purchasing Department
- 5.2 Inventory & Supply Department Finance Division (Chief Accountant) (6)
  - 6.1 Accounting Department
  - 6.2 Internal Audit Department
- (7) Manpower & Wages Division (Deputy FM)
  - Personnel Department 7.1
  - 7.2 Education & Training Department
- Administration Division (Deputy FM) (8)
  - 8.1 Security Department
  - 8.2 Estate & Development Department
  - 8.3 General Affairs Department
    - 8.3.1 Medical
    - 8.3.2 Centeen
    - 8.3.3 Nursary
- 2.5 BCRF is under the administration of the Beijing Municipal Government and the Beijing Instrument Bureau. In 1983, the Bureau was transformed into a quasi-government body called Beijing International Instrument Corporation (BIIC) as an initial step to delegate the governing role to this self-regulated institution composed of all the electronic instrument manufacturing industries in Beijing.

Since then, more autonomy in terms of planning an control decisions has been authorised by the Beijing Government to the BIIC and turning into this decade, BIIC's major roles played for its subordinate enterprises are (1) appointing the factory manager and the communist party secretary; (2) maintaining a macoreconomic control or balance on the 5-year's plans suggested by its enterprises; and (3) acting as a bridge or facilitator between the government and its enterprises in policy matters such as capital invetment, taxation, legal form import and export autonomy, transformation etc. BIIC has delegated the planning and management responsibilities to BCRF although quarterly and annual reports have to be submitted to the BIIC for review. (Q.2.6 & 2.7)

2.6 BCRF has a total of 970 working employees (compared with 1,200 in 1990) and 600 retired employees at the end of 1994. It is classified as a "medium size SOE" in China. (Q.2.10)

# Since BCRF is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to BCRF.

#### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB 90M (historical cost) (Q.3.1)

3.2 Turnover : RMB 41M (1992) RMB 33M (1993)

RMB 21M (1994)

RMB 22M (1995 forecast) (Q.3.2 & 7)

3.3 Income before tax: RMB5.2M (1992) - 12.7% of sales

RMB 0M (1993) - breakeven (RMB4.6M) (1994) - loss making\*

(RMB4.5M) (1995 forecast)# (Q.3.5, 6 & 7)

\* The decrease in income before tax to breakeven and even incurrance of loss in 1994 were due to high inflation, depreciation and loan interest, unsellable products, inefficient management, insufficient new products and the change of fully absorption costing method to manufacturing costing method under the new enterprise accounting regulations implemented since July 1993. The outstanding bank loan in 1995 was almost RMB30 million.

# This loss figure did not include an extraordinary income of RMB8 million due to leasing a piece of land (8,000 square metre) inside the factory to a Guangdong province for constructing a 5-storey commercial building with a small motel inside. Eventually, there would be a profit before tax of about RMB3.5M in 1995.

3.4 Income tax rate : 15%@ (before 1996) 33% (after 1996) (Q.3.6)

@ BCRF enjoyed a lower income tax rate compared with the 33% levied on the other state-owned enterprises because it is treated as a hightech manufacturing enterprise which can retain more earnings for research and development, and also replace the old plant and equipment. The net VAT (output VAT - input VAT) was about 9% in 1994 compared with 8% in the past.

Without diclosing the exact amount, Mr He has admitted the fact that bad and doubtful debts are quite serious in BCRF. He has complained that VAT has to be paid on one hand while cash cannot be received from debtors on the other hand. But this situation was changed in 1995 by paying the net VAT upon receiving cash from the debtors.

- 3.5 In 1994, nearly all the manufacturing enterprises in this industry were loss-making mainly because of : (Q.3.7 & 8)
  - (a) lack of sources of capital to replace the old plant and machinery due to the macro-economic control policies implemented since July 1993;
  - (b) the existing products could not suit the changing demands in the national market;
  - (c) the cost of production is high mainly due to inflation of raw materials and wages, and also small batch of production but incurring high fixed costs (i.e. set-up, scheduling);
  - (d) the end users prefer to import the same products from overseas suppliers at similar prices but higher quality; and
  - (e) the incompetent leadership ability of the top management.

In 1988, BCRF obtained a bank loan of RMB29 million to procure a set of machines form the UK for producing a series of new products. However, most of these products are still keeping in the inventory and as a result, 60% of the bank loan is still outstanding now. Of course, the loan interest affects the profit and loss account adversely. Adding up with the other working capital bank loan, BCRF paid RMB2.8 million of bank interest in 1994.

# Q.3.4 is not applicable to BCRF because it is neither a holding nor a subsidiary enterprise.

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### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

4.1 BCRF entered into an ERC with the Beijing Municipal Government represented by BIIC in 1992. It was a standing contract without duration (time limit) specified but subject to review by both parties every year. (Q.4.1)

- 4.2 The terms and conditions of this contract were summarised below: (Q.4.2 & 4)
  - (1) income tax rate was 15%
  - (2) income after tax was split 40:60 between the government and the enterprise (the split was 60:40 and 50:50 before 1992)
  - (3) income after tax was subject to tow local taxes, i.e. energy and transportation development tax 10% government budget adjustment tax 15%
  - (4) total wages and bonus linked up with economic efficiency
  - (5) deducted bank loan repayment of RMB1 million from the income before tax
  - (6) accerlarated depreciation by 3%
  - (7) provided 1% on sales for new product development
- 4.3 The terms and conditions stated in 4.2 above were based on the past three financial performance before 1992. The favourable income tax rate was explained in 3.4 above. (Q.4.3)
- 4.4 Another favourable term provided for BCRF was to deduct the bank loan repayment (RMB1M for 1992) from the PBT before income tax assessment. (Q.4.6)
- 4.5 Since the financial performance has been deteriorating as from 1993, BIIC requested BCRF to achieve at least the breakeven (i.e. PBT = RMB 0) in 1994 and 1995. (Q.4.5)
- 4.6 The top management did participate in the negotiation with the government and BIIC in setting the above targets. The chosen terms were mutually agreed among the BIIC, government and BCRF. (Q.4.7-10)
- 4.7 Mr He has mentioned that in view of the current product and market position and potential, the top management believe that the PBT targets would be positive figures after 1995. The terms and conditions of the informal ERC would not be changed significantly in the next few years. (Q.4.12 & 13)

#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Very High-High Corporate
  (0.9)" before 1992 to "Medium Corporate (2.1)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992 : all the 5 production workshops were "cost centres" managed by the workshop managers. All the other management and service departments were "expenses centres" under tight expense budgets.
- After 1992: it went to some length in 1992 to convert the 5 production workshops into independent "semi-profit centres" managed by the workshop managers with higher autonomy in management and operation. All the other management and service departments remain "expense centres" whose managers participate in the budgeting process. Mr Quo has said that there would be no significant changes in BCRF's organisation structure in the next few years.

Corporate Planning Influence\* : "Very High-High (1)" to "High-Medium (2)"

Greatest Influence Very High (0) \* By using a 5-point scale -(1) (consistent with the scale High used in the questionnaire Medium (2) e.g. 5.4.4 to quantify (3) Low some of the parameters or Very Low Least Influence (4)variables)

Very High	[VH]	(0.0	-	0.5)
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6	-	4.0)

- (2) Decentralization (Q.5.1.2)
- Before 1992: the workshop managers were responsible for the production volumes and costs as given in the annual budgets and internal responsibility contracts (IRCs) with the top management.

  Therefore, classifying the factories into cost centres were appropriate.

After 1992: top management has been decentralising more planning responsibility to each workshop and department such as initiating the annual budget and the IRC. The profit responsibility lies with the workshop manager but the top management keep a surveillance cost control on each production workshop through monthly or weekly report.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Appointment (Q.5.1.3)
- Before 1992: the factory manager, party secretary and some deputy managers were appointed by the BIIC, any major organisational changes required BIIC's approval.
- After 1992: the factory manager, party secretary and some deputy managers are still appointed by the BIIC. The factory manager can appoint most of the other senior staff such as the workshop managers. The workshop managers can suggest changes in organisation structure and personnel affairs to the factory manager for approval. Mr He has mentioned that in fact the party secretary was the representative from the government/BIIC to ensure some sort of macro-economic policies are under control.

Corporate Planning Influence : "Very High (0.5)" to "High-Medium (2)"

- (4) Interdependencies (Q.5.1.4)
- Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production without any profit margin.
- After 1992: the transfer prices are based on standard cost plus 16% across the board. Although the transfer prices may be lower than the market prices, nevertheless, they provide a profit margin to the workshop or a buffer to cover the underestimateion of inflation rates in setting the standard cost.

Corporate Planning Influence : "Very High (0.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	VH-H High VH VH	(1.0) (1.5) (0.5) (0.5)	H-M (2.0) Medium (2.5) H-M (2.0) H-M (2.0)
Overall Planning Influence	VH-H	(0.9)	Medium (2.1)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the BIIC while the top management was in consultation only. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the BIIC.
- After 1992: BIIC has delegated the long term planning and annual budgeting autonomy to the top management but Mr He has said that due to the present economic downturn in this industry, the BIIC now retains some controls in planning and operation including the manpower and wages increase.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between BIIC and the top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the workshop managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was top-down process but middle management (i.e workshop managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: BIIC reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the top management during every year end and significant changes should be discussed with BIIC and informed the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notify to lower management immediately.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After 1992
Central Planning Operation Participation Review & Communication	VH-H High VH-H High	(1.0) (1.5) (1.0) (1.5)	H-M (2.0) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High	(1.3)	Medium (2.4)

- 5.3 Strategic Themes, Thrusts & Suggestions [Planning Influence changed from "Very High-High Corporate (1) before 1992 to "Medium Corporate (2.2)" after 1992]
- Themes (Q.5.2.4-7\*)(1)
- Before 1992 : since 1990, the following strategic themes have been promulgated:
  - implement the management by exception principles
  - enhance product and market development
  - maintain flexible operation to cater for changes

  - ensure proper marketable product mixensure production target with good quality
  - guarantee safety production
  - measure monthly internal profit of workshops
  - emphasize the cost reduction activities
  - provide more education and training for employees
- After 1992 : the above strategic themes are further reinforced with more inputs and suggestions from middle and lower management.
- Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"
- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992 : "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.
- After 1992 : in 1993, the Quality Control Division was separated from the Technical support Division and became an independent unit. Quality has the veto power in determining bonus as stated in the IRCs.
- Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"
- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992 : top management always made suggestions on the planning and review process such as production quantity and mix, transfer price, personnel, incentive scheme, sales and marketing etc.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the workshop managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	VH-H (1.0) VH-H (1.0) VH-H (1.0)	H-M (2.0) H-M (2.0) Medium (2.5)
Overall Planning Influence	VH-H (1.0)	Medium (2.2)

### 5.4 Long-Term Plans [Planning Influence changed from "High Corporate (1.4)" before 1992 to "Medium Corporate (2.3)" after 1992]

- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the BIIC in terms of production facilities, volume and mix, product and market development.
- After 1992: the top management has to initiate its own long term plans such as capital projects, product and market development which need to be discussed with the BIIC who have been exercising macro-economic controls and provide directives and targets i.e. technology expertise and quality standards. BCRF has also been allowed to carry out feasible studies to ascertain the possibility of success in the capital projects to be taken.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the BIIC to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. workshop managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1993-1997), includes competitive edge, research and development, product and market development, cost reduction program, capacity expansion and leasing out spare land space.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979 started to allow BCRF to participate in the 5-year's planning with the BIIC and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse
- After 1992: BCRF has to formulate their own long term strategic plan since 1990. The workshop and department managers are consulted in the process. The long term planning and review exercises are rather a top-down approach.

Corporate Planning Influence : "Very-High to High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992 : 5-year long term plan was reviewed annually by the BIIC with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the BIIC for endorsement and sometimes assistance such as seeking a long term bank loan.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After 1992	
Central Planning Operation Participation Review & Communication	High High VH-H High	(1.5) (1.5) (1.0) (1.5)	Medium (2.5) Medium (2.5) H-M (2.0) H-M (2.0)	
Overall Planning Influence	High	(1.4) =====	Medium (2.3)	

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because BCRF caters for the capital budgets during the long term planning exercise.

## 5.5 Short-Term Plans/Budgets [Planning Influence changed from "High-Medium Corporate (2)" before 1992 to "Low Corporate (3.4)" after 1992]

(1) Central Planning (Q.5.5.1)

Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.

After 1992: top management has higher autonomy in the annual planning and budgeting processes which involve the middle management such as the workshop managers.

But BIIC still provides the major targets such as sales and profit level.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

(2) Operation (Q.5.5.2 & 4)

Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the workshop managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.

After 1992: top management provided major guidelines to the workshop managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"

(3) Participation (Q.5.5.3 & 5)

Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.

After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

(4) Review & Communication (Q.5.5.6 & 8)

Before 1992: annual plans and budgets were reviewed quarterly and amendments were seldom made except under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.

After 1992: top management reviews the annual plans and budgets monthly and amendments are made due to unavoidable internal and external factors. A fixed budget concept is still in force because computer is not widely used. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After	1992
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	M-L Low Low Low	(3.0) (3.5) (3.5) (3.5)
Overall Planning Influence	H-M ======	(2.0) ======	Low	(3.4) ======

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.4)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: The IRC system was started in 1991 and mainly applied to the production workshops. The major targets set were production quantity and cost.
- After 1992: major economic target is internal profit while quality and safety have the veto effects on the bonus which was linked up with the IRC performance. Other qualitative factors, such as environment, sanity, training, compliance and family planning are also emphasized.

A general guideline for IRC is shown in Appendix B of the Data Analysis Set 9.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992 : workshop managers are given the production quantity and cost targets without much negotiation.
- After 1992: workshop managers negotiate and compromise the IRC targets with the general management during the annual planning cycle.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets given to the workshop managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective workshop managers and their employees.

Corporate Planning Influence: "High (1.5)" to "Medium (2)"

#### (4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the workshop managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards. But suggestions on financial targets are sometimes given.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

#### Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	High (1.5) VH-H (1.0) High (1.5) High (1.5)	Medium (2.5) H-M (2.0) H-M (2.0) M-L (3.0)
Overall Planning Influence	High (1.4)	Medium (2.4)

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "Very High Corporate (0.5)"
  before 1992 to "High Corporate (1.3)" after 1992]
- (1) Characteristics (Q.5.9.1-7)

		· ~ · - · - · · ·	
		Before 1992	After 1992
1.1	Interdepen-	Production workshops	Production workshops
	dencies	involved only	involved only
1.2	Transfer	actual cost of	historical cost plus
	Price Basis	production	16% as standard cost
1.3	Transfer Price	Did not exist between	Little negotiations
	Negotiation	buyer and seller	are allowed
1.4	Intermediate	Buy and sell were not	Buy & sell are not
	Product	available in market	available in market
1.5	Transfer	All determined by the	All sold internally
	Quantity	top management	-
1.6	Arbitration	Prices and quantities	Determined by top
		all determined by top	management with very
		management	limited negotiations
1.7	Government	No, except the output	No, only suggest
	Interference	volumes & selling	volumes & prices of

Corporate Planning Influence : "Very High (0.5)" to "Very High-High (1)"

prices of final products final products

- (2) Participation (Q.5.9.8)
- Before 1992: all the transfer prices and quantities were determined by the top management and the workshop managers were consulted sometimes. Any conflects were arbitrated by the factory manager. Workshop managers didn't care much because they were measured by their own production volume and cost.
- After 1992: the transfer prices and quantities are still controlled by the top management although limited negotiations are allowed for the workshop managers because they are measured on internal profit.

  Interference from and arbitration by the factory manager are quite often.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

- (3) Review (Q.5.9.9-12)
- Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management. It was based on actual cost of production. The transfer prices were reviewed annual and adjustment made due to inflation.

After 1992: the actual cost plus a fixed profit margin is used for setting the transfer prices which are reviewed in the middle of the year.

Corporate Planning Influence : "Very High (0.5)" to "High (1.5)"

Summary of Corporate Planning Influence :

Factors	Before	e 1992	After	After 1992		
Characteristics Participation Review	VH VH VH	(0.5) (0.5) (0.5)	VH-H High High	(1.0) (1.5) (1.5)		
Overall Planning Influence	VH =====	(0.5)	High =====	(1.3)		

#### Section 6 : Control System

6.1 Decentralisation & Control [Control Influence changed from "Financial (1.5)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Organisational Design (Q.6.1.1)

		======	=====	======	=====
		High	(1.5)	Medium	(2.1)
1.4	Interactions	Medium	(2.5)	M-L	(3.0)
	Roles & functions	H-M	(2.0)	M-L	(3.0)
	Staffing		(1.0)		(1.5)
	Structure	VH	(0.5)*	VH-H	(1.0)
		Before	1992	After 1	L992

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	.c<			-Tight	Financial
Control				Contro	ol

Tight Financial	(0.0	-	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	_	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	_	3.0)
Tight Strategic	(3.1	-	4.0)

(2)	Personnel#	(Q.	6.	. 1	.1)
-----	------------	-----	----	-----	-----

			======	=====	=====	=====
			H-M	(1.8)	Medium	(2.4)
2.6	Termination		VH-H	(1.0)	High	(1.5)
2.5	Remuneration		High	(1.5)	Medium	
	Evaluation		Medium	(2.5)	M-L	(3.0)
	Training		Medium	(2.5)	M-L	(3.0)
2.2	Assignment		H-M	(2.0)	M-L	(3.0)
2.1	Recruitment		VH-H	(1.0)	High	(1.5)
		f	Before	1992	After	1992

# Mr He said that since 1992, more delegation has been given to the workshop managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

(	(3)	Control	Mechanisms	(Q.6.1.2-3, Q.6.4.8)	
١	<b>ر</b> د ۱	COLLETON	riccitatifallia	(Q.0.1.2-3, Q.0.4.0)	

		Before 1992		After	1992
3.1	Budget	VH-H	(1.0)	High	(1.5)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.5	Qualitative targets	High	(1.5)	VH-H	(1.0)
3.6	Communication*	VH-H	(1.0)	High	(1.5)
		High	(1.2)	High	(1.3)
			======	=====	======

\* The control mechanisms are clearly communicated to the workshops and departments through the annual plan, IRC and also the Internal Economic Evaluation System established in 1988 (see section 6.1 of Data Analysis 9).

#### Summary of Corporate Control Influence :

Factors	Before	1992	After :	1992
Organisational Design Personnel Control Mechanisms	High H-M High	(1.5) (1.8) (1.2)	Medium Medium High	(2.4)
Overall Control Influence	High	(1.5)	H-M ======	(1.9)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Financial (1.1)" before 1992 to "Moderate Financial (2)" after 1992]

Facto	ors affecting the types a	nd styles Before 1		mechani After 1	
(1)	Precision & detail of				
	targets	VH-H	(1.0)	H-M	(2.0)
(2)	Objective vs subjective				
4 - 1	targets	VH-H	(1.0)	H-M	(2.0)
(3)	Achieving targets				
4 - 3	Timeframe	VH-H	(1.0)	H-M	(2.0)
(4)	Stretch built into		( a . a )		(0.0)
	the targets	VH-H	(1.0)	H-M	(2.0)
(5)	Financial vs non-	1	/		(0.0)
1-1	financial targets	High	(1.5)	H-M	(2.0)
(6)	Manangement influence	****	/1 0)	v. v.	(0.0)
	on setting targets	VH-H	(1.0)	M-M	(2.0)
		High	(1.1)	H-M	(2.0)
		nign	( + . + /	n-m	(2.0)

# 6.3 Monitoring Results [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

Refore 1992

After 1992

		======	=====	======	======
		High	(1.1)	H-M	(1.7)
	_				
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	High	(1.5)	H-M	(2.0)
1.8	Feedback	High	(1.5)	H-M	(2.0)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.1	Policy	VH-H	(1.0)	High	(1.5)
		Before		After 1	

# Mr He has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the factory manager. For any serious adverse variances shown on any report, the factory manager or deputy-factory managers will contact the respective workshop manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible. More details are described in the Internal Economic Evaluation System adopted in 1988 (see section 6.1 of Data Analysis 9).

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production workshops were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: internal profit, working capital and production volume are the major economic targets, however, more qualitative targets such as environment, sanity, training, compliance and family planning are measured.

Corporate Control Influence: "High (1.5)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each workshop or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the workshop managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual workshop or departmental meetings.

Corproate Control Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Reporting Requirements Performance Measurement Review & Communication	High High High	(1.1) (1.5) (1.5)	H-M H-M H-M	(1.7) (2.0) (2.0)
Overall Control Influence	High	(1.4) =====	H-M	(1.9)

# 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

		======	======	======	=====
		H-M	(1.6)	H-M	(1.7)
1.0	Reduirdancy		w ( <del>1</del> .0)		(2.0)
1.8	Redundancy	Very Lo	•	H-M	(2.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	VH	(0.5)	VH-H	(1.0)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
		Before		After 1	
(1)	Incentives* (Q.6.5.1-7,1				

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Beijing municipal government at least once in each year to combat inflation. The second part is decided by the BCRF which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the factory manager and the workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the BCRF's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 40-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 25-40% of total wages.

  Basic wages has been increased and increments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992: workshop managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by the headquarters and government.
- After 1992: workshop managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

#### (4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the workshop or department managers

After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the workshop or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

#### Summary of Corporate Control Influence :

Factors	Before 1	1992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.6) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.7) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2)	H-M =====	 (1.8) =====
=======================================			======	

### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Chunshu Rectifier Factory (BCRF) belonged to before and after 1992.

Planning Influences		After 1992
Organisation Structure*	Very High to High (0.9)	
Review Process*	High (1.3)	Medium (2.4)
Strategic Themes, Thursts and Suggestions*	Very High to High (1.0)	Medium (2.2)
Long-Term Plans* (Resource Allocation)	High (1.4)	Medium (2.3)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium (2.0)	Low (3.4)
Internal Responsibility Contracts#	High (1.4)	Medium (2.4)
Management of Inter- dependencies*	Very High (0.5)	High (1.3)
Overall Planning Influence	High (1.2)	Medium (2.3)
	Before 1992	After 1992
Decentralisation & Control#	Financial (1.5)	Moderate Financial (1.9)
Agreeing Objectives*	Financial (1.1)	Moderate Financial (2.0)
Monitoring Results*	Financial (1.4)	Moderate Financial (1.9)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.8)
Overall Control Influence	Financial (1.3)	Moderate Financial (1.9)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Contro	l Influence
inituence	Strategic	Financial
High (	Strategic Programmin	g O Financial Programming
<u>.</u> !	•	X
н/м		
Medium2		2
M/L		0
3		3
Low 4	Strategic Control	4 Financial Control

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Chunshu Rectifier Factory (BCRF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

15 June 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 10 Report Date : 17 June 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 10" (31 August 1995).

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### Name of SOE: Beijing Instrument Machine Tool Works (BIMT)

Staff Interviewed: Mr Wu De Cheng/Chief Accountant

(No. of years in this enterprise : 16 years)

Dates of Visits : First Visit - 1 September 1993

Second Visit - 1 September 1994

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### Section 1: History & Background (Q.1.1-5)

- 1.1 BIMT is a state-owned enterprise established in 1956. It is one of the earliest specialized factories in manufacturing multi-purpose tool milling machines in China. (Q.1.1)
- 1.2 BIMT is a key enterprise under the administration of the Ministry of Machine Building Industry. (Q.1.2)
- 1.3 BIMT is currently producing the following three major categories of milling machines of which 60% are exported to 30 countries:
  - 1.3.1 Multi-purpose tool milling machines

- 1.3.2 Radial milling machines
- 1.3.3 Equipment for air-conditioning (Q.1.3)
- 1.4 The annual production output of various machine tools is about 700 sets of which 60% are exported to 30 countries, including the USA, France, Italy, South American and Southeast Asian regions. BIMT obtained the "import and export right" and created a foreign income of US\$3M in 1992. (Q.1.4)
- 1.5 In recent years, BIMT has undertaken significant technical renovation by importing some advanced production equipment and established a 2,000 square metres constant-temperature workshop in order to enhance the manufacturing process and product quality. However, BIMT is losing out to the overseas competitors and was unlikely to maintain an export sales of US\$3.6 million in 1994. (Q.1.5)

### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 BIMT has been a wholly state-owned enterprise before and after 1992. There is no plan to transform into a shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise. (Q.2.1)
- 2.2 BIMT is neither a holding or subsidiary enterprise. (Q.2.4)
- 2.3 The organisation structure of BIMT can be divided into 5 divisions under the direct control of the Factory Manager who has an Enterprise Management Office. (Q.2.3)
- 2.4 The 5 divisions are listed as follow: (Q.2.5 & 2.9)
  - (1) Production Division (Deputy Factory Manager)
    - 1.1 Production Workshop No.1#
    - 1.2 Production Workshop No.2#
    - 1.3 Production Workshop No.3#
    - 1.4 Production Workshop No.4#
    - 1.5 Purchasing & Supply Company\*
  - (2) Production Technology Division (Chief Engineer)
    - 2.1 Chief Engineer Office
    - 2.2 Facility & Support Department
    - 2.3 Quality Control Department
    - 2.4 Inspection Department
    - 2.5 Research & Development Department
  - (3) Marketing & Sales Company\* (Chief Economist)
  - (4) Finance Division (Chief Accountant)
    - 4.1 Accounting Department
    - 4.2 Internal Audit Department

- (5) Administration Division (Deputy FM)
  - 5.1 Security Department
  - 5.2 Estate & Development Department
  - 5.3 General Affairs Department
    - 5.3.1 Medical
    - 5.3.2 Centeen
    - 5.3.3 Nursary
- (6) Manpower & Wages Division (Deputy FM)
  - 6.1 Personnel Department
  - 6.2 Wages Department
  - 6.3 Education & Training Department
- (7) Communist Party Office
  - 7.1 Discipline & Promotion
  - 7.2 Political Education
- (8) Labour Union Office
- # All the 4 production workshops have signed Internal Responsibility Contracts (IRC) with the Factory Manager and are measured mainly on internal profit.
- \* The Purchasing and Supply Company is an independent and self-financed service entity (tertiary enterprise) which can buy from and sell to the external vendors and customers respectively. Similarly, the Marketing and Sales Company is an independent investment centre which represents BIMT selling the final products to local and overseas customers.
- 2.5 BIMT is under the administration of the Beijing Municipal Government and the Beijing Instrument Bureau. In 1983, the Bureau was transformed into a quasi-government body called Beijing International Instrument Corporation (BIIC) as an initial step to delegate the governing role to this self-regulated institution composed of all the electronic instrument manufacturing industries in Beijing.

Since then, more autonomy in terms of planning an control decisions has been authorised by the Beijing Government to the BIIC and turning into this decade, BIIC's major roles played for its subordinate enterprises are (1) appointing the factory manager and the communist party secretary; (2) maintaining a macoreconomic control or balance on the 5-year's plans suggested by its enterprises; and (3) acting as a bridge or facilitator between the government and its enterprises in policy matters such as capital invetment, import and export autonomy, taxation, legal BIIC has delegated the planning and transformation etc. management responsibilities to BIMT although quarterly and annual reports have to be submitted to the BIIC for review.  $(0.2.6 \& \bar{2.7})$ 

2.6 BIMT has a total of 1,250 working employees and 300 retired employees at the end of 1994. It is classified as a "medium size SOE" in China. (Q.2.10)

 $\sharp$  Since BIMT is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to BIMT.

### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB130M (historical cost) (Q.3.1)

3.2 Turnover : RMB 42M (1992) RMB 48M (1993) RMB 50M (1994)

RMB 55M (1995 forecast) (Q.3.2 & 7)

3.3 Income before tax : RMB3.2M (1992) - 7.6% of sales

RMB2.5M (1993) - 5.2% of sales\*

RMB2.5M (1994) - 5.0% of sales\*

RMB2.2M (1995 forecast) (Q.3.5, 6 & 7)

\* The decrease in income before tax in 1993 and 1994 were due to high inflation, bank interest and incompetable selling prices.

3.4 Income tax rate : 33%@ (Q.3,6)

@ The net VAT (output VAT - input VAT) is about 7% which has to be paid upon sales but some accounts receivable may be doubtful. As a result, strain has been placed on the cash flow.

- 3.5 In 1994, nearly all the manufacturing enterprises in this industry were loss-making mainly because of : (Q.3.7 & 8)
  - (a) lack of sources of capital to replace the old plant and machinery due to the macro-economic control policies implemented since July 1993;
  - (b) the existing products could not suit the changing demands in the national market;
  - (c) the cost of production is high mainly due to inflation of raw materials and wages, and also small batch of production but incurring high fixed costs (i.e. set-up, scheduling);
  - (d) the end users prefer to import the same products from overseas suppliers at similar prices but higher quality; and
  - (e) the incompetent leadership ability of the top management.

In 1993, BIMT obtained a bank loan of RMB20 million to set up a R&D Centre in order to diversify into new products. Adding up with the other working capital bank loan, BIMT incurred an outstanding balance of RMB40 million and paid RMB4.5 million of bank interest in 1994.

# Q.3.4 is not applicable to BIMT because it is neither a holding nor a subsidiary enterprise.

### Section 4: Econmic Responsibility Contract System (ERCS) (0.4.1-13)

- 4.1 BIMT entered into the first 5-year ERC (1991-1995) in 1991 with the following 7 departments in Beijing:
  - 4.1.1 Finance Bureau
  - Tax Bureau 4.1.2
  - 4.1.3 Manpower & Wages Bureau

  - 4.1.4 Economic & Trade Commission 4.1.5 State Assets Administration Bureau
  - Bank of China 4.1.6
  - 4.1.7 Beijing International Instrument Corporation
- The terms and conditions of this contract were summarised 4.2 below: (Q.4.2 & 4)
  - profit before tax RMB3M in the first year;
  - profit before tax growth rate 8% per year;
  - foreign exchange income of US\$3.6M each year; and (3)
  - for every 1% increase in profit before tax, the gross wages can be increased by 0.7%. (4)
- 4.3 The terms and conditions stated in 4.2 above were based on the past three financial performance before 1991. (Q.4.3)
- Another favourable term provided for BIMT was to deduct 4.4 certain amount of bank loan repayment from the PBT before income tax assessment. (Q.4.6)
- 4.5 Since the financial performance has been deteriorating as from 1993, BIIC requested BIMT to achieve at least PBT of RMB2M in 1994 and 1995. (0.4.5)
- The top management did participate in the negotiation with the government and BIIC in setting the above targets. The 4.6 chosen terms were mutually agreed among the BIIC, government and BIMT. (Q.4.7-10)

4.7 Mr Wu has mentioned that in view of the present promulgations of shareholding transformation, company law and modern enterprise sytem, BIMT expects that the ERC will be ceased after the current one is expired at the end of 1995, instead BIMT will be subject to the new taxation system enforced since January 1994 and other laws and regulations governing the state-owned enterprises. (Q.4.12 & 13)

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### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Very High-High Corporate
  (1)" before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 4 production workshops were "cost centres" managed by the workshop managers. All the other management and service departments were "expenses centres" under tight expense budgets.
- After 1992: it went to some length in 1992 to convert the 4 production workshops into independent "semi-profit centres" managed by the workshop managers with higher autonomy in management and operation. All the other management and service departments remain "expense centres" whose managers participate in the budgeting process. Mr Wu has said that there would be no significant changes in BIMT's organisation structure in the next few years.

Corporate Planning Influence\* : "Very High-High (1)" to "High-Medium (2)"

Very High (0) Greatest Influence \* By using a 5-point scale -(1) (consistent with the scale High used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) Least Influence some of the parameters or Very Low (4)variables)

Very High	[VH]	(0.0	-	0.5)
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1		1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6	-	4.0)

- (2) Decentralization (Q.5.1.2)
- Before 1992: the workshop managers were responsible for the production volumes and costs as given in the annual budgets and internal responsibility contracts (IRCs) with the top management.

  Therefore, classifying the factories into cost centres were appropriate.
- After 1992: top management has been decentralising more planning responsibility to each workshop and department such as initiating the annual budget and the IRC. The profit responsibility lies with the workshop manager but the top management keep a surveillance cost control on each production workshop through monthly or weekly report.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Appointment (Q.5.1.3)
- Before 1992: the factory manager, party secretary and some deputy managers were appointed by the BIIC, any major organisational changes required BIIC's approval.
- After 1992: the factory manager and party secretary are still appointed by the BIIC. The factory manager can appoint most of the other senior staff such as the workshop managers. The workshop managers can suggest changes in organisation structure and and personnel affairs to the factory manager for approval. Mr Wu has mentioned that in fact the party secretary was the representative from the government/BIIC to ensure some sort of macroeconomic policies are under control.

Corporate Planning Influence: "Very High (0.5)" to "High-Medium (2)"

- (4) Interdependencies (Q.5.1.4)
- Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production. The workshops were consulted in setting the prices and quantities.
- After 1992: the transfer prices are based on standard cost plus or revised market prices so as to leave a profit margin to the workshop or a buffer to cover the underestimateion of inflation rates in setting the standard cost.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992	
Responsibility Centre Decentralization Appointment Interdependencies	VH-H (1.0) High (1.5) VH (0.5) VH-H (1.0)	H-M (2.0) Medium (2.5) H-M (2.0) Medium (2.5)	
Overall Planning Influence	VH-H (1.0)	Medium (2.3)	

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the BIIC while the top management was in consultation only. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the BIIC.
- After 1992: BIIC has delegated the long term planning and annual budgeting autonomy to the top management but Mr Wu has said that due to the present economic downturn in this industry, the BIIC now retains some controls in planning and operation including the manpower and wages increase.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between BIIC and the top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.

After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the workshop managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992 : long term planning was top-down process but middle management (i.e workshop managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top.

Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: BIIC reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the top management during every year end and significant changes should be discussed with BIIC and informed the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notify to lower management immediately.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992
Central Planning Operation Participation Review & Communication	VH-H High VH-H High	(1.0) (1.5) (1.0) (1.5)	H-M (2.0) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High	(1.3)	Medium (2.4)

Strategic Themes, Thrusts & Suggestions 5.3 [Planning Influence changed from "Very High-High Corporate (1) before 1992 to "Medium Corporate (2.2)" after 1992]

#### (1) Themes (Q.5.2.4-7\*)

Before 1992 : since 1990, the following strategic themes have been promulgated:

- implement the management by exception principles
- enhance product and market development
- maintain flexible operation to cater for changes
- ensure proper marketable product mix
- ensure production target with good quality
- guarantee safety productionmeasure monthly internal profit of workshops
- speed up the working capital cycle and cash collection
- emphasize the cost reduction activities
- provide more education and training for employees

After 1992 : the above strategic themes are further reinforced with more inputs and suggestions from middle and lower management.

Influence : "Very High-High (1)" to Corporate Planning "High-Medium (2)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- Thrusts (Q.5.3.1 & 4) (2)
- Before 1992 : "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.

After 1992: it is clearly stipulated in the IRC that "quality" has the veto power in determining bonus. As far as hardware is concerned, BIMT has imported some modern manufacturing plant and equipment from the USA and Japan at a cost of over RMB30M since 1992.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

(3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, transfer price, personnel, incentive scheme, sales and marketing etc.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the workshop managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992 After 3		After 1992
Theme Thrust Suggestions	VH-H VH-H VH-H	(1.0) (1.0) (1.0)	H-M (2.0) H-M (2.0) Medium (2.5)
Overall Planning Influence	VH-H	(1.0)	Medium (2.2)

# 5.4 Long-Term Plans [Planning Influence changed from "High Corporate (1.4)" before 1992 to "Medium Corporate (2.3)" after 1992]

(1) Central Planning (Q.5.4.2,4 & 8)

Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the BIIC in terms of production facilities, volume and mix, product and market development.

After 1992: the top management has to initiate its own long term plans such as capital projects, product and market development which need to be discussed with the BIIC who have been exercising macro-economic controls and provide directives and targets i.e. technology expertise and quality standards. BIMT has also been allowed to carry out feasible studies to ascertain the possibility of success in the capital projects to be taken.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the BIIC to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992 : formal planning meetings and procedures are in existence to get middle management (i.e. workshop managers) involved whose planning, control and evaluation aspects are affected. The current 5-year rolling planning (1993-1997), includes competitive edge, research and development, product and market development and cost reduction program.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979
  started to allow BIMT to participate in the 5year's planning with the BIIC and the municipal
  government but specific directives and suggestions
  were always coming from the top by using the term
  "macroeconomic control and adjustment" as an excuse
- After 1992: BIMT has to formulate their own long term strategic plan since 1990. The workshop and department managers are consulted in the process. The long term planning and review exercises are rather a top-down approach.

Corporate Planning Influence : "Very-High to High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992 : 5-year long term plan was reviewed annually by the BIIC with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the BIIC for endorsement and sometimes assistance such as seeking a long term bank loan.

Corporate Planning Influence : "High (1.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	High High VH-H High	(1.5) (1.5) (1.0) (1.5)	Medium Medium H-M H-M	•
Overall Planning Influence	High	(1.4)	Medium	(2.3)

- \* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because BIMT caters for the capital budgets during the long term planning exercise.
- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Low Corporate (3.4)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.
- After 1992: top management has higher autonomy in the annual planning and budgeting processes which involve the middle management such as the workshop managers.

  But BIIC still provides the major targets such as sales and profit level.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales, production volume and mix, labour and materials, and then compromised with the workshop managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: top management provided major guidelines to the workshop managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.
- Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"
- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed halfannually and amendments were seldom made except under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.
- After 1992: top management reviews the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors. A fixed budget concept is still in force because computer is not widely used. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.
- Corporate Planning Influence : "High-Medium (2)" to "Low (3.5)"
  Summary of Corporate Planning Influence :

Factors	Before 1992		After	1992
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	M-L Low Low Low	(3.0) (3.5) (3.5) (3.5)
Overall Planning Influence	H-M ======	(2.0)	Low =====	(3.4)

5.6 Internal Responsibility Contracts (IRC)
[Planning Influence changed from "High Corporate (1.4)"
before 1992 to "Medium Corporate (2.4)" after 1992]

(1) Target Bias (0.5.6.1-6\*)

Before 1992: the IRC system was started in 1992 and mainly applied to the production workshops. The major targets set were production quantity and cost.

After 1992: major economic targets are sales, internal profit, working capital and wages while quality, repair and maintenance, inventory control are also linked up with the incentive scheme.

A general guideline for IRC is shown in section 5.6 of the Data Analysis Set 10.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

\* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.

(2) Participation (Q.5.6.8)

Before 1992: workshop managers are given the production quantity and cost targets without much negotiation.

After 1992: workshop managers negotiate and compromise the IRC targets with the general management during the annual planning cycle.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

(3) Review & Communication (Q.5.6.9-15)

Before 1992: targets given to the workshop managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective workshop managers and their employees.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

#### (4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the workshop managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards. But suggestions on financial targets are sometimes given.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

### Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Target Bias Participation Review & Communication Incentive	High VH-H High High	(1.5) (1.0) (1.5) (1.5)	Medium H-M H-M M-L	(2.5) (2.0) (2.0) (3.0)
Overall Planning Influence	High	(1.4)	Medium	(2.4)

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Characteristics (Q.5.9.1-7)

\ <del>-</del> /	011012000000000000	(2.0.).	•
		Before 1992	After 1992
1.1	Interdepen-	Production & service	Production & service
	dencies	departments involved	departments involved
1.2	Transfer	standard cost of	standard cost plus &
	Price Basis	production	adjusted market price
1.3	Transfer Price	Some negotiation for	More negotiation for
	Negotiation	buyer and seller	buyer and seller
1.4	Intermediate	Some buy and sell were	Some buy & sell are
	Product	available in market	available in market
1.5	Transfer	Mainly determined by	Internal demands
	Quantity	the top management	must be satisfied
1.6	Arbitration	Prices and quantities	Decision required to
		mainly determined by	settle unresolved
		the top management	negotiation
1.7	Government	No, except the output	No, only suggest
	Interference	volumes & selling	volumes & prices of
		prices of final products	final products

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Participation (Q.5.9.8)
- Before 1992: most of the transfer prices and quantities were determined by the top management after discussion with the workshop managers. Any conflects were were arbitrated by the factory manager.
- After 1992: the transfer prices and quantities are allowed to be discuss among the providers and receivers.

  Interference from and arbitration by the factory manager are required to settle down unresolved negotiation.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Review (Q.5.9.9-12)
- Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise after discussion with the middle management. They were based on actual cost of production. Transfer prices were reviewed annually and adjustment were made due to inflation.

After 1992: standard cost plus and adjusted market prices are used for setting the transfer prices which are reviewed half-annually.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	rs Before 1992	
Characteristics Participation Review	High (1.5) High (1.5) VH-H (1.0)	Medium (2.5) Medium (2.5) H-M (2.0)
Overall Planning Influence	High (1.3)	Medium (2.3)

### Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Financial (2)" after 1992]

(1) Organisational Design (Q.6.1.1)

			======	=====	======	=====
			High	(1.5)	Medium	(2.3)
1.3	Roles & functions Interactions		H-M Medium	(2.0)	M-L	
	Structure Staffing	5	Before VH VH-H	(0.5)*	After 1 VH-H High	(1.0)

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	Lc<			-Tight	Financial
Control			•	Contro	ol

Tight Financial	(0.0	_	1.0)
Financial	(1.1	_	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	_	4.0)

		=====	======	======	=====
		H-M	(1.6)	Medium	(2.4)
2.6	Termination	VH-H	(1.0)	High	(1.5)
	Remuneration	High	(1.5)	Medium	(2.5)
	Evaluation	H-M	(2.0)	M-L	(3.0)
	Training	H-M	(2.0)	M-L	(3.0)
	Assignment	H-M	(2.0)	M-L	(3.0)
2.1	Recruitment	VH-H	(1.0)	High	(1.5)
		Before	1992	After 1	.992
(2)	Personnel# (Q.6.1.1)				

# Mr Wu said that since 1992, more delegation has been given to the workshop managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

		=====:	=======	=====	======
		High	(1.2)	High	(1.3)
3.6	Communication	VH-H	(1.0)	High	(1.5)
3.5	Qualitative targets	High	(1.5)	VH-H	(1.0)
3.4	Quantitative target		(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
		Before	e 1992	After	1992
(3)	Control Mechanisms	(Q.6.1.2-3,	Q.6.4.8)		

### Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.5) H-M (1.6) High (1.2)	Medium (2.3) Medium (2.4) High (1.3)
Overall Control Influence	High (1.4)	H-M (2.0)

## 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 Precision & detail of (1) targets VH-H (1.0) H-M(2.0)(2) Objective vs subjective VH-H (1.0)targets H-M (2.0)Achieving targets (3) VH-H Timeframe (1.0)H-M (2.0)(4) Stretch built into the targets VH-H (1.0) H-M (2.0)Financial vs non-(5) financial targets High (1.5) H-M(2.0)(6) Manangement influence on setting targets (0.5) VH M-M\_\_\_\_\_ VH-H (1.0) H-M (2.0) =========

## 6.3 Monitoring Results [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

		======	=====	======	=====
		VH-H	(1.0)	H-M	(1.7)
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.1	Policy	VH-H	(1.0)	High	(1.5)
		Before	1992	Aiter 1	.992

# Mr Wu has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the factory manager. For any serious adverse variances shown on any report, the factory manager or deputy-factory managers will contact the respective workshop manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production workshops were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: internal profit, working capital and production volume are the major economic targets, however, more qualitative targets such as quality, safety, production and management control are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each workshop or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the workshop managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual workshop or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 199	2	After 1	992
Reporting Requirements Performance Measurement Review & Communication	VH-H (1	1)	H-M H-M H-M	(1.7) (2.0) (2.0)
Overall Control Influence	VH-H (1	.0)	H-M ======	(1.9)

6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

		=====:	======	=====	=====
		H-M	(1.6)	H-M	(1.7)
1.8	Redundancy	Very Lo	ow(4.0)	H-M	(2.0)
1.7	Recognition (intangible)		(1.0)	H-M	(2.0)
	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	High	(2.5)
1.3	Bonuses - monthly	VH	(0.5)	VH-H	(1.0)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
	,	Before		After	1992
(1)	Incentives* (Q.6.5.1-7,1	5-16,22	-23)		

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Beijing municipal government at least once in each year to combat inflation. The second part is decided by the BIMT which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the factory manager and the workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the BIMT's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 40-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 25-40% of total wages.

  Basic wages has been increased and increments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992: workshop managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by the headquarters and government.
- After 1992: workshop managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

### (4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the workshop or department managers

After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the workshop or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

### Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M	(1.6)	H-M	(1.7)
	VH-H	(1.0)	High	(1.5)
	VH-H	(1.0)	H-M	(2.0)
	VH-H	(1.0)	H-M	(2.0)
Overall Control Influence	High	(1.2)	H-M	(1.8)
	======	======	======	======

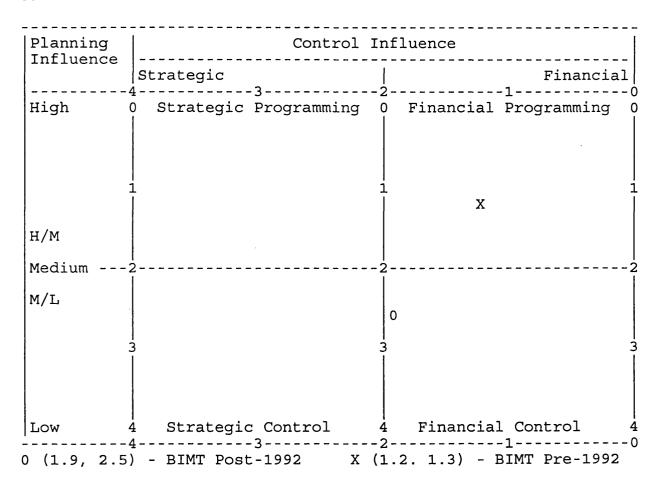
### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Instrument Machine Tool Works (BIMT) belonged to before and after 1992.

Planning Influences	Before 1992	
Organisation Structure*		
Review Process*	High (1.3)	Medium (2.4)
Strategic Themes, Thursts and Suggestions*	Very High to High (1.0)	Medium (2.2)
Long-Term Plans* (Resource Allocation)	High (1.4)	Medium (2.3)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium (2.0)	Low (3.4)
Internal Responsibility Contracts#	High (1.4)	Medium (2.4)
Management of Inter- dependencies*	High (1.3)	Medium (2.3)
Overall Planning Influence	=======================================	==========
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.4)	Moderate
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (2.0)
Monitoring Results*	Tight Financial (1.0)	Moderate Financial (1.9)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.8)
Overall Control Influence	Financial (1.2)	Moderate Financial (1.9)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.



Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Instrument Machine Tool Works (BIMT) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

17 June 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

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Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 11
Report Date : 17 June 1996

\_\_\_\_\_\_\_

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

- (2) identify the factors affecting each planning and control parameters;
- (3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;
- (4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 11" (29 December 1994).

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Name of SOE: Shanghai No.1 Department Store Company (SDS1)

Staff Interviewed : Ms Lee Shu Hua/Chief Accountant

(No. of years in this enterprise : 7 years)

Dates of Visists : Frist Visit - 11 September 1993

Second Visit - 5 September 1994 Third Visit - 10 February 1995

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### Section 1: History & Background (Q.1.1-5)

1.1 The predecessor of SDS1 was the privately owned Daxin Department Store established in the 1920s. SDS1 is the first and largest state-owned department store in Shanghai established in October 1949 right after the birth of the PRC. (refer to Q.1.1)

- 1.2 Since the early 1930s, SDS1 has been using the present old building as the main store with an expansion from 5 floors in 1960s to 7 floors in 1980s, and then 9 floors in 1994 with a total shopping area over 20,000 square metres and another 5,000 square metres for administration offices. This famous old building is located in the central of Nanging Road which is recognised as the heart of West Shanghai business centre. SDS1 is selling over 30,000 items of commodities of which about 5% are imported from other countries. (Q.1.2)
- 1.3 In view of the fierce competition from local and foreign-invested department stores in Shanghai, SDS1 has been focusing on improving the service quality, modifying the commodity mix, expanding the wholesale market and diversifying into other businesses, in order to capture a bigger share in this vigorous retailing market. (Q.1.3)
- 1.4 About 5% of the commodities sold by SDS1 are imported and most of the commodities are sold locally. After gaining the "import and export right" in the early 1990s, SDS1 has successively set up trade ties with some countries and regions. (Q.1.4)
- 1.5 Keeping growth in the retailing business is the major strategic plan of SDS1. At the same time, diversification in wholesales, manufacturing, import and export, investment and service businesses are the long term plans which have been decided by the board of directors. (Q.1.5)

### Section 2: Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 SDS1 was transformed into a public shareholding enterprise in mid-1992 in order to raise RMB470 million of capital to finance a few large investments. The shares were held by the government (60%), other enterprises (21%) and individuals (19%). The individual shares, issued to the employees and general public at a price of RMB8.9 per share, were listed in the Shanghai Stock Exchange in July 1992. A right issue was made in July 1993 to raise an additional capital of RMB200 million which has also fully utilized to finance the major projects. (Q.2.1 & 2)
- 2.2 The organisation structure of SDS1 can be divided into three levels: (Q.2.3, 5 & 9)
  - (1) Board of Directors (11 members)
    - 1.1 Chairman
    - 1.2 1 Vice-Chairman
    - 1.3 General Manager
    - 1.4 1 Deputy General Manager

- 1.5 1 Government Representative
- 1.6 1 Labour Union Representative
- 1.7 1 Party Representative
- 1.8 4 Enterprise Representatives (major shareholders)
- (2) Executive Management
  - 2.1 General Manager
  - 2.2 Deputy General Manager Operation
  - 2.3 Deputy General Manager Purchasing & Stores
  - 2.4 Deputy General Manager Marketing & Sales
  - 2.5 Deputy General Manager Planning
  - 2.6 Deputy General Manager General Affairs
  - 2.7 Chief Accountant
- (3) 7 Department Stores & 1 Wholesale Market\*
  - 3.1 Women's Clothing
  - 3.2 Men's Clothing
  - 3.3 Electrical Household Appliances
  - 3.4 Watches & Jewellery
  - 3.5 Household Furniture
  - 3.6 Daily Necessities
  - 3.7 Supermarket
  - 3.8 Wholesale Market

(Each department has its own manager, deputy managers, accounting, personnel, general affairs staff and section supervisors in charge of several counters selling various commodities.)

- (4) Other Branches\*
  - 4.1 Manager
  - 4.2 2 Deputy Managers
  - 4.3 Purchasing Officer
  - 4.4 Accounting Officer
  - 4.5 Personnel Officer
  - 4.6 General Affairs Officer
  - 4.7 Section Supervisors
- (5) Joint Ventures, Subsidiaries & Tertiary Enterprises\*

All the department stores, branches, joint-ventures, subsidiaries and tertiary enterprises are treated as profit centres and have signed Internal Responsibility Contracts (IRC) with the General Manager. In turn, each department store has the autonomy to sign second tier IRCs with its various sections.

- 2.3 SDS1 is holding the above joint ventures, subsidiaries and tertiary enterprises. (Q.2.4 & 8)
- 2.4 SDS1 is under the administration of the Shanghai Municipal Government and the Shanghai Commerce Bureau who dictated all the planning and control systems of SDS1 before the enconomic reforms started in 1979. (0.2.6)

- 2.5 After converting into a shareholding enterprise, the SDS1's top management (i.e. board of directors) have experienced much higher pressure to develop and monitor both long and short term plans because now they are accountable to various shareholders, including the general public, other than the government who is the major shareholder. But on the other hand, their degree of freedom is higher than the wholly state-owned enterprises in terms of higher autonomy and motivation to manage their business activities. Now the government and bureau only oversee the major development and projects, mainly long term ones, recommended by SDS1. Furthermore, the bureau has fully delegated the pricing autonomy to SDS1 to compete in the fast developing and keen retailing market in Shanghai. (Q.2.7)
- 2.6 SDS1 is a large SOE having a total of 4,500 working
   employees and about 2,000 retired employees in 1994.
   (Q.2.10 & 11)

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#### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB1,101M (revaluated 1992) (Q.3.1)

3.2 Turnover : RMB1,780M (1993)

RMB2,140M (1994) (Q.3.2 & 7)

3.3 Income before tax : RMB 105M (1993) - 5.9% of sales RMB 110M (1994) - 5.1% of sales\*

\* The decrease of profit margin in 1994 was mainly due to inflation of purchased goods, wages and overheads. (Q.3.5, 6 & 7)

- 3.4 Income tax rate : 15% (Q.3.6)
- 3.5 SDS1 is planning to maintain an average growth rate in turnover from 15%-20% before 2000 despite the fact that competition in the retailing business is very keen in China. In view of the high input costs and inflation, to keep income before tax at 4%-5% of sales will be considered to be satisfactory. (Q.3.7 & 8)

# Information for Q.3.3 & 4 was not applicable.

### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

4.1 SDS1 signed first 5-year's ERC (1987-1991) with the Shanghai Municipal Government in 1987. (Q.4.1)

- 4.2 The major targets set in the ERC were turnover, profit, income and other taxes. (Q.4.2-4 & 6)
- 4.3 There were different forms of ERCs for the state-owned enterprises to choose from and which had different financial and non-financial targets. The choosen format was mutually agreed between the government and SDS1. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. Miss Lee said that all the financial targets set for the five years had been overshot subsequently. (Q.4.5, 7-10)
- 4.5 No second ERC had been entered because SDS1 was transformed into a shareholding enterprise in July 1992, and then SDS1 has been subject to an income tax of 15%. (Q.4.11-13)

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### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Medium Corporate (2.1)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the department stores and subsidiaries were independent "profit centres" and held accountable for their results based on the IRCs.
- After 1992: the department stores and subsidiaries have to formulate their own short term strategies in the annual planning and budgeting process

Corporate Planning Influence\* : "High-Medium (2)" to "Medium-Low (3)"

\* By using a 5-point scale -Very High Greatest Influence (0) (consistent with the sacle High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0	_	0.5)
Very High-High	[VH-H]	(0.6	_	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.5	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6	_	4.0)

### (2) Decentralization (Q.5.1.2)

Before 1992: the store and subsidiary managers were responsible for the income and profit as agreed in the annual budget and internal responsibility contracts.

After 1992: the store and subsidiary managers should also decide their own strategies in marketing, purchasing, selling, cost control and personnel.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

### (3) Appointment (Q.5.1.3)

Before 1992: the chairman, party secretary and a few chief executives were appointed by the government. The general manager appointed the management staff of the department stores and subsidiaries.

After 1992: only the chairman and party secretary are appointed by the government. The chairman appoints all the chief executives including the store and subsidiary managers who can decide their own organisation structures and personnel affairs but important changes should be approved by the headquarters.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

### (4) Interdependencies (Q.5.1.4)

Before 1992: the interactions between the department and subsidiaries are minimal because they are selling different categories of commodities. Any conflicts were settled by the headquarters.

After 1992 : similar to 1992 and before but store and subsidiary managers are encouraged to solve the conflicts by themselves before headquarters' arbitration.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1	992	After 3	L992
Responsibility Centre Decentralization Appointment Interdependencies	Medium High	(2.0) (2.5) (1.5) (2.5)	M-L Low M-L Low	(3.0) (3.5) (3.0) (3.5)
Overall Planning Influence	Medium	(2.1)	Low	(3.3)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "Medium Corporate (2.3)"
  before 1992 to "Low Corporate (3.5)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term plans were initiated by the top management before discussion and negotiation with the government. Short term planning and budgeting were delegated by the government to the enterprise except agreeing key targets like sales, profit and inventory.
- After 1992: significant long term plans are submitted to the government for review or raising capital. Short term planning and budgeting have been completely delegated to the enterprise.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992 : formal planning committee and procedures were existed to formulate, evaluate, approve and review the annual plans and budgets for submission to the government. Initiation from the middle management was required for the budgets but not the long term plans which was finally determined by government.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and internal responsibility contracts. Major guidelines are provided by the top management to the store and subsidiary managers to formulate their own budgets and IRCs. They are also involved in the long term planning during the annual planning review before starting the budget cycle.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was a top-down process but middle management (i.e. store managers) did participate in the annual planning & budgeting processes and initiation was required.
- After 1992: middle management is involved in the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

(4) Review & Communication (5.7.9-14, 5.8.8-11)

Before 1992: the government reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed quarterly between the top and middle management and amendments could be made and communicated to the lower management through the revised budgets and IRCs.

After 1992 : long term plans are reviewed by the BOD during every year end and significant changes should be notified to the government before informing the employees during the AGM. The annual budgets are reviewed quarterly or monthly between the top and middle management and significant amendments can be made and then notify the lower management.

Corporate Planning Influence: "Medium (2.5) to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 19	992	After 1	.992
Autonomy Operation Participation Review & Communication	Medium (	(2.0) (2.5) (2.0) (2.5)	Low Low Low	(3.5) (3.5) (3.5) (3.5)
Overall Planning Influence	Medium (	(2.3) ====	Low	(3.5)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "Medium Corporate (2.2)"
  before 1992 to "Medium-Low Corporate (3)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992 : since the early 1990s, SDS1 has explicitly promulgated the following :
  - provide different varieties, choices, models, fashions and prices of commodities for various segments of customers
  - guarantee the quality, return and delivery of the commodities sold
  - adopt different flexible selling methods and styles

- improve service quality to promote company reputation and goodwill
- use modern management techniques to enhance economic efficiency such as computerisation
- After 1992: the above strategic themes have been put into action plans in order to materialise their positive effects on the financial targets at the end.
- Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"
- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (0.5.3.1 & 4)
- Before 1992: SDS1 has been promulgating "commodity and price variety" as the most important strategic thrust in order to provide a wide spectrum of goods for different segments of customers to choose from.
- After 1992: In parallel with the sharp increases of income, the purchasing power of the general public has been raised significantly in the last few years. As a result, SDS1 offers different classes or price levels of many categories of commodities for various segments of customers to choose from according to their purchasing abilities.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992 : top management sometimes made suggestions on specific strategic issues such as commodity varities, prices, promotion tactics, etc. in order to enhance economic efficiency.
- After 1992: suggestions are still made on specific issues such as department layout and decoration, promotion strategies, selling price, commodity mix, purchasing and manpower.

Corporate Planning Influence: "High-Medium (2)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	H-M (2.0) Medium (2.5) H-M (2.0)	M-L (3.0) Low (3.5) Medium (2.5)
Overall Planning Influence	Medium (2.2)	M-L (3.0)

#### 5.4 Long-Term Plans

[Planning Influence changed from "High-Medium Corporate (1.9)" before 1992 to "Medium-Low Corporate (2.8)" after 1992]

- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: the early 5-year long term plans before the economic reform started in 1979 focused on the commodity varieties and prices dictated by the government. Top management participated in the long term planning negotiations since the early 1980s.
- After 1992: the board of directors has actively undertaken the the long term plans which are believed to be able contribute handsome returns to the shareholders and other stakeholders.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was responsible to the government to formulate, evaluate, implement, monitor and review the long term plans.
- After 1992 : formal planning committee and procedures are existed to get middle management (i.e. store managers) involved whose planning, control and evaluation aspects are affected. The time span of long term planning is extended to 10 years to be formulated by the board of directors.

  Details are shown under section 5.4 in the Data Analysis 11.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)

(3) Participation (Q.5.4.4 & 6)

Before 1992: the involvement from middle management (i.e. store

managers) was limited to consultation.

After 1992 : long term plans are initiated and discussed by the

top management and the BOD without much participation from the department store and business unit managers except playing a consultation role only.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992 : 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employees during the

annual general meeting.

After 1992: the planning committee reviews the 5-year plan every year before the annual planning cylce and significant changes are reported to the government.

Details of the long term plans are made known to various levels of management through meetings and

internal documentation.

Corporate Planning Influence: "High-Medium (2)" to "High-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After	1992
Central Planning Operation Participation Review & Communication	H-M H-M High H-M	(2.0) (2.0) (1.5) (2.0)	M-L M-L H-M M-L	(3.0) (3.0) (2.0) (3.0)
Overall Planning Influence	H-M ======	(1.9)	M-L ====	(2.8)

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "Medium Corporate (2.5)"
  before 1992 to "Very Low Corporate (3.6)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the planning autonomy to the top management and only made suggestions when it was necessary.
- After 1992 : government has completely delegated the short term planning autonomy to the board of directors who is fully responsible for the financial performance.
- Corporate Planning Influence: "Medium-Low (3)" to "Very Low (4)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management initiated the key budgets and discussed and compromised with the store managers.
- After 1992: board of directors provides major guidelines to store and subsidiary managers for intitiating their own budgets which are subject to negotiation.
- Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992 : store managers were asked to discuss and comprise the key budgets with the top management before working out the details.
- After 1992: store and subsidiary managers have to formulate their own budgets and get the lower management involved formulating the details which affect their performance and rewards directly.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans/budgets were reviewed quarterly and amendments made in line with the changing environmental factors. Annual plans & budgets were documented and copied to every department.
- After 1992: planning committee reviews the annual plans and budgets monthly and amendments are made in view of the fast changing market economy.

  Budget information is futher communicated in the monthly performance reporting.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	M-L (3.0) Medium (2.5) H-M (2.0) Medium (2.5)	V. Low (4.0) Low (3.5) Low (3.5) Low (3.5)
Overall Planning Influence	Medium (2.5)	V. Low (3.6)

5.6 Internal Responsibility Contracts (IRC)
[Planning Influence changed from "Medium Corporate (2.3)"
before 1992 to "Low Corporate (3.4)" after 1992]

(1) Target Bias (Q.5.6.1-6\*)

Before 1992 : major targets set were sales, profit & foreign exchange created.

After 1992: major targets are similar but more emphasis on qualitative targets such as service quality, discipline, decoration, display, sanity, day-to-day operation and security in accordance with the strategic themes and thrusts.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)

Before 1992 : store managers negotiated and compromised the given IRC targets during the annual planning cycle.

After 1992: store and subsidiary managers have to initiate, quantify and justify the major IRC targets before negotiating with the top management.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

(3) Review & Communication (Q.5.6.9-15)

Before 1992: IRCs were reviewed half-annually and amendments could be made when mutually agreed by the top management and store managers. IRCs were documented and informed to respective departments & employees.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect attainable targets.

Second-tier IRCs are signed between the store manager and sales sections/counters in order to further delegate the planning and control responsibilities.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

#### (4) Incentive (0.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the economic targets set in the IRCs which were not difficult to attain.

After 1992: both the economic and qualitative targets are linked up with the bonus so the store managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After	1992
Target Bias Participation Review & Communication Incentive	H-M H-M Medium Medium	(2.0) (2.0) (2.5) (2.5)	M-L Low Low Low	(3.0) (3.5) (3.5) (3.5)
Overall Planning Influence	Medium	(2.3)	Low	(3.4)

#### 5.7 Management of Interdependencies (Transfer Pricing)

Because the department stores, branches and subsidiaries in SDS1 are selling different categories of commodities and services with very minimal interactions, therefore, internal transfer pricing does not exist.

#### Section 6 : Control System

2.6 Termination

#### 6.1 Decentralisation & Control [Control Influence changed from "Moderate Financial (2)" before 1992 to "Tight Strategic (3.1)" after 1992]

		======	=====	======	=====
		Medium	(2.1)	Low	(3.1)
1.4	Interactions	Medium	(2.5)	Low	(3.5)
	Roles & functions	Medium	• •		(3.5)
	Staffing _		(2.0)		(3.0)
	Structure	High .	(1.5)*	Medium	(2.5)
		Before	1992 ·	After 1	
(1)	Organisational Design#	(Q.6.1.1)			

# Miss Lee said that since the early 1990s, more delegation has been given to the store managers in deciding their own divisional structures, staffing and their roles and functions, and interactions between their sub-units.

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4) Low(3) Tight Strategic< Control					
Moderate Financial Moderate Strategic	(1.1 (1.6 (2.1 (2.6	- 1.0) - 1.5) - 2.0) - 2.5) - 3.0) - 4.0)			
(2) Personnel@ (Q.6.1.1)					
		Before	1992	After 1	992
2.1 Recruitment			(2.0)	M-L	(3.0)
2.2 Assignment		Medium	(2.5)	Low	(3.5)
2.3 Training		Medium		Low	
2.4 Evaluation		Medium	(2.5)	Low	
2.5 Remuneration		H-M	(2.0)	M-L	(3.0)

@ Miss Lee further mentioned that since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

High (1.5) -----Medium (2.2)

==========

Low (3.3)

==========

		======	======	=======	=====
		H-M	(1.8)	M-L	(2.8)
	~				
3.5	Qualitative targets	H-M	(2.0)	M-L	(3.0)
3.4	Quantitative targets	M-M	(2.0)	M-L	(3.0)
3.3	Financial targets	High	(1.5)	Medium	(2.5)
3.2	IRC	High	(1.5)		(2.5)
3.1	Budget	♣ H-M	(2.0)	M-L	(3.0)
		💃 Before		After 1	
(3)	Control Mechanisms*				

\* Miss Lee expressed that as long as the department stores can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility for strategy development to the stores without much interference. This change in control style was mainly because of the government's macroeconomic influence and many uncertainties existed in the market.

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	Medium (2.1) Medium (2.2) H-M (1.8)	Low (3.1) Low (3.3) M-L (2.8)
Overall Control Influence	H-M (2.0)	Low (3.1)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Moderate Strategic (2.2)" before 1992 to "Strategic (3)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 Precision & detail of (1) targets High (1.5)Medium (2.5) Objective vs subjective (2) M-L(3.0)targets H-M(2.0)(3) Achieving targets (2.0)Medium (2.5) Timeframe H-MStretch built into (4)the targets Medium (2.5)(3.5)Low Financial vs non-financial targets (5) Medium (2.5)M-L (3.0)Manangement influence (6) on setting targets Low Medium (2.2)M-L (3.0)========= =========

- 6.3 Monitoring Results
  [Control Influence changed from "Moderate Financial (1.6)"
  before 1992 to "Strategic (2.8)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)

Factors considered by the headquarters in management control

		=======	=====	======	
		H-M	(1.9)	M-L	(2.8)
1.10	Computerization	H-M	(2.0)	M-L	(3.0)
1.9	Follow-up	Medium	(2.5)	Low	(3.5)
	Feedback	Medium	(2.5)	Low	(3.5)
	Authorization	High	(1.5)	Medium	(2.5)
	Evaluation	Medium	(2.5)	M-L	(3.0)
1.5	Review	H-M	(2.0)	Medium	(2.5)
1.4	Compilation	High	(1.5)	H-M	(2.0)
1.3	Contents	High	(1.5)	Medium	(2.5)
1.2	Frequency	H-M	(2.0)	M-L	(3.0)
1.1	Policy	VH-H	(1.0)	H-M	(2.0)
		Relore 1	.992	After 1	.992

# Miss Lee has mentioned that for any serious adverse variances shown on the monthly report, the general or deputy-general managers will contract the respective store managers to dig out the underlining reasons or ask them to perform investigation immediately.

(2) Performance Measurement (Q.6.4.1-2)

Before 1992: department stores were mainly measured on the financial targets such as sales, profit and foreign exchange created.

After 1992: other than the previous financial targets, a set of qualitative targets such as service quality, discipline, decoration, display, sanity, day-to-day operation and security are also measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

(3) Review & Communication\* (Q.6.4.3-7, Q.6.4.9-12))

Before 1992: the top management reviewed the performance report monthly and discuss with store managers for corrective actions.

After 1992: the planning committee reviews the performance report monthly! Infrequent adverse variances can be tolerated if store managers can take remedial tactics or strategies to correct the unfavourable conditions and meet the budget at the year end.

Corporate Control Influence : "High-Medium (2)" to "Low (3.5)"

\* Miss Lee said that it was expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the effect of advertisement).

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Reporting Requirements Performance Measurement Review & Communication	H-M VH-H H-M	(1.9) (1.0) (2.0)	M-L H-M Low	(2.8) (2.0) (3.5)
Overall Control Influence	H-M ======	(1.6)	M-L ====	(2.8)

### 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.5)" before 1992 to "Moderate Strategic (2.2)" after 1992]

		=======	=====	======	=====
	•	H-M	(1.9)	Medium	(2.3)
•	•				
1.8	Redundancy	Medium	(2.5)	M-L	(3.0)
1.7	Recognition (intangible)	H-M	(2.0)	Medium	(2.5)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	H-M	(2.0)	Medium	(2.5)
1.2	Allowances	Medium	(2.5)		
	Basic wages	Medium	(2.5)	H-M	(2.0)
		Before 1		After 1	
(1)	Incentives* (Q.6.5.1-7,1				

<sup>\*</sup> The "basic wages" is reviewed annually depending on grade and seniority without paying regards to qualification and technical skill. Every point increase on the basic pay scale is RMB10-20, therefore, it is no substantial enough to catch up with the inflation. Obviously, the "bonus" is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The firest part is determined by the Manpower Bureau of the Shanghai government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the SDS1 which may include housing, meals, travel, education, attendance, overtime, festival gifts etc.

The calculation of "bonus" is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to his or her subordinates according to individual performance, such as the sales achieved by a salesgirl in a certain month.

The "bonus" for the management and administrative staff in the headquarters is linked up with the average bonus of the employees in all department stores, and is based on their performance and grades as well.

- (2) Performance Orientation# (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and took over 50% of total wages. Basic wages was low and depended on seniority. Too many types of allowances all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 50% of total wages. Basic wages has been increased and increaments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. Pension is partly contributed by the government. Laying off redundant employees is easier after implementing the employment contract system.

Corporate Control Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : store managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances , pension and other benefits were decided by headquarters and government.

After 1992: store managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. Pension policy is still decided by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8, 13-14, 20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees on a monthly basis.
- After 1992: IRC's targets are reviewed twice every year and can be modified. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies. Performance and reward are made known to employees every month.

Corporate Control Influence : "High (1.5)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After 1992
Incentives Performance Orientation Participation Review & Communication	H-M High VH-H High	(1.9) (1.5) (1.0) (1.5)	Medium (2.3) Medium (2.5) H-M (2.0) H-M (2.0)
Overall Control Influence	High	(1.5) =====	Medium (2.2)
=======================================	=======	=======	

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai No.1 Department Store Company Limited (SDS1) belonged to before and after 1992.

•	•	
Planning Influences	Before 1992	After 1992
Organisation Structure*		Low (3.3)
Review Process*	Medium (2.3)	Low (3.5)
Strategic Themes, Thursts and Suggestions*	Medium (2.2)	Medium to Low (3.0)
Long-Term Plans* (Resource Allocation)	High to Medium (1.9)	Medium to Low (2.8)
Short-Term Planning/ Budgeting* (Resource Allocation)	Medium (2.5)	Very Low (3.6)
Internal Responsibility Contracts#	Medium (2.3)	Low (3.4)
Management of Inter- dependencies*	N/A	N/A
Overall Planning Influence	Medium (2.2)	Low (3.3)
Control Influence	Before 1992	
Decentralisation & Control#	Moderate Financial (2.0)	Tight Strategic (3.1)
Agreeing Objectives*	Moderate Strategic (2.2)	Strategic (3.0)
Monitoring Results*	Moderate Financial (1.6)	Strategic (2.8)
Rewards & Incentives*	Financial (1.5)	Moderate Strategic (2.2)
Overall Control Influence	Moderate Financial (1.8)	Strategic (2.8)

\* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.

# Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence		Control	Infl	uence		
	Strategic	2			Financ	ial
High (	Strategic	Programming	0 F	inancial	Programming	0
H/M Medium2	2 – – – – – – – – – – – – – – – – – – –		-2			2
M/L			X			
Low 4	s Strategic	0 Control	3	Financia	al Control	3
0 (2.8, 3.3)		3	-2		-1 SDS1 Pre-1992	0 2

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai No.1 Department Store Company Limited (SDS1) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Moderate Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of strategic control style as described by Goold's and Campbell's Strategic Style.

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### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 12
Report Date : 20 June 1996

Based on the case writing (data transcription) of each state-owned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 12" (18 January 1995).

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#### Name of SOE: Shanghai Crane & Conveyor Works (SCCW)

Staff Interviewed: Miss Zhu Mei Di/Chief Accountant

(No. of years in this enterprise : 26 years)
Miss Zhu Zhi Mei/Deputy Manager of Finance
Department/Shanghai Heavy Mining Machinery

Corporation (SHMMC)

(No. of years in this enterprise : 25 years)

Dates of Visits : First Visit - 6 September 1994

Second Visit - 12 January 1995

#### Section 1: History & Background (Q.1.1-5)

1.1 SCCW was a state-owned enterprise established in 1956. It is located on the northern outskirt of Shanghai with a total land space of 188,000 square metres and only 10 kilometres away from Shanghai River (Huangpu River) from where its products can be shipped to other cities and abroad. (Q.1.1)

- 1.2 SCCW is supplying a great variety of single units and complete material handling systems to metalurgical, mining, coal, construction material, light and textile, chemical and machine-building industries as well as thermal, hydraulic and nuclear power stations, harbours, railway stations and airports. The annual turnout (output) can be up to 30,000 tons. It is one of China's leading plants in designing and manufacturing of cranes, belt conveyors and special material handling equipment. (Q.1.2)
- 1.3 SCCW is currently developing and producing the second and third generation of the following ten major categories of products: (Q.1.3)
  - 1.3.1 Cranes
  - 1.3.2 Crane Components
  - 1.3.3 Belt Conveyors
  - 1.3.4 Conveyor Components
  - 1.3.5 Vibration Conveyors
  - 1.3.6 Elevators
  - 1.3.7 Material Handling System (Customer Specifications)
  - 1.3.8 Airport Equipment
  - 1.3.9 Speed Reducers
  - 1.3.10 Parts for Customer's Production Facilities
- 1.4 Material handling equipment play a very important role in various industries and are in great demand in the construction of the four modernisations in China. Therefore, most of SCCW's products are sold domestically with less than 10% of the products are exported to some Southeast Asian countries and achieved a revenue of US\$3 million in 1994. (Q.1.4)
- 1.5 The major competitors of SCCW of similar scale of operation come from Yingchuan, Dalin, Fuzhou and Guangzhou cities. SCCW is very active in searching new businesses in national and overseas markets and maintain close relationships with customers, industries and research institutions. The recent establishment of five affiliate plants in Shanghai suburbs, Jiansu and Guizhou provinces emboies SCCW's pace-keeping with the overall economic system reform in China. In recent years, SCCW has paid special attention to the switchover of its main products to special function, multi-function and technical intensification. (Q.1.5)

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#### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 SCCW has been a wholly state-owned enterprise before and after 1992. There is no plan to transform into a shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise. (Q.2.1)
- 2.2 SCCW is neither a holding or subsidiary enterprise. (Q.2.4)
- 2.3 The organisation structure of SCCW can be divided into 5 major functions under the direct control of the Factory Manager who has an Enterprise Management Office. (Q.2.3)
- 2.4 The 5 major functions and other roles are listed as follow:
   (Q.2.5 & 2.9)
  - (1) Deputy-Factory Manager (Production)
    - 1.1 Crane Manufacturing Workshop\*
    - 1.2 Conveyor Manufacturing Workshop\*
    - 1.3 Customer Designed Products Manufacturing Workshop\*
    - 1.4 Speed Reducers Manufacturing Workshop\*
    - 1.5 Metal Framework Workshop#
    - 1.6 Heat Treatment Workshop#
    - 1.7 Packing Workshop#
    - 1.8 Mechinery Repair Centre
    - 1.9 Tool Supplies Centre
    - 1.10 Safety & Environment Department
    - 1.11 Production Planning Department
  - (2) Chief Engineer (with 2 Assistant Chief Engineers)
    - 2.1 Quality Control Department
    - 2.2 Quality Inspection Department
    - 2.3 Technical Department
    - 2.4 Research & Development Department
    - 2.5 Information & Filing Department
    - 2.6 Energy Supplies Department
    - 2.7 Tool Department
    - 2.8 Railway Department
  - (3) Deputy-Factory Manager (Sales)
    - [Acting by Factory Manager]
    - 3.1 Equipment Sales Department3.2 Components Sales Departmen
  - 3.2 Components Sales Department(4) Deputy-Factory Manager (Administration)
    - 4.1 Personnel Department
    - 4.2 Education Department
    - 4.3 Estate Department
    - 4.4 Security Department
    - 4.5 General Affairs Department
    - 4.6 Hospital
  - (5) Chief Accountant (Accounting & Finance)
    - 5.1 Accounting Department
    - 5.2 Auditing & Legal Department

- (6) Deputy-Factory Manager (Tertiary/Service Enterprises)
- (7) Communist Party Office
- (8) Labour Union Office
- \* All the production workshops and departments are treated as cost or expense centres.
- # Production supporting workshops.
- @ Most of the workshops and departments have signed Internal Responsibility Contracts (IRC) with the Factory Manager either on an annual basis or on a single project or job basis.
- 2.5 SCCW is under the administration of the Shanghai Heavy Mining Machinery Corporation (SHMMC) which is an independent organisation under the umbrella of the Shanghai Mechanical and Electrical Equipment Bureau. SHMMC has 17 fully state-owned enterprises manufacturing heavy machinery and equipment for mining, steel, energy, transportation, construction and other industries. The major role played by this corporation is to maintain an economical balance of the production and sales among its member enterprises. It also arranges capital to finance the approved projects or investments for the enterprises. Another important function of the corporation is to provide market information for its industry to produce the right products and sell to the right markets at the right time.

Since 1992, the short term planning and operation autonomy have been delegated to SCCW. But the Bureau and SHMMC still oversee the long term development and projects recommended by SCCW and also appoint the top management of SCCW. The investment autonomy such as raising capital for project investment has to be arranged by the Bureau and SHMMC. (Q.2.6 & 2.7)

2.6 SCCW has a total of 2,470 working employees and 860 retired employees at the end of 1994. It is classified as a "medium size SOE" in China. (Q.2.10)

# Since SCCW is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to SCCW.

#### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB190M (1994) (Q.3.1)

3.2 Turnover : RMB190M (1993) RMB230M (1994)

RMB260M@ (1995 forecast) (Q.3.2 & 7)

- 3.3 Income before tax: RMB2.1M (1993) 1.1% of sales\*

  RMB3.3M# (1994) 1.4% of sales\*

  RMB3.5M (1995 forecast) (Q.3.5, 6 & 7)
  - @ This is the figure compromised with the SHMMC but in fact the internal target agreed with the sales department is RMB280M in order to initiate salemen's motivation.
  - \* The low profit margin was mainly because of open and keen competition under the market economy instead of the guaranteed production and sales budgets as assigned by the government before 1992, and also the purchased prices of raw materials like iron and steel (60% of turnover) which prices are fluctuating tremendously since 1993 due to significant import from other countries. In addition, selling prices in quotations have to be reduced in order to bid the contracts. Furthermore, inflation and heavy payroll and benefit in kinds (including retired employees) increased the total expenditures or fixed overheads (RMB40M in 1993). Improvement in 1994 was mainly due to product quality enhancement and other marketing strategies.
  - # Income before tax has deducted the value added tax already which amounted to RMB13.2M in 1994 or 5.7% of the turnover. The VAT related to new products approved by the municipal government can be refunded. In addition, conversion cost added to input materials imported from joint venture partners i.e. Japan can be exempted from VAT.
- 3.4 Income tax rate : 55% (before 1994 33% (from 1994) (Q.3,6)
- 3.5 Due to capital intensive nature and long production cycle (6 to 18 months), SCCW had an outstanding bank loan of over RMB90M (for both fixed assets and current assets financing purposes) at the end of 1994 and paid almost RMB10M of bank interest in the same year. In order to finance some long term investment projects, at least an additional RMB50M is required in the next few years. One way to capture additional capital is getting loans from foreign banks through the joint-venture arrangement such as foreign loan from a German bank by entering a joint-venture to manufacture underground compartments.

Another source of capital is to transform SCCW into a shareholding enterprise and issue shares to its employees, other enterprises and individuals. But the latter avenue involves a lot of political and economic problems related to the government, bureau and corporation (SHMMC). (Q.3.7 & 8)

# Q.3.4 is not applicable to SCCW because it is neither a holding nor a subsidiary enterprise.

### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 SCCW entered into the first 5-year ERC (1988-1992) in 1988 with the Shanghai Mechanical & Electrical Equipment Bureau and the Shanghai Finance Bureau in 1988. (Q.4.1)
- 4.2 This first ERC was based on the "Three Guarantees and One Linkage" concept which means the contractee (SCCW) had to guarantee: (Q.4.2 & 4)
  - (1) income tax handed over to the government;
  - (2) technology improvement;
  - (3) foreign exchange created from export; and

the total remuneration payable to the employees was linked up with the overall economic (or financial) performance.

- 4.3 The terms and conditions stated in 4.2 above were based on the past three financial performance before 1988. (Q.4.3)
- 4.4 Another favourable term provided for SCCW was to deduct certain amount of bank loan repayment from the PBT before income tax assessment. (Q.4.6)
- 4.5 Because of the reasons stated in 3.3 above, SHMMC allowed SCCW to maintain a profit margin of 1% to 1.5% in the first five years in the 1990s. (Q.4.5)
- 4.6 The top management did participate in the negotiation with the government and SHMMC in setting the above targets. The chosen terms were mutually agreed among the SHMMC, government and SCCW. (Q.4.7-10)
- 4.7 As from 1992, no formal ERC has been existed but targets on production output value, sales, income tax and accounts receivable have been agreed between SCCW and the Corporation (SHMMC). The production output is valued at 1990 price index except new or modified products i.e. 12% growth of sales in 1995. The SHMMC has also agreed similar targets with the Shanghai Electrical and Mechanical Equipment Bureau and Shanghai Municipal Economic Planning Committee subject to negotiation and review per quarter and allowed to revise if necessary.

These targets are put in terms of growth percentages. The fulfilment of these targets by SHMMC will be awarded a lump sum bonus from the government assessed twice every year. In turn SHMMC will distribute this bonus to its 17 enterprise managers according to their achievement of predetermined targets.

Usually 40% of the bonus will be distributed during the mid-year and 60% will be given at the year end. This incentive system is similar to the "Factory Manager Responsibility System" adopted by the state-owned enterprises in parallel with the ERC system promulgated since 1987. (Q.4.12 & 13)

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#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "High Corporate (1.4)"
  before 1992 to "High-Medium Corporate (1.8)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: the production workshops had been classified as profit centres, but the difficulty of determining internal profits due to input mix, they have been converted back into cost centres.
- After 1992 : all the production workshops and other departments are treated as cost or expense centres.

Corporate Planning Influence\* : "High (1.5)" to "High (1.5)"

Greatest Influence \* By using a 5-point scale -Very High (0) (consistent with the scale (1) High used in the questionnaire Medium (2) (3) e.g. 5.4.4 to quantify Low some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0	_	0.5)
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	$[\Lambda\Gamma]$	(3.6	-	4.0)

- (2) Decentralization (Q.5.1.2)
- Before 1992: the workshop managers were responsible for the production volume and internal profit as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.
- After 1992: top management has been decentralising more planning responsibility to each workshop and department such as initiating the annual budget and the IRC. The responsibility of production and cost control lies with the workshop manager but the top management keep a surveillance quantity and quality control on each production workshop through monthly or weekly report.

Corporate Planning Influence : "Medium (1.5)" to "High-Medium (2)"

- (3) Appointment (Q.5.1.3)
- Before 1992 : the factory manager, party secretary, deputy managers and some workshop managers were appointed by the SHMMC, any major organisational changes required SHMMC's approval
- After 1992: the factory manager, party secretary and some deputy managers are still appointed by the SHMMC. The factory manager can appoint most of the other senior staff such as the workshop managers. The workshop managers can suggest changes in organisation structure and personnel affairs to the factory manager for approval. Miss Zhu has mentioned that in fact the party secretary was the representative from the government/BIIC to ensure some sort of macro-economic policies are under control.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Interdependencies (Q.5.1.4)
- Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production. The workshops were consulted in setting the prices and quantities.

After 1992: the 4 production workshops are manufacturing different product lines and the other 5 production support workshops are providing components and services to the production departments according to the production schedules without charging any costs or profit margins. SCCW is using a job costing system by collecting all the direct production, supporting and other relevant costs to each individual job or product. Therefore, internal transfer pricing is not involved.

Corporate Planning Influence: "High (1.5)" to "High (1.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	High (1.5) High (1.5) VH-H (1.0) High (1.5)	High (1.5) H-M (2.0) H-M (2.0) High (1.5)
Overall Planning Influence	High (1.4)	H-M (1.8)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.1)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the SHMMC while the top management was in consultation only. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the SHMMC.
- After 1992: SHMMC has delegated the long term planning and annual budgeting autonomy to the top management but Miss Zhu has said that due to the present country-wide macro-economic controls, the SHMMC now retains some controls in planning and operation.

Corporate Planning Influence : "Very High-High (1)" to "High (1.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between SHMMC and the top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the workshop managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992 : long term planning was top-down process but middle management (i.e workshop managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top.

Corporate Planning Influence: "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: SHMMC reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the top management during every year end and significant changes should be discussed with SHMMC and informed the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notify to lower management immediately.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	VH-H (1.0) High (1.5) VH-H (1.0) High (1.5)	High (1.5) Medium (2.5) H-M (2.0) Medium (2.5)
Overall Planning Influence	High (1.3)	Medium (2.1)

#### Strategic Themes, Thrusts & Suggestions [Planning Influence changed from "Very High-High Corporate (1) before 1992 to "Medium Corporate (2.2)" after 1992]

#### Themes (Q.5.2.4-7\*)(1)

Before 1992 : the operation philosophy or strategic theme was to provide advanced products to its customers with least cost and maximum use value through modern design and upgraded products.

After 1992 : more specific strategic themes are listed in the 1994 annual plan as follow:

- increase planning participation and flexibility - enhance product design (use value engineering)
- adjust product mix
- improve production technology
- simplify production process
   maintain production output growth
- improve pruchasing and supply process and quality
- enhance product quality
- strengthen internal management quality
- reduce redundent employees
- reform manpower and wages system
- continue and increase export and joint ventures

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

\* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.

#### (2) Thrusts (Q.5.3.1 & 4)

Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.

After 1992: a quality control office to exercise unified control over the entire process from raw material acceptance to after-sales service. SCCW has envisaged a vision to attain ISO9000 certification before the year 2000 but no concreate plans have been formulated yet.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

#### (3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, transfer price, personnel, incentive scheme, sales and marketing etc.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the workshop managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	VH-H (1.0) VH-H (1.0) VH-H (1.0)	H-M (2.0) H-M (2.0) Medium (2.5)
Overall Planning Influence	VH-H (1.0)	Medium (2.2)

- 5.4 Long-Term Plans
  [Planning Influence changed from "High Corporate (1.4)"
  before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the SHMMC in terms of production facilities, volume and mix, product and market development.
- After 1992: the top management has to initiate its own long term plans such as capital projects, product and market development which need to be discussed with the SHMMC who have been exercising macro-economic controls and provide directives and targets i.e. technology expertise and quality standards.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the SHMMC to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. workshop managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1996-2000), includes joint ventures, competitive edge, research and development, product and market development, production diversification, source of capital and computerisation.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979
  started to allow SCCW to participate in the 5year's planning with the SHMMC and the municipal
  government but specific directives and suggestions
  were always coming from the top by using the term
  "macroeconomic control and adjustment" as an excuse

After 1992: SCCW has to formulate their own long term strategic plan since 1990. The workshop and department managers are consulted in the process. The long term planning and review exercises are rather a top-down approach.

Corporate Planning Influence: "Very-High to High (1)" to "High-Medium (2)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992 : 5-year long term plan was reviewed annually by the BIIC with the top management and changes made were notified to the employee's representatives during the annual general meeting.

After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the SHMMC for endorsement and sometimes assistance such as seeking a long term bank loan.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After 1992
Central Planning Operation Participation Review & Communication	High High VH-H High	(1.5) (1.5) (1.0) (1.5)	Medium (2.5) Medium (2.5) H-M (2.0) H-M (2.0)
Overall Planning Influence	High	(1.4) =====	Medium (2.3)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because SCCW caters for the capital budgets during the long term planning exercise.

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Medium-Low Corporate (3)" after 1992]
- (1) Central Planning (Q.5.5.1)

Before 1992: government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.

After 1992: top management has higher autonomy in the annual planning and budgeting processes which involve the middle management such as the workshop managers.

But SHMMC still provides the major targets such as sales and profit level.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

(2) Operation (Q.5.5.2 & 4)

Before 1992: top management reviewed the key budgets i.e. sales, production volume and mix, labour and materials, and then compromised with the workshop managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.

After 1992: top management provided major guidelines to the workshop managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

A brief description of the 1994 Annual Plan was presented in section 5.5 of the Data Analysis 12.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

(3) Participation (Q.5.5.3 & 5)

Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.

After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed halfannually and amendments were seldom made except under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.
- After 1992: top management reviews the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors. A fixed budget concept is still in force because computer is not widely used. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After	1992
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	M-L M-L M-L M-L	(3.0) (3.0) (3.0) (3.0)
Overall Planning Influence	H-M	(2.0)	M-L =====	(3.0)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: the IRC system was started in 1989 and mainly applied to the production workshops. The major targets set were production quantity, internal profit and quality.
- After 1992: major economic targets are equivalent labour hours of output, product quality, operation management, production facility and material usage which are linked up with the wages and incentive scheme.

  A sample of IRC is shown in section 5.6 of the Data Analysis Set 12.

- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: top management discussed with workshop managers to agreed with the targets set in the IRCs.
- After 1992: workshop managers negotiate and compromise the IRC targets with the general management during the annual planning cycle.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Review & Communication (Q.5.6.9-15)
- Before 1992 : targets compromised with the workshop managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective workshop managers and their employees.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (4) Incentive (Q.5.6.16)
- Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because rapid changing of external factors.
- After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the workshop managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards. But suggestions on financial targets are sometimes given.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

### Summary of Corporate Planning Influence :

Factors	Before 1	.992	After 1992
Target Bias Participation Review & Communication Incentive	High High	(1.5) (1.5) (1.5) (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High	(1.5)	Medium (2.5)

#### 5.7 Management of Interdependencies (Transfer Pricing)

Because the 4 production workshops in SCCW are manufacturing their own products without any interactions with the other workshops, therefore, internal transfer pricing does not exist. Although the other 5 supporting workshops or departments are supplying materials and services to the 4 production workshops according to the requirement of each job, however, they are all treated as cost centres and no internal profits or transfer prices have to be determined.

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#### Section 6 : Control System

### 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Financial (2)" after 1992]

		======	=====	======	=====
		High	(1.5)	Medium	(2.1)
1.4	Interactions	Medium	(2.5)	M-L	(3.0)
1.3	Roles & functions	H-M	(2.0)	M-L	(3.0)
1.2	Staffing	VH-H	(1.0)	High	(1.5)
	Structure	VH	(0.5)*	VH-H	(1.0)
	Channa at anna				
( - /	0194.11040101141 2021911	Before	1992	After :	1992
(1)	Organisational Design	(0.6.1.1)			

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)		High(0)
Tight Strategi	lc<			-Tight	Financial
Control				Contro	

```
Tight Financial (0.0 - 1.0)
Financial (1.1 - 1.5)
Moderate Financial (1.6 - 2.0)
Moderate Strategic (2.1 - 2.5)
Strategic (2.6 - 3.0)
Tight Strategic (3.1 - 4.0)
```

#### (2) Personnel# (Q.6.1.1)

		======	======	========
		H-M	(1.6)	Medium (2.4)
2.6	Termination	VH-H	(1.0)	High (1.5)
2.5	Remuneration	High	(1.5)	Medium (2.5)
2.4	Evaluation	H-M	(2.0)	M-L (3.0)
2.3	Training	H-M	(2.0)	
			•	M-L (3.0)
2.2	Assignment	H-M	(2.0)	$M-\bar{L}$ (3.0)
2.1	Recruitment	VH-H	(1.0)	High (1.5)
		Before	1992	After 1992

# Miss Zhu said that since 1992, more delegation has been given to the workshop managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

(3)	Control Mechanisms (Q.6.	1.2-3, Q	.6.4.8)			
			Before 1992		After 1992	
3.1	Budget	VH-H	(1.0)	High	(1.5)	
3.2	IRC	VH-H	(1.0)	High	(1.5)	
3.3	Financial targets	VH-H	(1.0)	High	(1.5)	
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)	
3.5	Qualitative targets	High	(1.5)	VH-H	(1.0)	
3.6	Communication	VH-H		High	(1.5)	
		High	(1.1)	High	(1.4)	
		======	=====	======	=====	
Summary of Corporate Control Influence :						
Factors		Before :	1992	After 1992		
Organisational Design		High	(1.5)	Medium	(2.1)	
Personnel		_	(1.6)	Medium		
Control Mechanisms		High		High		
_	11 G. L. T. Fl.				(0.0)	
Over	all Control Influence	High	( <b>1.4</b> )	H-M	(2.0)	

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 Precision & detail of (1) VH-H (1.0) H-M (2.0) targets (2) Objective vs subjective VH-H (2.0)(1.0)H-Mtargets Achieving targets (3) (1.0)H-M(2.0)Timeframe VH-H Stretch built into (4) the targets VH-H (1.0) H-M(2.0)Financial vs non-financial targets (5) H-M (2.0) High (1.5) (6) Manangement influence M-Mon setting targets VH H-M (2.0) VH-H (1.0) ========= ========

- 6.3 Monitoring Results
  [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.9)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)
  Factors considered by the headquarters in management control

	•	=========		=========	
		High	(1.1)	H-M	(1.8)
1.10	Computerization	High	(1.5)	M-L	(3.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
	Feedback	VH-H	(1.0)	H-M	(2.0)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.1	Policy	VH-H	(1.0)	High	(1.5)
		Before 1992		After 1992	

# Miss Zhu has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the factory manager. For any serious adverse variances shown on any report, the factory manager or deputy-factory managers will contact the respective workshop manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

#### (2) Performance Measurement (Q.6.4.1-2)

Before 1992: production workshops were mainly measured on production volume and internal profit, but other non-financial targets such as quality and safety were accounted for less weightings.

After 1992: production quantity and cost are the major economic targets, however, more qualitative targets such as quality, safety, operation and facility management and material usage are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each workshop or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the workshop managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual workshop or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	Before 1992		After 1992	
Reporting Requirements Performance Measurement Review & Communication	High VH-H VH-H	(1.1) (1.0) (1.0)	H-M H-M H-M	(1.8) (2.0) (2.0)	
Overall Control Influence	VH-H ======	(1.0)	H-M =====	(1.9) ======	

## 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

(1)	Incentives* (Q.6.5.1-7,1	5-16,22	2-23)		
		Before 1992		After 1992	
1.1	Basic wages	H-M	(2.0)	High	(1.5)
	Allowances	H-M	(2.0)	H-M	(2.0)
1.3	Bonuses - monthly	VH	(0.5)	VH-H	(1.0)
1.4	Bonuses - annual	High	(1.5)	H-M	(2.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.8	Redundancy	Very I	ow(4.0)	H-M	(2.0)
	•				
		H-M	(1.6)	H-M	(1.7)
		=========		======	======

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB10-25.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once in each year to combat inflation. The second part is decided by the SCCW which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the factory manager and the workshop manager decides what level of group bonus will be given to the factory. It is up to a workshop manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well.

One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the SCCW's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 30-40% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 40-50% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

(3) Participation (Q.6.5.16 - 17)

Before 1992 : workshop managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided

by the headquarters and government.

After 1992: workshop managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8,13-14,20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees every month via the workshop or department managers
- After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

  Performance and reward are made known to employees every month via the workshop or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.6) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.7) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2)	H-M =====	(1.8)

## Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Crane & Conveyor Works (SCCW) belonged to before and after 1992.

Planning Influences		.992		92
Organisation Structure*			High to Medium	
Review Process*	High	(1.3)	Medium	(2.1)
Strategic Themes, Thursts and Suggestions*	Very Hig to High		Medium	(2.2)
Long-Term Plans* (Resource Allocation)	High	(1.4)	Medium	(2.3)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium		Medium to Low	(3.0)
Internal Responsibility Contracts#	High	(1.5)	Medium	(2.5)
Management of Inter- dependencies*	N/A		N/A	
Overall Planning Influence	High ======	(1.4)	Medium	(2.3)
Control Influence	Before 1	.992	After 19	92
Decentralisation & Control#			Moderate	<u>}</u>
Agreeing Objectives*	Tight Financia	1 (1.0)	Moderate Financia	
Monitoring Results*	Tight Financia	ıl (1.0)	Moderate Financia	
Rewards & Incentives*	Financia	ıl (1.2)	Moderate Financia	
Overall Control Influence	Financia	•	Moderate Financia	

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
Influence	Strategic   Financial		
High	O Strategic Programming O Financial Programming O		
H/M			
Medium:	 22		
M/L	0		
=	3 3		
Low	Strategic Control 4 Financial Control 4		
0 (1.9, 2.3)	) - SCCW Post-1992 X (1.2. 1.4) - SCCW Pre-1992		

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Crane & Conveyor Works (SCCW) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

20 June 1996

## UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 13
Report Date : 26 June 1996

Based on the case writing (data transcription) of each state-owned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 13" (6 February 1995).

## Name of SOE: Shanghai Metallurgical Equipment General Factory (SMEF)

Staff Interviewed: Mr Weng Wei Shan/Finance Division Manager
(No. of years in this enterprise: 26 years)

Miss Tao Wen Quen/Ass. Finance Division Mgr. (No. of years in this enterprise : 22 years)

Dates of Visits : First Visit - 28 May 1993

Second Visit - 8 September 1994 Third Visit - 6 February 1995

### Section 1: History & Background (Q.1.1-5)

1.1 SMEF is a wholly state-owned enterprise established in 1956 and is manufacturing whole sets of metallurgical equipment, both mechanical and electrical, for the iron and steel industry. SMEF has two production sites. One is located at the Yangpu (Eastern Urban) District occupied a land area of over 130,000 square metres and another one is situated at the Putao (Western Urban) District with a land area of over 120,000 square metres. (Q.1.1)

- 1.2 SMEF is one of the clargest metallurgical equipment manufacturers in China. It has a total fixed asset of over RMB200M at book value and an annual production capacity of over 70,000 tons. SMEF was qualified by the government as a "Second Class" enterprise in 1988. Over 60% of SMEF's products achieved high quality standard and received a Quality Management Award from the Ministry of Metallurgy in 1989. Furthermore, SMEF was also qualified as first class "Information Management" and second class "Energy Saving" awards in 1990. (Q.1.2)
- 1.3 SMEF is currently producing the following three types of products:
  - 1.3.1 Mechanical Equipment (Smelting, Pressing & Crushing)
  - 1.3.2 Electrical Equipment (Large Size Transformers, Electronic Products and Others)
  - 1.3.3 Commercial Casts & Forgings (Steel Casts, Iron Casts & Forging Steel) (Q.1.3)
- 1.4 Less than 5% of SMEF's products are directly exported and less than US\$5 millions foreign exchange has been achieved which are unable to be qualified as a free import and export enterprise. SMEF is working closely with the bureau to negotiate with the government in obtaining the import and export right (alos the foreign exchange usage right) so that they can explore the overseas markets such as Southeast Asian, South American and Eastern European Countries. (Q.1.4)
- 1.5 Since the South China visit by the Chinese top leader, Mr Deng Xiao Ping, the pace of economic development has been speeded up. SMEF has made use of this opportunity in time to reform the internal operation and management systems on one hand, and react to the quick changes in the domestic and overseas markets in order to become a really self-managed, self-financed, self-regulated and self-developed modern enterprise on the other hand. These reforms included the following: (Q.1.5)
  - (1) Organisation Restructuring (see section 2 below)
  - (2) Strategic Themes & Thrusts (see section 5.3 below)
  - (3) Employee Evaluation & Contract (see section 6.4 below)
  - (4) Reward & Incentive Scheme (see section 6.4 below)

## Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- SMEF has been a wholly state-owned enterprise before and 2.1 after 1992. There is no plan to transform into a shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise.
- SMEF is neither a holding nor subsidiary enterprise. (Q.2.4) 2.2
- 2.3 Under the General Factory Manager, the enterprise management office and 7 administrative divisions are the middle level of management which functions are servicing, coordination, planning and control. (Q.2.3)
- 2.4 The organisation structure is listed below: (Q.2.5 & 2.9)
  - 7 Divisions (each has a Division Manager)
    - Production Division (supervising the 12 Production Factories as shown in 2 below)
    - 1.2 Sales & Marketing Division
    - Technical & Quality Management Division
    - 1.4 Accounting & Finance Division
    - Manpower & Personnel Division 1.5
    - 1.6 General Affairs Division
    - 1.7 Enterprise Development Division
  - 12 Production Factories\* (each has a Factory Manager) (2)
    - 2.1 Steel Casting & Forging Factory (Note 1)
    - 2.2 Iron Casting & Forging Factory (Note 1)
    - (Note 1) No.1 Rolling Steel Factory 2.3
    - (Note 2) 2.4 Metallurgical Framework Factory
    - 2.5
    - No.1 Metallurgical Equipment Factory (Note 3)
    - No.2 Metallurgical Equipment Factory (Note 3) 2.6
    - 2.7 (Note 3) No.3 Metallurgical Equipment Factory
    - (Note 4) Special Transformer Factory 2.8 (Note 4)
    - 2.9 Electrical Appliance Factory (Note 4)
    - 2.10 Mechanical Appliance Factory
    - 2.11 Wooden Mould Factory (Note 5)
  - 2.12 Electricity, Water & Gas Supplies Factory (Note 6) 12 Tertiary Enterprises\* (each has a Unit Manager under (3) the direct supervision of the General Factory Manager)
    - 3.1 Metallurgical Product Sales Company
    - 3.2 Import & Export Sales Company
    - Material Supplies Company 3.3
    - 3.4 Transportation Service Company
    - 3.5 Food & Beverage Company
    - 3.6 Asia Trading Company
    - Taiwan Steel & Metallurgy Limited Company 3.7
    - Asian Metallurgical Technical Equipment Company 3.8
    - Research & Development Centre 3.9
    - 3.10 Metallurgical Equipment Inspection Centre

- 3.11 Measurement & Precision Inpsection Centre
- 3.12 Education & Training Centre

\* All the production factories and tertiary enterprises are treated as profit centres measured mainly by internal profits. Most of them have signed Internal Responsibility Contracts (IRC) with the General Factory Manager either on an annual basis or on a single project or job basis.

Notes : (summaries of internal transfer)

- (1) The majority products of these 3 production factories are transferred to the framework factories, equipment factories, transformer factory and appliance factories as input materials.
- (2) Most of the output of metallurgical framework factory will be transferred to the equipment factories, transformer factory and appliance factories as input components.
- (3) The 3 metallurgical equipment factories are manufacturing stand-alone products which are tailor-made to customer's specifications.
- (4) The transformer factory and appliance factories are manufacturing various types and models of products in batch and selling to the end-users directly or via the tertiary enterprises.
- (5) The wooden mould factory are producing moulds to all other production factories according to specifications.
- (6) The supplies factory is providing electricity, water and gas to all the other production factories, tertiary enterprises and headquarters.
- 2.5 SMEF is under the administration of the Shanghai Metallurgy Bureau under which all the iron and steel and related industries in Shanghai are placed under its umbrella. major role played by the Bureau is to maintain an economical balance of the product mix and sales among its member enterprises. It also appoints the top management, such as the party leaders and factory managers, of the enterprises under its supervision. It also assists the arrangement of capital to finance the approved projects or investments for the enterprises. Another important economic function of the Bureau or the government is to purchase the iron and steel raw materials at lower prices (80%-90%) and then sell to various enterprises as a means of maintaining reasonable input costs under high inflation. The short term planning and operation like purchasing, production and sales autonomy have been fully delegated to SMEF. The investment autonomy such as raising capital for project investment has to be discussed with the Bureau even though the interference is minimal at present. (Q.2.6 & 2.7)

2.6 SMEF is a large SOE having 5,000 working employees, in which 3,000 are production workers, and 2,000 retired employees. About 500 of the working employees are involved in the 12 "tertiary enterprises" (service enterprises) as listed in 2.4 above. On the other hand, another 500 redundant employees have stopped their jobs or posts and received only basic wages and welfare. All the employees have signed "employment contracts" since 1993 with duration from one year to no limit leaving an optional right to the employees. (0.2.10)

# Since SMEF is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to SMEF.

## Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB 200M (1994)@ (Q.3.1)

@ The total assets value was increased by 21.4% after a revaluation was performed by the government in 1993.

3.2 Turnover : RMB 250M (1992)

RMB 360M (1993)

RMB 275M# (1994)

RMB 400M (1995 forecast) (Q.3.2 & 7)

# The 24% drop of turnover in 1994 was due to the relocation of a few production lines to the new plant in Wangdu and the market demand.

- - \* The low profit margin or loss making was mainly because of open and keen competition under the market economy instead of the guaranteed production and sales budgets as assigned by the government before 1992, and also the purchased prices of raw materials like iron and steel (over 52% of turnover) which prices were fluctuating tremendously since 1993 due to significant import from other countries.
- 3.4 Income tax rate : 55% before 1994 33% from 1994@ (Q.3.6)

@ Due to the poor financial performance since 1991, both net value aded tax (about 6% of turnover) and income tax were exempted in 1991, 1992 and 1993 but VAT was resumed in 1994.

- 3.5 Both the sales and profit has been deteriorating because of the following reasons: (Q.3.7 & 8)
  - (1) lack of capital to rennovate the production facilities and invest into new projects to modify the product mix according to the market demands and improve the product quality in order to compete nationally and internationally;
  - (2) insufficient market information for product mix and sales forecasts;
  - (3) increase in expenses due to high inflation but unable to increase the product selling prices in parallel due to competition and pricing guidance from the bureau;
  - (4) macro-economic control measures controlled by the government and inadequate assistance to the inefficient enterprises;
  - (5) quality of internal management and control in the enterprises due to insufficient education and training;
  - (6) heavy social responsibilities and financial burden to the enterprises but could not lay-off the redundant employees due to insufficient employment benefits (i.e. unemployment, medical, retirement etc.) offered by the government.

# Q.3.4 is not applicable to SMEF because it is neither a holding nor a subsidiary enterprise.

## Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 SMEF entered into the first 5-year (1988-1992) ERC with the Shanghai Metallurgy Bureau and the Shanghai Fianance Bureau in 1988. (0.4.1)
- 4.2 The form of ERC taken in 1988 was "Target Profit Underwritten". The major reason for adopting this basis was because SMEF was a low-profit making state-owned enterprise and required over RMB90 million of capital for the next five years investment in production facilities and equipment including RMB56M for relocating a few production factories from the existing plant to the New Plant. It was expected high borrowings and repayments would be incurred in this period. (Q.4.2 & 4)
- 4.3 The first year (i.e. 1988) profit target base was determined at RMB7.72M after considering the profit achieved in 1987 as shown in section 4 of Data Analysis 13. (Q.4.3)
- 4.4 Because of profit downturn since 1991, SMEF was exempted in handing over any profit or tax to the municipal government in 1991, 1992 and 1993. (Q.4.6)

- 4.5 SMEF achieved the profit targets in the first three years and then either loss making or breakeven since 1992. (Q.4.5, 4.9, 4.10)
- 4.6 The top management did participate in the negotiation with the government and bureau in setting the above targets. The chosen terms were mutually agreed among the three parties. (0.4.7-8)
- 4.7 The second (1993-1997) ERC's profit target is zero for the first 3 years and then subject to review for the latter 2 years. Although no profit or income tax would be levied, the net VAT (6% of turnover) had to be paid since 1994. SMEF is still negotiating with the government to refund and exempt their VAT until 1996. (Q.4.12 & 13)

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## Section 5 : Planning System

- 5.1 Organisation Structure [Planning Influence changed from "High Corporate (1.4)" before 1992 to "Medium-Low Corporate (2.6)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992 : all the production factories were "cost centres" managed by the factory managers. All the other management and service departments were "expense centres" under tight expense budgets.
- After 1992: the organisation structure was restructured in 1993 in order to streamline the operation efficiency and reduce the redundant employees. All the production factories and tertiary enterprises are treated as profit centres and measured mainly by internal profit. All the other management and service remain "expense centres" controlled by budgets initiated.

Corporate Planning Influence\*: "High (1.5)" to "Medium (2.5)"

\* By using a 5-point scale -Greatest Influence Very High (0) (consistent with the scale High (1) used in the questionnaire Medium (2) (3) e.g. 5.4.4 to quantify Low some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0	_	0.5)
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6		4.0)

## (2) Decentralization (Q.5.1.2)

Before 1992: the factory managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.

Therefore, classifying the factories into cost centres were appropriate.

After 1992: the primary profit responsibility lies with the factory managers who initiate the annual budgets and IRCs and get their subordinates (middle and lower management) involved. Obviously, changing into profit centres is reasonable.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

## (3) Appointment (Q.5.1.3)

Before 1992: the general manager and party secretary were appointed by the Bureau, and other senior appointments and major organisational changes required Bureau's approval.

After 1992: the general manager and party secretary are still appointed by the Bureau. The general manager can appoint all the other senior staff such as the factory managers. The factory and department managers can suggest changes in organisation structure and personnel affairs to the general manager for approval.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

## (4) Interdependencies (Q.5.1.4)

Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production with or without markup.

After 1992: the transfer prices are based on market prices less discounts to provide for some profit margins. The top management tries to reduce interference in the setting of transfer prices, quantities and timings.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	High (1.5) High (1.5) VH-H (1.0) High (1.5)	Medium (2.5) M-L (3.0) H-M (2.0) M-L (3.0)
Overall Planning Influence	High (1.4)	M-L (2.6)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium-Low Corporate (2.8)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the top management after discussion and agreement with Bureau. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the Bureau.
- After 1992: Bureau has delegated the long term planning and annual budgeting autonomy to the top management but Mr Weng has said that strategic plans still have to be reviewed, discussed and modified with the Bureau

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between the Bureau and top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management (i.e. factory managers) was limited.

- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the factory managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (3) Participation (Q.5.7.6-8)
- Before 1992 : long term planning was top-down process but middle management (i.e factory managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the top management during every year end and significant changes should be discussed with the Bureau and informed to the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notified to the lower management immediately.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	High (1.5) High (1.5) High (1.5) High (1.5)	Medium (2.5) M-L (3.0) M-L (3.0) Medium (2.5)
Overall Planning Influence	High (1.5)	M-L (2.8)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High Corporate (1.2)"
  before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "improve efficiency" and "increase profit or cost control" were the major strategic themes given to and imbedded into the planning and control system.
- After 1992 : the following specific strategic themes have been promulgated since 1993 :
  - improve the production efficiency and capacity in order to maintain a higher output growth
  - enhance the economic efficiency and development potential
  - increase employee's remuneration and their unity
  - delegate more autonmy to middle/lower management

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992 : "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.
- After 1992: the following strategic thrusts have been promulgated since 1993:
  - convert the production cost centres into profit centres and deal with markets directly

- reorganise and convert some administrative cost centres into independent profit centres (i.e. tertiary enterprises) to provide services to other production and administration units on a self-financing basis
- establish "internal banking system" to determine the internal transfer prices and to handle the transactions between the production factories, administrative divisions and tertiary enterprises
- establish arms-length "internal marketing system" by entering into internal contracts when production cooperation and service are required among the production factories, administrative division and tertiary enterprises
- penetrate existing markets and develop new market
- enhance product and production quality
- reduce resources consumptions
- improve customer before- and after-sales services
- shorten production cycles

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

## (3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, selling price, personnel, incentive scheme, sales and marketing etc.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the factory managers and division heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Summary of Corporate Planning Influence:

Factors	Before 1	992	After 1992
Theme Thrust Suggestions	VH-H High VH-H	(1.0) (1.5) (1.0)	H-M (2.0) Medium (2.5) Medium (2.5)
Overall Planning Influence	High	(1.2)	Medium (2.3)

- 5.4 Long-Term Plans
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of production facilities, volume and mix, product and market development.
- After 1992: the top management has to initiate its own long term plans and compromise with the Bureau who may insist on certain macro-targets such as output volume and mix.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine feasible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1996-2000), includes competitive edge, research and development, product and market development, facility relocation, joint ventures, sources of capital and computerisation.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979
  started to allow SMEF to participate in the 5year's planning with the Bureau and the municipal
  government but specific directives and suggestions
  were always coming from the top by using the term
  "macroeconomic control and adjustment" as an excuse

After 1992: SMEF has to formulate their own long term strategic plans which are submitted to the Bureau for review and approval. Some projects involved significant capital investment require financial arrangement by the Bureau.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992: 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.

After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the Bureau for endorsement and sometimes assistance such as seeking long term bank loan.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After 1992
Central Planning Operation Participation Review & Communication	High High High High	(1.5) (1.5) (1.5) (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High	(1.5) =====	Medium (2.5)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because SMEF caters for the capital budgets during the long term planning exercise.

\_\_\_\_\_

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Central Planning (Q.5.5.1)

Before 1992: government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and working capital.

- After 1992: top management has the full autonomy in the annual planning and budgeting processes which involve the middle management such as the factory managers.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the factory managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: top management provided major guidelines to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.
- Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes.

  Annual plans were communicated to middle and lower management in written forms.

After 1992: top and middle management review the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors.

A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	Low M-L Low M-L	(3.5) (3.0) (3.5) (3.0)
Overall Planning Influence	H-M ======	(2.0)	Low	(3.3)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: the IRC system was started in 1989 and mainly applied to the production factories. Before 1992, production factories were measured against targets such as production mix, quantities, and costs.
- After 1992 : financial target internal profit production targets quantity, value, equivalent labour hours, quality management targets quality, safety, technology, material consumption, operation

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992 : factory managers had to discuss and compromise the production quantity and cost targets with the top management.

After 1992: factory managers negotiate and agree the IRC targets with the general manager during the annual planning cycle.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(3) Review & Communication (Q.5.6.9-15)

Before 1992: targets agreed by the production managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective factory managers and their employees.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets and qualitative factors such as quality and safety had veto effect on the bonus to be awarded.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the factory managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	High (1.5) High (1.5) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.5)	Medium (2.5)

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Characteristics (Q.5.9.1-7) Before 1992 After 1992 Interdepen-Production & service 1.1 Production & service dencies departments involved departments involved 1.2 Transfer standard cost and market price less Price Basis standard cost plus internal discount Transfer Price Very little between 1.3 Some negotiations Negotiation buyer and seller are allowed Intermediate Some buy and sell are Some buy & sell are 1.4 Product available in market available in market 1.5 Transfer Mostly determined by Excess service can Quantity the top management be sold externally 1.6 Arbitration Prices and quantities Mainly determined by mainly determined by top management but top management negotiations allowed No, only suggest 1.7 Government No, except the output

volumes & prices of

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

prices of final products final products

volumes & selling

(2) Participation (Q.5.9.8)

Interference

- Before 1992: most of the transfer prices and quantities were determined by the top management and the factory managers were consulted sometimes. Any conflicts were arbitrated by the general manager. Factory managers didn't care much because they were measured by production volume and cost.
- After 1992: most of the transfer prices and quantities are still controlled by the top management although some negotiations are allowed for the factory managers because they are measured on internal profit. Interference from and arbitration by the general manager are necessary.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Review (Q.5.9.9-12)
- Before 1992: the standard costs and profit margins used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management. The transfer prices were reviewed in the middle of the year and some amendments were allowed.

1992 : the market price less internal discount is used for After setting the transfer prices which are reviewed quarterly. Standard costs plus is still used for a few factories.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Characteristics Participation Review	High High High	(1.5) (1.5) (1.5)	Medium (2.5) Medium (2.5) Medium (2.5)	
Overall Planning Influence	High	(1.5)	Medium (2.5)	

## Section 6 : Control System

6.1 Decentralisation & Control [Control Influence changed from "Financial (1.3)" before 1992 to "Moderate Finance (2)" after 1992]

(1) Organisational Design (Q.6.1.1)

\* By using a 5-point scale which is exactly the same used in the questionnaire :

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	lc<			-Tight	Financial
Control				Contro	ol

Tight Financial	(0.0	_	1.0)
Financial	(1.1	_	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	-	4.0)

		High	(1.5)	Medium (2.3)
	Termination	VH-H	(1.0)	High (1.5)
	Evaluation Remuneration	H-M High	(2.0) (1.5)	M-L (3.0) Medium (2.5)
	Training	H-M	(2.0)	M-L (3.0)
	Assignment	High	(1.5)	Medium (2.5)
2.1	Recruitment	VH-H	(1.0)	High (1.5)
		' Before	1992	After 1992
(2)	Personnel# (Q.6.1.1)			

# Mr Weng said that since 1992, more delegation has been given to the factory managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the general manager and the party secretary.

		======	=====	=====	======
		High	(1.1)	High	(1.5)
3.6	Communication*	VH-H	(1.0)	H-M	(2.0)
3.5	Qualitative targets	VH-H	(1.0)	High	(1.5)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
		Before	1992	After	1992
(3)	Control Mechanisms (Q.	6.1.2-3, Q	2.6.4.8)		

\* The control mechanisms are clearly communicated to the factories and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

## Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.4) High (1.5) High (1.1)	Medium (2.1) Medium (2.3) High (1.5)
Overall Control Influence	High (1.3)	H-M (2.0)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 (1) Precision & detail of targets VH-H (1.0) H-M (2.0) Objective vs subjective (2) VH-H (1.0) H-M (2.0)targets Achieving targets (3) H-MTimeframe VH-H (1.0) (2.0)(4)Stretch built into VH-H (1.0) H-M (2.0) the targets Financial vs non-financial targets (5) High (1.5) H-M (2.0) (6) Manangement influence on setting targets VH (0.5) M-M (2.0) \_\_\_\_\_ \_\_\_\_\_ VH-H (1.0) H-M (2.0) ======== ========

# 6.3 Monitoring Results [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

		Before	1992	After:	1992
1.1	Policy	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
	•	VH-H	(1.0)	H-M	(1.7)
		======	=====	=====	=====

# Mr Weng has mentioned that the monthly condensed report format is unique for each factory. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the general manager. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production factories were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: production volume and internal profit are the major economic targets, however, more qualitative targets such as production management, resource consumption and quality are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

## Summary of Corporate Control Influence:

Factors	Before	1992	After 1992		
Reporting Requirements Performance Measurement Review & Communication	High VH-H VH-H	(1.1) (1.0) (1.0)	H-M H-M H-M	(1.7) (2.0) (2.0)	
Overall Control Influence	VH-H =====	(1.0)	H-M =====	(1.9)	

# 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

(1)	Incentives* (Q.6.5.1-7,19	5-16,22-2	3)		
		Before 1	.992	After :	1992
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
1.3	Bonuses - monthly	VH	(0.5)	VH-H	(1.0)
1.4	Bonuses - annual	H-M	(2.0)	High	(2.5)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.8	Redundancy	Very Low	(4.0)	H-M	(2.0)
		H-M	(1.6)	H-M	(1.7)
		======	=====	======	=====

<sup>\*</sup> The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once in each year to combat inflation. The second part is decided by the SMEF which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the factory manager decides what level of group bonus will be given to the factory. It is up to a factory manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the SMEF's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 30-50% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 20-30% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by the headquarters and government.
- After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8,13-14,20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees every month via the factory or department managers.
- After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

  Performance and reward are made known to employees every month via the factory or department managers.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992		After	After 1992	
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.6) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.7) (1.5) (2.0) (2.0)	
Overall Control Influence	High	(1.2)	H-M =====	(1.8)	

## Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Metallurgical Equipment General Factory (SMEF) belonged to before and after 1992.

Planning Influences Before 1992 After 1992 \_\_\_\_\_\_ Organisation Structure\* High (1.4) to Low (2.6) High (1.5) Medium Review Process\* to Low (2.8)Strategic Themes, Thursts and Suggestions\* High (1.2) Medium (2.3)Long-Term Plans\* High (1.5) Medium (2.5) (Resource Allocation) Short-Term Planning/ High to Medium (2.0) Low (3.3) Budgeting\* (Resource Allocation) Internal Responsibility High (1.5) Medium (2.5) Contracts# Management of Inter-High (1.5) Medium (2.5) dependencies\* Medium Overall Planning Influence High (1.5) to Low (2.6) Control Influence Before 1992 After 1992 Decentralisation & Moderate Financial (2.0) Financial (1.3) Control# Agreeing Objectives\* Tight Moderate Financial (1.0) Financial (2.0) Monitoring Results\* Tight Moderate Financial (1.0) Financial (1.9) Rewards & Incentives\* Moderate Financial (1.2) Financial (1.8) Moderate Overall Control Influence Financial (1.1) Financial (1.9) ========= ===========

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning  Influence	Control Influence
Influence	Strategic   Financial
High (	Strategic Programming 0 Financial Programming 0
H/M Medium2	X
M/L	
Low	3 3 3 4 4 Strategic Control 4 Financial Control 4
0 (1.9, 2.6)	4130

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Metallurgical Equipment General Factory (SMEF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

26 June 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 14

Report Date : 3 July 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

- (2) identify the **factors** affecting each planning and control parameter;
- (3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;
- (4) summarise all the planning and control parameters and represent the final result into the **responsibility** accounting style grid.

For further details, please refer to the case writing of "Data Analysis 14" (28 February 1995).

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Name of SOE: Shanghai No.2 Cotton Mill (SCM2)

Staff Interviewed: Miss Zhou Wei Min/Chief Accountant

(No. of years in this enterprise : 15 years)

Dates of Visits : First Visit - 10 September 1993

Second Visit - 12 September 1994 Third Visit - 8 February 1995

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### Section 1: History & Background (Q.1.1-5)

1.1 SCM2 is a state-owned enterprise established in 1914 and is manufacturing cotton yarn and cloth of which the former products are the input materials for the latter products. SCM2's long term visions are to maintain textile manufacturing as the core business, enhance the product quality and increase export as the driving force, develop tertiary (service) enterprises as the diversification strategy, and establish advanced management techniques as a modern enterprise. (Q.1.1)

- 1.2 Operating under the competitive market economy, SCM2 aggressively adjust its product mix and organisation structure. To actualise the technology advancement as the first production strategy, since 1990s SCM2 has invested RMB50 million in importing 75 modern and advanced spinning and weaving machines in order to upgrade the product variety and quality. As a result, SCM2 was qualified as the "high count kingdom\*" by the mayor of Shanghai in January 1994. SCM2 is devloping 75 new high grade products and trying to explore the overseas markets. (Q.1.2)
  - \* The quality or grade of yarn is measured in terms of numbers of count which means the higher the count, the more refined the product.
- 1.3 The competitive edge of SCM2 is offering high count and high density (quality measurement of cloth) yarn and cloth to sustain the market share. Before the oil-shortage crisis in 1993, SCM2 had produced cotton-synthetic (a by-product of crude oil) cloth and supplied to a large clothing factory for manufacturing the "Smart" shirt which was a famous brand name in Hong Kong as well.

In addition, SCM2 started to produce and supply low-price yarn (6-10 count) for other weaving factories to manufacture denim (jeans) in 1993. This low-price yarn used cheaper cotton (raw material) costing RMB10,000 per ton compared with those high count (80-120) using cotton costing RMB40,000 per ton. However, this low-count yarn could generate good profit because the production cycle was shorter and output volume was greater. In the same year, SCM2 produced high-count (80-100) cotton cloth and supplied to a large clothing factory for manufacturing a delux gentleman shirt with the brand name called "Seashell". (Q.1.3)

- 1.4 SCM2 supplies 92% of its yarn and cloth to other textile and clothing industries for further processing and exporting most of their final products overseas. Only 3% of SCM2's products (mixture of cotton and linen cloth) exported directly (i.e. to Australia) and the other 5% are sold domestically. The production and sales ratio of SCM2 have been maintained at 1:0.95. (Q.1.4)
- 1.5 Under the economic reforms, open-door policies and operation mechanism transformation, SCM2 insists the strategic theme of "textile is the mainstream business and diversification is the breakthrough venture".

Subsidiary to the main business of textile, SCM2 has reserved 20,000 square metres of land space for establishing various "tertiary enterprises" including commercial office block, securities trading company, storage and transportation service, beverage wholesales market, food and oil future market, motel, restaurants and amusement centre which are expected to bring in RMB10 million of profit (before income tax) before the end of the year 2000. (Q.1.5)

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### Section 2: Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 SCM2 has been a wholly state-owned enterprise since 1950 and under the administration of the Shanghai Textile Bureau. All the cotton mills and related industries such as textile machines manufacturing are under the umbrella of the Shanghai Textile Bureau. Since the textile industrial restructuring in early 1990s, many cotton mills have been grouped under three large corporations in Shanghai. One of these three large textile corporations is Xin Da Corporation which has the following subsidiaries:
  - (1) Shanghai No.2 Cotton Mill
  - (2) Shanghai No.6 Weaving Factory
  - (3) Shanghai Industrial Cloth Factory
  - (4) Xin Da Real Estate Development Company
  - (5) 10 Trading/Import and Export Companies
  - (6) Representative Offices in the USA, Australia and Macau

In 1991, Xin Da Corporation was registered in Pudong (Eastern Shanghai) which is a special economic development zone enjoying many favourable policies granted by the municipal government, such as income tax of 15% for shareholding enterprises compared with the 33% of the counterparts registered in old Western Shanghai city.

In May 1992, Xin Da Corporation was transformed into a shareholding entity by issuing shares to the government (63%), other enterprises (27%) and other individuals (10%) including employees working for Xin Da Corporation (i.e. SCM2's employees). The shares owned by the individuals, at an issue price of RMB3 per share, were listed in the Shanghai Stock Exchange at the same time. Therefore, SCM2 is a 100% shareholding subsidiary of Xin Da Corporation.

The major role played by Xin Da Corporation is to supervise the financial performance and appoint the top management such as general manager and party secretary (rectified by the Shanghai Textile Bureau) of each subsidiary. Another important function of the corporation is to raise capitals for the approved projects or investments initiated by the subsidiaries. Despite the latter fact, SCM2 has the autonomy to obtain bank loan independently. (Q.1.1, 4, 6, 7)

2.2 Since SCM2 is a shareholding enterprise, it has a Board of Directors constituted by the following 11 members: (Q.2.3)

Chairman Vice Chairman - Chairman of Xin Da Corporation

- General Manager of SCM2

Directors

- 3 representatives from other enterprises holding shares of Xin Da
- 1 representative from Textile Bureau
- 1 representative from Party Office
- 1 representative from Labour Union
- Chief Accountant of Xin Da Corporation
- Deputy-General Manager (Production) of SCM2
- Deputy-General Manager (Operation) of SCM2
- Under the Factory General Manager, who has an Enterprise 2.3 Management Office, the organisation structure of SCM2 is listed as follow: (Q.2.5, 2.9)
  - Production Department (Deputy-GM) (1)
    - No.1 Spinning Factory\*
    - No.2 Spinning Factory\* 1.2
    - No.3 Spinning Factory\* 1.3
    - Weaving Factory\* 1.4
    - 1.5 Production Support Factory (supplying electricity, gas, water, consumables, spares, tools etc.)\*\*
      Technical Support Section (Chief Engineer)
    - 1.6
    - Production Planning Section (Chief Engineer) 1.7
    - 1.8 Production Facilities Section
    - 1.9 Quality Control Section
  - Operation Department (Deputy-GM) (2)
    - Purchasing Section 2.2
    - Sales Section 2.3
  - Organisation & Personnel Department@ (3)
    - 3.1 Personnel Section
    - 3.2 Manpower & Wages Section
    - Organisation & Discipline Section 3.3
    - Education & Training Section
  - Safety & Security Department@ (4)
    - Safety Section 4.1
    - Security Section
    - @ headed by the same Deputy-GM
  - Accounting & Finance Department (Chief Accountant)
    - 5.1 Accounting & Finance Section@@
      - Internal Audit Section
  - Promotion Department (Party Leader) (6)
    - 6.1 Promotion Department
    - 6.2 Party Office

- (7) Labour Union Office
- (8) Tertiary Enterprises@@@ (Deputy-GM)
- \* All the production factories have a factory manager, a deputy factory manager, section supervisors and group leaders. Each factory is responsible for its own repair and maintenance work.
- \*\* All the production factories and tertiary enterprises are treated as profit centres. But the production support factory is a cost centre and allocates its operating costs to the other production factories or departments according to actual usages.
- \*\*\* All the production factories have signed Internal Responsibility Contracts (IRC) with the General Manager on an annual basis.
- @@ In addition to the 21 staff in the accounting and finance department in the headquarters, there is one accounting staff in each production factory and tertiary enterprise reporting to both the unit manager and chief accountant.
- @@@ The tertiary (service) enterprises are independent profit centres having their own management teams and bank accounts, and they have signed IRCs with the General Manager on an annual basis.
- 2.4 SCM2 had a total of 4,860 working employees (10% are administrative staff) and 5,200 retired employees (annual pension RMB14 million) at the end of 1994. It is classified as a medium-size SOE in China. About 350 of the working employees are involved in the tertiary enterprises established in mid-1993.
  - On the other hand, 350 redundant employees have stopped their jobs or posts and received about RMB300 basic wages per month. All the employees have signed "employment contracts" since 1993 with duration from one year to no limit leaving an optional right to the employees.

# Although SCM2 is a subsidiary enterprise, insufficient information has been obtained for questions Q.2.2, Q.2.8 and Q.2.11.

### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets : RMB 40M (1994) (Q.3.1)

3.2 Turnover : RMB 180M (1992) RMB 200M (1993)

RMB 180M@ (1994)

RMB 200M@ (1995 forecast) (Q.3.2 & 7)

@ Including sales of tertiary enterprises.

3.3 Income before tax: RMB 7.0M (1992) - 3.9% of sales (Q.3.5, 6 & 7) RMB 4.0M (1993) - 2.0% of sales\* RMB 5.1M# (1994) - 2.8% of sales\*\* RMB 4.0M##(1995 forecast)

\* The low profit margin was mainly because of a fire occured in May 1993 and No.1 Spinning Factory was burnt down lossing RMB4 million of assets after claiming insurance. In addition, selling prices had to be reduced in order to bid the orders. Furthermore, inflation and heavy payroll and benefits in kind (including retired employees) increased the total expenditures or fixed overheads. The purchase prices of raw materials (i.e. cotton) have been increased from RMB11,000 per ton in 1993 to RMB18,000 per ton in 1994 (or 64% increase) due to reduction of domestic production.

The farmers did not have the incentive to grow cotton because of low selling prices set by the government and high inflation of input materials like fertilisers. The domestic produced cotton is centrally purchased and distributed by the Ministry of Textile (and also the corporations under its umbrella), Ministry of Commerce and Ministry of Agriculture at predetermined prices. In view of domestic short supply, 45% of the cotton demand was imported from foreign countries in 1994. SCM2 is importing overseas cotton via the import and export right of its holding Xin Da Corporation.

\*\* Income before tax has deducted the value added tax already which is 17% on sales but only 13% on cotton purchased can be deducted according to the new taxation system implemented in January 1994. As a result, the VAT paid in 1994 was RMB10 million (6% of turnover) which is RMB500,000 higher than the previous known sales tax in 1993.

# The tertiary enterprises generated RMB2 million of profit before tax in 1994 which achieved only 40% of the budget. The target for 1995 will be RMB2.5 million of profit before tax.

## To support a few capital projects started in 1990, SCM2 obtained a RMB29 million 5-year bank loan and interest payment of RMB3 million has been capitalized into the work-in-progress. Since all the projects were completed in 1994, both the interest of outstanding loan (RMB25 million) and the depreciation of a total RMB4.5 million has to be charged to profit and loss as from 1995. Therefore, the potential profit level of RMB8.5 million (including RMB2.5 million coming from the tertiary enterprises) will be reduced to RMB4 million in 1995.

3.4 Income tax rate : 55% (before 1992) 15% (from 1992)### (Q.3.6)

### All the profit before tax belongs to the Xin Da Corporation which is registered in Pudong (Eastern Shanghai) and subject to 15% of income tax rate in this economic development zone.

- 3.5 Unlike the last few decades, the demands of textile products, in particular the old cotton mills such as SCM2, in China have been declining since the early 1990s due to the following reasons: (Q.3.7 & 8)
  - (1) The production plants and equipment are rather out-dated such as before 1994, SCM2 were still using very old machines manufactured in the 1920s, 1930s and 1940s. Productivity, efficiency and quality of these retiring machines are low compared with the other developed countries like the USA, Japan and Europe or even the many newly developed small-sized cotton mills located in small towns and cities all around China which have the ability to imported advanced equipment and machines from overseas.
  - (2) Lacking of capital, either coming from retained earnings or bank loans, makes the large- and medium-sized long-established cotton mills (there are 30 cotton mills in Shanghai) unable to rennovate their out-dated plants and equipment. Therefore, they can mainly manufacture lower quality or class of products and only a small portion of them belong to the higher counts for further processing into high quality products such as the shirts and T-shirts with famous brand names as mentioned above.
  - (3) The surging of too many small-sized township cotton mills increases the total supply in excess of the total demand. Under this unfavourable situation, the old cotton mills including SCM2 can harly compete with them in terms of price and quality.

(4) In the 1980s, SCM2 has entered into joint-ventures in terms of associated enterprise mode with two old cotton mills in Shandong and Jingsu provinces (major raw cotton producing places in China). SCM2 has invested capital, equipment and technology into these two enterprises in order to revive their deteriorating performance. This kind of assistant programme as imposed by the government has diverted the resources of SCM2 from own development purposes.

# Informtion for Q.3.4 was not available.

The intermediate of Q.S.1 was not available.

### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 SCM2 entered into the first 5-year (1988-1992) ERC with the Shanghai Textile Bureau and the Shanghai Fianance Bureau in 1988. (Q.4.1)
- 4.2 The major financial target set in this ERC was based on the target income which was 55% of net profit. (Q.4.2 & 4)
- 4.3 The target income tax (base) in the first year (1988) was agreed at RMB5 million with a 2% annual growth in the subsequent years. (Q.4.3)
- 4.4 The annual total gross wages was linked up with the above financial targets. (Q.4.6)
- 4.5 SCM2 exceeded the target income tax every year until 1992. In general, the labour efficiency and productivity have been increased after shareholding conversion compared with the ERC system because without good profit there would be no handsome dividends distributed and the share market price would be affected as well. However, under the ERC system, once the target profit has been achieved, the predetermined wages, bonuses, and benefits-in-kind will be awarded plus other favourable terms like bank loan repayment could be tax deductable. Therefore, all the personnel in SCM2 have been facing higher pressure and challange to enhance the overall economic efficiency year after year. (Q.4.5, 9 & 10)
- 4.6 The top management did participate in the negotiation with the government and bureau in setting the above targets. The chosen terms were mutually agreed among the three parties. (Q.4.7-8)
- 4.7 The ERC was ceased in 1993 after SCM2 had been transformed into a shareholding enterprise and subject to a preferential income tax rate of 15%. (Q.4.12 & 13)

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### Section 5: Planning System,

- 5.1 Organisation Structure
  [Planning Influence changed from "High-Medium Corporate
  (1.8)" before 1992 to "Medium-Low Corporate (2.8)" after
  1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)

Before 1992 : all the production factories were "cost centres" managed by the factory managers. All the other management and service departments were "expense centres" under tight expense budgets.

After 1992: the organisation structure was consolidated from over 20 departments into 6 major departments in 1992 when converting into a shareholding enterprise The production factories and tertiary enterprises are treated as profit centres and measured mainly by internal profit. All the other management and and service departments remain "expense centres" controlled by budgets.

Corporate Planning Influence\*: "High (1.5)" to "Medium (2.5)"

\* By using a 5-point scale -Very High (0) Greatest Influence (consistent with the scale High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0	-	0.5)
Very High-High	[VH-H]	(0.6	-	1.0)
High	[H]	(1.1	-	1.5)
High-Medium	[H-M]	(1.6	-	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	-	3.5)
Very Low	[VL]	(3.6	-	4.0)

- (2) Decentralization (Q.5.1.2)
- Before 1992: the factory managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.

  Therefore, classifying the factories into cost centres were appropriate.

After 1992: the primary profit responsibility lies with the factory managers who initiate the annual budgets and IRCs and get their subordinates (middle and lower management) involved. Obviously, changing into profit centres is reasonable.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

(3) Appointment (Q.5.1.3)

Before 1992: the general manager and party secretary were appointed by the Bureau, and some senior appointments and major organisational changes required Bureau's approval.

After 1992: the general manager and party secretary are still appointed by the Corporation. The general manager can appoint all the other senior staff such as the factory managers. The factory and department managers can suggest changes in organisation structure and personnel affairs to the general manager for approval.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(4) Interdependencies (Q.5.1.4)

Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production as agreed with the factories.

After 1992: the transfer prices are based on market prices less discounts to provide for some profit margins. The top management tries to reduce interference in the setting of transfer prices, quantities and timings.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Factors	Before 1	.992	After 1	.992
Responsibility Centre Decentralization Appointment Interdependencies	High H-M High H-M	(1.5) (2.0) (1.5) (2.0)	Medium M-L Medium M-L	(3.0)
Overall Planning Influence	H-M	(1.8)	M-L	(2.8)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium-Low Corporate (2.8)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the top management after discussion and agreement with Bureau. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the Bureau.
- After 1992: Corporation has delegated the long term planning and annual budgeting autonomy to the top management but strategic plans and annual financial targets still have to be reviewed, discussed and modified with the Corporation.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between the Bureau and top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management (i.e. factory managers) was limited.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the board of directors to the factory managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was top-down process but middle management (i.e factory managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence : "High (1.5)" to "Medium-Low (3)"

(4) Review & Communication (5.7.9-14, 5.8.8-11)

Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management in mid-year but amendments were made due to significant changes which were communicated to lower management through revised budgets.

After 1992: long term plans are reviewed by the board of directors twice every year end and significant changes should be discussed with the Corporation and informed to the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notified to the lower management immediately.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	High (1.5) High (1.5) High (1.5) High (1.5)	Medium (2.5) M-L (3.0) M-L (3.0) Medium (2.5)
Overall Planning Influence	High (1.5)	M-L (2.8)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High Corporate (1.2)"
  before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "improve efficiency" and "increase profit or cost control" were the major strategic themes given to and imbedded into the planning and control system.
- After 1992: "textile is the mainstream business" and "diversification is the breakthrough venture" have been the strategic themes since the shareholding conversion in 1992.

Corporate Planning Influence: "Very High-High (1)" to "High-Medium (2)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.
- After 1992: the following strategic thrusts have been promulgated since 1992:
  - production facilities should be rennovated to further enhance product quality
  - streamline the organisation structure and reduce the number of employees
  - sustain steady profit growth and maintain a reasonable return to shareholders
  - employ advanced management techniques to achieve a modern enterprise system

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, selling price, personnel, incentive scheme, sales and marketing etc.
- After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the factory managers and division heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the ultimate annual sales and profit targets.

Corporate Planning Influence: "Very High-High (1)" to "Medium (2.5)"

Factors	Before 1992	After 1992
Theme Thrust Suggestions	VH-H (1.0) High (1.5) VH-H (1.0)	H-M (2.0) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.2)	Medium (2.3)

- 5.4 Long-Term Plans
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of production facilities, volume and mix, product and market development.
- After 1992: the board of directors has to initiate its own long term plans and compromise with the Corporation who may insist on certain macro-targets such as output volume and profit level.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1996-2000), includes competitive edge, research and development, product and market development, facility relocation, joint ventures, and diversification through tertiary enterprises.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979
  started to allow SCM2 to participate in the 5year's planning with the Bureau and the municipal
  government but specific directives and suggestions
  were always coming from the top by using the term
  "macroeconomic control and adjustment" as an excuse
- After 1992: has to formulate their own long term strategic plans which are submitted to the Corporation for review and approval. Some projects involved significant capital investment require financial arrangement by the Corporation.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992: 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the Corporation for endorsement and sometimes assistance such as seeking long term bank loan.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 199	2	After 1	992
Central Planning Operation Participation Review & Communication	High (1 High (1	.5) .5)	Medium Medium Medium Medium	(2.5) (2.5)
Overall Planning Influence	High (1	 .5) ===	Medium	(2.5)

<sup>\*</sup> The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because SCM2 caters for the capital budgets during the long term planning exercise.

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- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and working capital.
- After 1992: top management has the full autonomy in the annual planning and budgeting processes which involve the middle management such as the factory managers.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the factory managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: board of directors provided major guidelines to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.
- Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed quarterly and amendments were seldom made except under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.
- After 1992: top and middle management review the annual plans and budgets monthly and amendments are made due to unavoidable internal and external factors.

  A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After	1992
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	Low M-L Low M-L	(3.5) (3.0) (3.5) (3.0)
Overall Planning Influence	H-M =====	(2.0)	Low	(3.3)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: before the IRC system started in 1993, the production factories were measured against targets such as production mix quantities and costs.
- After 1992: after implementing the IRC in 1993, the major targets measured are output quantity, internal profit, operation management, quality and safety.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

\* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.

- (2) Participation (Q.5.6.8)
- Before 1992 : factory managers had to discuss and compromise the production quantity and cost targets with the top management.
- After 1992: factory managers negotiate and agree the IRC targets with the general manager during the annual planning cycle.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets agreed by the production managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective factory managers and their employees.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (4) Incentive (Q.5.6.16)
- Before 1992: the bonus was determined by the accomplishment of the production and cost targets and qualitative factors such as quality and safety had veto effect on the bonus to be awarded.
- After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the factory managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (2.5)"

	=======	=====	======	=====
Overall Planning Influence	High	(1.5)	Medium	(2.5)
Participation Review & Communication	High	(1.5) (1.5) (1.5) (1.5)	Medium Medium Medium Medium	(2.5) (2.5)
Summary of Corporate Planning Factors	Influence Before 1		After 1	992

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Characteristics (Q.5.9.1-7)

\ <del>-</del> /	OHALACOUL LD GIO.	(2.5.)	
		Before 1992	After 1992
1.1	Interdepen-	Production & service	Production & service
	dencies	departments involved	departments involved
1.2	Transfer	standard cost and	market price less
	Price Basis	standard cost plus	internal discount
1.3	Transfer Price	Very little between	Some negotiations
	Negotiation	buyer and seller	are allowed
1.4	Intermediate	Some buy and sell are	Some buy & sell are
	Product	available in market	available in market
1.5	Transfer	Mostly determined by	Excess output can
	Quantity	the top management	be sold externally
1.6	Arbitration	Prices and quantities	Mainly determined by
		mainly determined by	top management but
	•	top management	negotiations allowed
1.7	Government	No, except the output	No, only suggest
	Interference	volumes & selling	volumes & prices of
		prices of products	final products

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(2) Participation (Q.5.9.8)

Before 1992: most of the transfer prices and quantities were determined by the top management and the factory managers were consulted sometimes. Any conflicts were arbitrated by the general manager. Factory managers didn't care much because they were measured by production volume and cost.

After 1992: most of the transfer prices and quantities are still controlled by the top management although some negotiations are allowed for the factory managers because they are measured on internal profit. Interference from and arbitration by the general manager are necessary.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(3) Review (Q.5.9.9-12)

Before 1992: the standard costs and profit margins used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management. The transfer prices were reviewed quarterly and some amendments were allowed

After 1992: the market price less internal discount is used for setting the transfer prices which are reviewed monthly. Standard costs is still used as transfer prices for the production support factories.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Characteristics Participation Review	High (1.5) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.5)	Medium (2.5)

### Section 6 : Control System

6.1 Decentralisation & Control [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Finance (2)" after 1992]

(1) Organisational Design (Q.6.1.1)

		======	======	======	=====
		High	(1.4)	Medium	(2.1)
	Roles & functions Interactions	High High	(1.5) (1.5)	Medium Medium	
	Staffing	High	(1.5)		(2.0)
1.1	Structure	VH-H	(1.0)*	High	
		Before	1992	After 1	992

\* By using a 5-point scale which is exactly the same used in the questionnaire :

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strateg	ic<			-Tight	Financial
Control				Contro	ol

Tight Financial	(0.0	-	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	_	4.0)

		High	(1.3)	Medium (2.2)
2.6	Terminacion	vn-n	(1.0)	High (1.5)
	Termination	VH-H	(1.0)	•
2.5	Remuneration	High	(1.5)	Medium (2.5)
2.4	Evaluation	High	(1.5)	Medium (2.5)
	Training	High	(1.5)	Medium (2.5)
	Assignment	High	(1.5)	Medium (2.5)
2.1	Recruitment	VH-H	(1.0)	High (1.5)
0 1	Do mari i tamana t	Before		After 1992
(2)	Personnel# (Q.6.1.1)			
\				

# Miss Zhou said that since 1992, more delegation has been given to the factory managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the general manager and the party secretary.

=======================================	:=======	=====	
(1.0) H-M (1.6	·H (1.0)	VH-H	
(1.0) H-M (2.0	·H (1.0)	ation* VH-H	3.6
, , , , , , , , , , , , , , , , , , , ,		ive targets VH-H	
• • • • • • • • • • • • • • • • • • • •		tive targets VH-H	
(1.0) High (1.5	·H (1.0)	l targets VH-H	3.3
(1.0) High (1.5	·H (1.0)	VH-H	3.2
(1.0) High (1.5	·H (1.0)	VH-H	3.1
re 1992 After 1992	ore 1992	Before	
, Q.6.4.8)	·3, Q.6.4.8)	Mechanisms (Q.6.1.2-3,	(3)

\* The control mechanisms are clearly communicated to the factories and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

### Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.4) High (1.3) VH-H (1.0)	Medium (2.1) Medium (2.2) H-M (1.6)
Overall Control Influence	High (1.2)	H-M (2.0)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Facto	ors affecting the types a	nd styles Before 1		mechani After 1	
(1)	Precision & detail of				
	targets	VH-H	(1.0)	H-M	(2.0)
(2)	Objective vs subjective				
	targets	VH-H	(1.0)	H-M	(2.0)
(3)	Achieving targets				
	Timeframe	VH-H	(1.0)	H-M	(2.0)
(4)	Stretch built into				
	the targets	VH-H	(1.0)	H-M	(2.0)
(5)	Financial vs non-				
	financial targets	High	(1.5)	H-M	(2.0)
(6)	Manangement influence				
	on setting targets	VH	(0.5)	M-M	(2.0)
		VH-H	(1.0)	H-M	(2.0)
		=======	=====	======	=====

6.3 Monitoring Results
[Control Influence changed from "Tight Financial (1)" before
1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

		Before	1992	After 1	L992
1.1	Policy	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
•					
	·	VH-H	(1.0)	H-M	(1.7)
		======	=====	======	=====

# Miss Zhou has mentioned that the monthly condensed report format is unique for each factory. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the general manager. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production factories were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: production volume and internal profit are the major economic targets, however, more qualitative targets such as production management, resource consumption and quality are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Reporting Requirements Performance Measurement Review & Communication	High VH-H VH-H	(1.1) (1.0) (1.0)	H-M H-M H-M	(1.7) (2.0) (2.0)
Overall Control Influence	VH-H	(1.0)	H-M =====	(1.9)

## 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

		======	=====	======	=====
	•	H-M	(1.7)	H-M	(1.8)
	iioddiiddiio <sub>j</sub>				
1.8	Redundancy	Very Lo		H-M	(2.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	VH-H	(1.0)	High	(1.5)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
		Before		After 1	
(1)	Incentives* (Q.6.5.1-7,1	5-16,22-	23)		

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once in each year to combat inflation. The second part is decided by the SCM2 which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the factory manager decides what level of group bonus will be given to the factory. It is up to a factory manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the SCM2's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 30-50% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 20-30% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992: factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by the headquarters and government.
- After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

(4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the factory or department managers.

After 1992: IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the factory or department managers.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

### Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.7) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.8) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2)	H-M ======	(1.8)

### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai No.2 Cotton Mill (SCM2) belonged to before and after 1992.

Planning Influences	Before 1	L992	After 1	992
Organisation Structure*	High to Medium	(1.8)	Medium to Low	
Review Process*	High	(1.5)	Medium to Low	(2.8)
Strategic Themes, Thursts and Suggestions*	High	(1.2)	Medium	(2.3)
Long-Term Plans* (Resource Allocation)	High	(1.5)	Medium	(2.5)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium		Low	(3.3)
Internal Responsibility Contracts#	High	(1.5)	Medium	(2.5)
Management of Inter- dependencies*	High	(1.5)	Medium	(2.5)
Overall Planning Influence	Medium	(1.6) =====	Medium to Low	(2.7) =====
Control Influence				
Decentralisation & Control#		al (1.2)	Moderate	2
Agreeing Objectives*	Tight Financia	al (1.0)	Moderate Financia	e al (2.0)
Monitoring Results*	Tight Financia	al (1.0)	Moderate Financia	e al (1.9)
Rewards & Incentives*	Financia	al (1.2)	Moderate Financia	e al (1.8)
Overall Control Influence	Financia	al (1.1)		e al (1.9)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Cont	rol Influence	
	Strategic	Fina	ncial
High (	Strategic Programm:	ing 0 Financial Programm	ing 0
H/M Medium2	2	x	2
M/L	3	3	3
Low 4	Strategic Control	4 Financial Control	4
0 (1.9, 2.7)	- SCM2 Post-1992	X (1.1, 1.6) - SCM2 Pre-	1992

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai No.2 Cotton Mill (SCM2) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

3 July 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 15

Report Date : 9 July 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 15" (31 March 1995).

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### Name of SOE: Shanghai Xinhua Iron & Steel Works (SXSW)

Staff Interviewed: Mr Ni Zhong Fong, Deputy Chief Accountant

(No. of years in this enterprise: 4 years)

Mr Zhang Ke Qin (Financial Accountant)

(No. of years in this enterprise : 27 years)

Dates of Visits : First Visit - 11 September 1993

Second Visit - 7 September 1994 Third Visit - 12 January 1995

### Section 1: History & Background (Q.1.1-5)

1.1 SXSW was founded in 1939 and then transformed into a wholly state-owned enterprise in early 1950s. It is producing medium and small sized iron and steel products. After over 56 years of development, SXSW has become one of the key enterprises under the Ministry of Metallurgy and is a large profit making enterprise in Shanghai. (Q.1.1)

- 1.2 Employing 5,600 employees and covering an area of 204,000 square metres, SXSW produces 600,000 tons of steel, 400,000 tons of billet and 12,000 tons of rolled steel annually. SXSW was awarded the title of First-Class Enterprise of the State and National Labour Day (1st of May) Certificate of Merit in 1990. (0.1.2)
- The major products of SXSW can be classified into the 1.3 following 10 categories : (Q.1.3)
  - Rolled Steel (i.e. seamless steel pipe, thin plate)
  - Window's Frame Steel (for buildings) (2)
  - (3) Deformed (Thread) Bar (for building construction)
  - (4) Steel for automobiles and farm tools
  - Steel for spinning and weaving machines Steel for standard parts (5)
  - (6)
  - (7) Steel for sewing machine
  - (8) Steel for electrical appliance
  - Steel for aviation and ship building (9)
  - (10) Other section and figured bar steel
- 1.4 From 1973 to 1993, a total amount of 440,000 tons of rolled steel had been exported and US\$154 million had been earned. However, the export quantity has been declined since 1993 because the average selling prices are higher than the steel products manufactured by other Asian countries such as Japan, Korea, Taiwan, Malaysia etc. Less than 2% of SXSW's products were exported in 1994. (Q.1.4)
- With strong technical expertise and advanced manufacturing 1.5 technology, SXSW has kept on upgrading its production At present, SXSW is installing an annual facilities. 300,000-ton model steel and round bar production line, importing a newest continuous rolling mill from Pomini Company of Italy and an electronic automatic control system from ABB Company of Sweden, which are expected to start production in 1995. SXSW is committed to satisfying its customers with products of more variety and higher quality. (Q.1.5)

### Section 2: Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 SXSW has been a wholly state-owned enterprise before and after 1992. There is no plan to transform into a shareholding enterprise in the next five years because it is the government policy to keep a macroeconomic control over the steel industry in China. (Q.2.1)
- 2.2 SXSW is neither a holding or subsidiary enterprise. (Q,2,4)

- 2.3 Under the General Manaer, who has an Enterprise Management Office, the organisation structure of SXSW can be divided into the following four divisions: (Q.2.3, 5 & 9)
  - Production Division (Deputy-GM)
    - Production Planning Department (Deputy-Chief Economist\*)
    - 1.2 Production Technical Department (Deputy-Chief Engineer\*)
    - 1.3 Quality Control Department
    - 1.4 No.1 Refine Rolling Factory#
    - No.2 Refine Rolling Factory# 1.5
    - No.3 Rolling Factory# No.1 Steel Factory# 1.6
    - 1.7
    - 1.8 No.2 Steel Factory#
    - 1.9 No.3 Steel Factory#
    - 1.10 No.4 Steel Factory#
  - (2) Operation Division (Deputy-GM)
    - 2.1 Operation Planning Department
    - 2.2 Purchasing Department
    - 2.3 Sales Department
    - Accounting & Finance Department (Deputy-Chief 2.4 Accountant\*)
    - 2.5 Internal Audit Department
  - (3) Support Division (Deputy-GM)
    - Repair & Maintenance Department
    - Energy Supply Department (electricity, gas & water
  - (4) Administration Division (Deptuy-GM)
    - 4.1 Personnel Department
    - 4.2 Manpower & Wages Department
    - General Affairs Department 4.3
      - 4.3.1 Education & Training
      - 4.3.2 Safety & Security
      - 4.3.3 Estate & Quarters
      - 4.3.4 Medical
  - \* The deputy chiefs are one rank lower than the depty general managers.
  - # Each production factory has a few production sections, support sections, 1 repair and maintenance section and 1 administration section (including personnel, wages, accounting and statistics).
  - @ All the production factories and service departments are treated as cost centres.

- 2.7 SXSW is under the administration of the Shanghai Municipal Government and the Shanghai Metuallurgy Bureau who dictated all planning and control systems of SXSW before 1992. Since the economic reforms started in 1979, instead of dictatorship from the authorities, the top management of SXSW have been involved in the 5-year long term plan even though SXSW for most of the time had to take the directives from and give in their negotiations to these two authorities. (Q.2.6 & Q.2.7)
- 2.8 SXSW is a medium SOE having 5,600 employees (4,000 workers) and 1,800 retired employees. Mr Huang has said that about 20% of SXSW's employees are redundant but the life-long employment concept still exists. (Q.2.10)

# Since SXSW is neither a holding nor a subsidiary enterprise, questions Q.2.2, Q.2.8 and Q.2.11 are not applicable to SXSW.

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### Section 3: Financial Indicators (Q.3.1-8#)

3.1 Total assets 500M (historical cost) (Q.3.1) : RMB

3.2 Turnover : RMB 946M (1992) RMB1,335M (1993)

RMB1,236M (1994) \*

RMB1,300M (1995 forecast) (Q.3.2 & 7)

\* The 7.4% decrease in turnover (including 17% of VAT) was mainly due to the government macro-economic control policies (i.e. contraction of certain industries and availability of capital) and keen competition under the market economy.

3.3 Income before tax: RMB 15M (1992) - 1.6% of sales RMB 19M (1993) - 1.4% of sales (1994) - 1.1% of sales# RMB 13M

RMB 10M (1995 forecast) (Q.3.5, 6 & 7)

# The decrease in net profit margin was mainly due to reduced selling prices (affected by cheaper imported products) and high inflation (affected the cost of production). Another reason to cut selling prices was to reduce inventory and obtain cash to repay the long-outstanding creditors. Contrary, SXSW had a total of doubtful debts (accounts receivable) of RMB200M at the end of 1994.

3.4 Income tax rate : 33% (before and after 1992) (Q.3.6)

- 3.5 SXSW is planning to maintain an average growth rate in turnover from 10% to 20% during 1996 to 2000. Mr Ni is quite optimistic on this forecast since the overall demand of iron and steel products is in parallel with the uprising trend of the economic development in China. (Q.3.7 & 8)
- # Q.3.4 is not applicable to SXSW because it is neither a holding nor a subsidiary enterprise.

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### Section 4: Econmic Responsibility Contract System (ERCS) (0.4.1-13)

- 4.1 SXSW signed the first 5-year's (1989-1993) ERC with the Shanghai Municipal Government in 1983. (Q.4.1)
- 4.2 The major target set in the ERC was income before tax of RMB2.4 million in the first year and then an annual compound growth rate of 5%. (Q.4.2-4 & 6)
- 4.3 There were different forms of ERCs for the state-owned enterprises to choose from and which had different financial and non-financial targets. The chosen format was mutually agreed between the government and SXSW. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. Mr Ni believed that the growth rate of 5% was underestimated and proved by the actual results subsequently. (Q.4.5,7-10)
- 4.5 The ERC was ceased at the end of 1993. Since 1994, SXSW has been subject to income tax of 33%. (Q.4.5, 9, 12 & 13)

### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Very High-High Corporate
  (1)" before 1992 to "Medium Corporate (2.1)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 7 production factories were "cost centres" managed by the factory managers. All the other management and service departments were "expense centres" under tight expense budgets.
- After 1992: the 7 production factories are independent responsibility centres that are run by individual factory managers with clear lines of responsibility.

Corporate Planning Influence\* : "Very High-High (1)" to "High-Medium (2)"

\* By using a 5-point scale -Very High Greatest Influence (0) (consistent with the scale High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0	-	0.5)
Very High-High	[VH-H]	(0.6	_	1.0)
High	[H]	(1.1	_	1.5)
High-Medium	[H-M]	(1.6	_	2.0)
Medium	[M]	(2.1	-	2.5)
Medium-Low	[M-L]	(2.6	-	3.0)
Low	[L]	(3.1	_	3.5)
Very Low	[VL]	(3.6	_	4.0)

### (2) Decentralization (Q.5.1.2)

Before 1992: the factory managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.

Therefore, classifying the factories into cost centres were appropriate.

After 1992: it goes further in decentralising responsibility such as initiating the annual budget or internal responsibility contract and setting up of sections within individual factory. The production, manpower and cost control responsibilities lie with the factory managers.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

### (3) Appointment (Q.5.1.3)

Before 1992: the general manager and party secretary were appointed by the government, and some senior appointments and major organisational changes required government's approval.

After 1992: the general manager and party secretary are still appointed by the government. The general manager can appoint all the other senior staff such as the factory managers. The factory managers can decide their own organisation structures and personnel affairs but important changes should be approved by the headquarters.

Corporate Planning Influence: "High (1)" to "Medium (2.5)"

Interdependencies (Q.5.1.4)

Before 1992 : the internal transfer prices and quantities were determined by the top management by using standard

cost without any profit margin.

After 1992 : same as before 1992 but discussions and comprises are allowed for the factories in concern.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

Summary of Corporate Planning Factors	Influence Before 19		After 1	992
Responsibility Centre Decentralization Appointment Interdependencies	High . VH-H	(1.0) (1.5) (1.0) (0.5)	Medium Medium	•
Overall Planning Influence	VH-H	(1.0) =====	Medium	(2.1)

- 5.2 Review Process (Planning & Budgeting) [Planning Influence changed from "High Corporate (1.3)" before 1992 to "Medium-Low Corporate (2.6)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992 : long-term planning was initiated, monitored, reviewed and modified by the government while the top management was in consultation only. annual budgeting process was initiated by the top management but sanction should be required after discussion with the government.
- After 1992: the government has delegated the long term planning and annual budgeting autonomy to the top management but Mr Ni has said that strategic plans still have to be reviewed, discussed and modified with the government.

Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992 : formal planning committee and procedures were in existence to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management was limited.
- After 1992: more formal and rigorous processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the top management to the factory managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (3) Participation (Q.5.7.6-8)
- Before 1992 : long term planning was a top-down process but middle management (i.e. factory managers) did participate in the annual planning & budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.
- Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"
- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the government reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management quarterly but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: Long term plans are reviewed by the top management during every year end and significant changes should be discussed with the government and informed the employees during the AGM. The annual budgets are reviewed monthly between the top and middle management and amendments can be made but flexible budgets are not used.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992	
Central Planning Operation Participation Review & Communication	VH-H (1.0) High (1.5) VH-H (1.0) High (1.5)	Medium (2.5) M-L (3.0) Medium (2.5) Medium (2.5)	
Overall Planning Influence	High (1.3)	M-L (2.6)	

5.3 Strategic Themes, Thrusts & Suggestions
[Planning Influence changed from "High Corporate (1.3)"
before 1992 to "Medium Corporate (2.3)" after 1992]

- (1) Themes (Q.5.2.4-7\*)
- Before 1992: the following 3 strategic themes have always been promulgated as the spirit of the enterprises -
  - (1) Unity of all the employees
  - (2) Truthfulness to customers, employees and other outsiders
  - (3) Innovation of product and management quality
- After 1992: as before 1992 and the factory managers are encouraged to make strategic or tactical suggestions to realise these themes and thrusts in both short and medium term i.e. suggest capital investment projects.

Corporate Planning Influence: "High (1.5)" to "Medium (2)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: technological improvement (long and short term), efficiency enhancement and capacity expansion are the strategic thrusts emphasized in the planning process. There have been significant manufacturing technology and production efficiency advancement since the late 1980s by importing new plants and machines form the Eruopean countries and the USA.

These production facility renovations have always been receiving top priorities in the capital appropriation budget which is formed an integral part of the anual planning exercise.

Ater 1992: the following 4 strategic thrusts are spelt out by some means i.e. brochures and noticeboards:

- (1) adjust product mix according to market needs
- (2) enhance the product qualtiy
- (3) develop new products
- (4) develop existing and new markets

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, transfer price, personnel, incentive scheme, sales and marketing etc.

After 1992: the headquarters has left more freedom to the factory managers to adjust their planning and operation as long as they would not deviate much from the long term plan and annual budget.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Factors	Before 1992	After 1992	
Theme Thrust Suggestions	High (1.5) High (1.5) VH-H (1.0)	Medium (2.5) Medium (2.5) H-M (2.0)	
Overall Planning Influence	High (1.3)	Medium (2.3)	

- 5.4 Long-Term Plans
  [Planning Influence changed from "High Corporate (1.4)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes suggested by the government. Since the 1980s, top management participated in the long term planning discussions with the government in terms of production facilities, volume and mix, right to export, product and market development.
- After 1992: the top management has to initiate its own long term plans and compromise with the government who may insist on certain macro-targets such as output volume and mix. The current 5-year planning (1991-1995), includes product differentiation and diversification, production technology and facility enhancement, production capacity expansion, market penetration and diversification, manpower and training, cost reduction, merger and takeover, plant relocation and computerisation.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the government to formulate, evaluate, implement, monitor and review the long term plans. It was a mean for the government to allocate limited resources, such as capital, to SXSW according to the central plans.
- After 1992: formal planning committee and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. It is a way for the top management to allocate limited resources to different divisions according to the market demand, product profitability and government suggestions.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the long term plans were compromises between the local government and the SXSW without any involvement from the middle management of the factories.

After 1992: long term plans are formulated through substantial analysis, evaluation and discussion among the top management and the senior staff of the production factories. Mr Ni anticipates that ist is very difficult to formulate the 1996-2000 plan because of a lot of fast-changing external factors such as macro-economic control, market economy, enterprise reform, credit control and doubtful debts.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992: 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the planning committee reviews the 5-year plan every year before the annual planning cycle and significant changes are reported to the government for endorsement and sometimes assistance such as seeking a long term bank loan. A summary of the long term plans is distributed to all members of the planning committee.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	High High High VH-H	(1.5) (1.5) (1.5) (1.0)	Medium Medium Medium H-M	(2.5)
Overall Planning Influence	High	(1.4) =====	Medium	(2.4)

<sup>\*</sup> The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because SXSW caters for the capital budgets during the long term planning exercise.

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Medium-Low Corporate (3)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992: the government involved in the process and provided major economic targets. The top management had to negotiate and compromise for approval.
- After 1992: both the mechanism transformation legislation and the market economy have given SXSW more freedom to plan ahead. The municipal government and bureau have almost completely devolved the short-term planning autonomy to SXSW, except to agree on the profit targets as agreed in the ERC.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management initiated the key budgets i.e. sales production volume and mix, labour and materials, then compromised with the factory managers.

  Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different profit and cost centres.
- After 1992: top management provided major guidelines to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins. Long term plans, special projects, product demands and profitability are considered in this annual resource allocation exercise.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (3) Participation (Q.5.5.3 & 5)
- Before 1992: middle management i.e. factory managers had to discuss and compromise the budgets suggested by the top management without much rooms for negotiation and effective communication.

After 1992: factory managers have to formulate their own budgets and get the lower management involved but top management's expectations should be observed. This change of budgeting style maintains better understandings between the different levels of management at least to work out a set of more realistic budgets which are acceptable by the factories and departments to be measured against.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

(4) Review & Communication (Q.5.5.6 & 8)

Before 1992: annual plans and budgets were reviewed in the middle of the year and amendments were seldom made except under significant environmental changes.

Annual plans were communicated to middle and lower management in document twice every year.

After 1992: planning committee reviews the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors. A fixed budget concept is still in force. Other than AGM and budget book, the budget information is further communicated between top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence:

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	High High High H-M	(1.5) (1.5) (1.5) (2.0)	M-L M-L M-L M-L	(3.0) (3.0) (3.0) (3.0)
Overall Planning Influence	H-M ======	(1.6)	M-L =====	(3.0) ======

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: major targets set were production volume and mix, and standard costs while qualitative targets such as safety, quality, resource consumption etc. were also defined. Since most of these targets were top down without much negotiations, therefore, factory or department managers did not have much control. The IRC system was started in 1988 and mainly applied to the production factories.
- After 1992: major targets are output volume, product quality, input/output ratio, cost of production, safety, energy consumption and new product success. These targets are all linked up with the quarterly bonus determination. A sample of IRC is shown in section 5.6 of the Data Analysis Set 15.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: factory managers negotiated and compromised the targets suggested by the top management during the annual planning cycle.
- After 1992: the IRCs are initiated by the factory managers during the budgeting process. After back and forth discussions and negotiations with top management, the IRCs are agreed and signed by the general manager and factory managers.
- Corporate Planning Influence: "High (1.5)" to "Low (3.5)"
- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: IRCs were reviewed in the middle of the year and amendments could be made when mutually agreed by the top management and factory managers. IRCs were

documented and informed to the respective factory managers and their employees.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. Second-tier IRCs are signed between the factory manager and production lines in order to further delegate the planning and control responsibilities. Mr Ni agreed that IRC was an effective way to achieve the short term targets on one hand and improve the budget communication between the different levels of management on the other hand. Furthermore, IRC can link up performance with the incentive scheme as a fair means for resource (i.e. bonus) distribution.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

#### (4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the factory managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Target Bias Participation Review & Communication Incentive	High	(1.5)	M-L	(3.0)
	High	(1.5)	Low	(3.5)
	H-M	(2.0)	Low	(3.5)
	High	(1.5)	M-L	(3.0)
Overall Planning Influence	H-M	(1.6)	Low	(3.3)
	======	======	=====	======

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "Very High-High Corporate
  (0.7)" before 1992 to "High Corporate (1.5)" after 1992]
- (1) Characteristics (Q.5.9.1-7)

  Before 1992

  1.1 Interdepen- All 7 production
  dencies factories involved factories involved

  1.2 Transfer Standard cost
- 1.2 Transfer Standard cost Standard cost Price Basis
- 1.3 Transfer Price A little between the Negotiation buyer and seller are allowed
  1.4 Intermediate Buy and sell available Product in the market available in market
- 1.5 Transfer All determined by the Excess over quota can sell externally
  1.6 Arbitration Prices and quantities Mainly determined by all determined by HQ HQ although negotia-
- ions are allowed

  1.7 Government No, except the output No, only suggest
  Interference volumes & selling volumes & prices of prices of final products

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

- (2) Participation (Q.5.9.8)
- Before 1992: nearly all the transfer prices and quantities were determined by the headquarters and the factory managers were consulted sometimes. Any conflicts were arbitrated by the headquarters. Factory managers didn't care much because they were measured by production volume & cost.
- After 1992: most of the transfer prices and quantities are still controlled by the headquarters although some negotiations are allowed for the factory managers although they are treated as cost centres.

  Interference from and arbitration by the the headquarters are quite often. Mr Ni said that it was because the demand and supply of steel products in the market have been quite volatile in the 1990s, so the headquarters, having more information, could make better decisions on transfer quantities and prices.

Corporate Planning Influence: "Very High (0.5)" to "High (1.5)"

#### (3) Review (Q.5.9.9-12)

Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management. It was historical cost plus inflation. The transfer prices were reviewed in the middle of the year and some amendments were allowed

After 1992: the standard costs are still used to determine the transfer prices during the annual planning exercise when the middle management is consulted. Material consumption and cost controls are crucial in order to avoid unfairness in internal transfers. The transfer prices were reviewed quarterly and some amendments were allowed when necessary.

Corporate Planning Influence : "Very High-High (1)" to "High (1.5)"

# Summary of Corporate Planning Influence :

Factors	Before 1	L992	After 1	L992
Characteristics Participation Review	VH VH VH-H	(0.5) (0.5) (1.0)	High High High	(1.5) (1.5) (1.5)
Overall Planning Influence	VH-H	(0.7)	High	(1.5)

\_\_\_\_\_\_\_

## Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Financial (2)" after 1992]

		======	=====	======	=====
		High	(1.5)	Medium	(2.1)
1.4	Interactions	Medium	(2.5)	M-L	(3.0)
1.3	Roles & functions	H-M	(2.0)	M-L	(3.0)
1.2	Staffing	VH-H	(1.0)	High	(1.5)
	Structure	VH	(0.5)*	VH-H	(1.0)
		Before	1992	After 1	L992
(1)	Organisational Design				

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strategi	C<			-Tight	Financial
Control				Contro	1

Tight Financial	(0.0	-	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	_	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	-	4.0)

# (2) Personnel# (Q.6.1.1)

		Before 1992	After 1992
2.1	Recruitment	VH-H (1.0)	H-M (2.0)
2.2	Assignment	H-M (2.0)	M-L (3.0)
2.3	Training	Medium (2.5)	Low (3.5)
2.4	Evaluation	H-M (2.0)	M-L (3.0)
2.5	Remuneration	H-M (2.0)	M-L (3.0)
2.6	Termination	VH (0.5)	VH-H (1.0)
		H-M (1.7)	M-L (2.6)
•			=========

# Mr Ni said that since 1992, more delegation has been given to the factory managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the headquarters and the party secretary.

		=====	======	=====	=====
		VH-H	(0.9)	High	(1.3)
3.5 3.6	Qualitative targets Communication*	High VH	(1.5) (0.5)	High VH-H	(1.5) (1.0)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	High	(1.5)
3.2	IRC	VH	(0.5)	VH-H	(1.0)
3.1	Budget	VH	(0.5)	VH-H	(1.0)
		Before	1992	After	1992
(3)	Control Mechanisms (Q.	6.1.2-3,	Q.6.4.8)		

\* The control mechanisms are clearly communicated to the factories and departments through the annual plan, IRC and other enterprise policies, rules and regulations. Mr Ni said that the control style has not been changed so much mainly because of the government's macroeconomic influence and many uncertainties existed in the market.

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Organisational Design Personnel Control Mechanisms	High H-M VH-H	(1.5) (1.7) (0.9)	Medium M-L High	(2.1) (2.6) (1.3)
Overall Control Influence	High	 (1.4) =====	H-M ======	(2.0)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1.0)" before 1992 to "Moderate Financial (2.0)" after 1992]

Factors affecting the types and styles of control mechanisms:

		=========		=====	=====
		VH-H	(1.0)	H-M	(2.0)
	on setting targets	VH	(0.5)	M-M 	(2.0)
(6)	Manangement influence		( a )		(0.0)
(5)	Financial vs non- financial targets	High	(1.5)	H-M	(2.0)
	the targets	VH-H	(1.0)	H-M	(2.0)
(4)	Timeframe Stretch built into	VH-H	(1.0)	H-M	(2.0)
(3)	Achieving targets		(4.0)	** **	(0.0)
(2)	targets	VH-H	(1.0)	H-M	(2.0)
(2)	targets Objective vs subjective	VH-H	(1.0)	H-M	(2.0)
(1)	Precision & detail of	DCIOIC .			
		Belore .	1992	Alter	L992

- 6.3 Monitoring Results
  [Control Influence changed from "Tight Financial (0.9)"
  before 1992 to "Financial (1.1)" after 1992]
- (1) Reporting Requirements# (Q.6.3.1-3)
  Factors considered by the headquarters in management control

		======	=====	======	=====
		VH-H	(0.7)	High	(1.3)
	•				
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.7	Authorization	VH	(0.5)	VH-H	(1.0)
1.6	Evaluation	VH	(0.5)	VH-H	(1.0)
1.5	Review	VH	(0.5)	VH-H	(1.0)
1.4	Compilation	VH	(0.5)	VH-H	(1.0)
1.3	Contents	VH	(0.5)	VH-H	(1.0)
1.2	Frequency	VH	(0.5)	VH-H	(1.0)
1.1	Policy	VH	(0.5)	VH-H	(1.0)
	÷	Before	1992	After 1	L992

# Mr Ni has mentioned that the monthly condensed report format is unique for each factory. The actuals are compared with the budgets or IRCs. Any variances plus or minus 5% will be highlighted in order to bring the attention to the factory managers and the top management. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

## (2) Performance Measurement (Q.6.4.1-2)

Before 1992: since 1990, production factories have been measured on economic, quality, R&D, management and political targets as shown in section 6.3 of Data Analysis 15

After 1992: same types of targets are measured but Mr Ni said that financial indicators such as internal profit, sales and inventory had been emphasized in order to meet the overall economic target as expected by the top management and government.

Corporate Control Influence: "Very High-High (1)" to "Very High (0.5)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the planning committee holds a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings. Middle management has been involved in determining the measurement criteria during the annual planning process.

Corproate Control Influence : "Very High-High (1)" to "High (1.5)"

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Reporting Requirements Performance Measurement Review & Communication	VH-H VH-H VH-H	(0.7) (1.0) (1.0)	High VH High	(1.3) (0.5) (1.5)
Overall Control Influence	VH-H	(0.9)	High	(1.1)

# 6.4 Rewards & Incentives [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Incentives\* (Q.6.5.1-7,15-16,22-23) Before 1992 After 1992 Medium (2.5) 1.1 Basic wages VH-H (1.0)(2.0)(1.5)H-M1.2 Allowances High VH-H (1.0)1.3 Bonuses - monthly VH (0.5)Medium (2.5) Bonuses - annual (2.0)1.4 H-MH-M (2.0)1.5 Other benefits VH-H (1.0)(1.0)VH-H 1.6 Pension VH (0.5)(2.0)1.7 Recognition (intangible) VH-H (1.0)H-MRedundancy# H-M(2.0)Low (3.5)1.8 H-M (1.9) (1.4) High ========= ========= \* Since 1994, a "pointing system" has been using to determine the basic wages. The points are calculated based on grade, seniority, qualification, technical skill and supervisory duty etc. The total point or score of individual employee will be multiplied by a "wages per point" factor which is adjusted according to the financial performance of the enterprise as a whole on a monthly basis. Mr Ni said that in the past, the increments from year to year are not substantial and the parity between a factory manager and a front-line worker is not great. Now this pointing system can differentiate the basic rewards between different types of works and employees.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once in each year to combat inflation. The second part is decided by the SXSW which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the top management and the factory management decides what level of group bonus will be given to the factory. Whereas, the second-tier IRCs agreed between a factory manager and his production lines are used as a basis to distribute that total amount of group bonus to the respective production lines. In turn, it is up to a production line supervisor to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well.

# According to Mr Ni's comment, about 15% employees in SXSW are redundant. But it is quite difficult to lay off these redundant staff because insufficient employment welfare and benefits have been established in China. One way to alleviate this problem is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the SXSW's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 50% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was almost impossible.
- After 1992: bonus is mainly determined according to IRCs and accounts for 40%-45% of total wages. Basic wages has been increased and increments take skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. Laying off redundant employees is possible but still difficult.

Corporate Control Influence: "Very High (0.5)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances , pension and other benefits were decided by the headquarters and government.
- After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (4) Review & Communication (Q.6.5.8,13-14,20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees every month via the factory or department managers.

After 1992: IRC's targets are subject to situation and negotiation very year. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the factory or department managers.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Incentives Performance Orientation Participation Review & Communication	High VH VH-H VH-H	(1.4) (0.5) (1.0) (1.0)	H-M High H-M H-M	(1.9) (1.5) (2.0) (2.0)
Overall Control Influence	VH-H	(1.0)	H-M =====	(1.9)

# Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Xinhua Iron & Steel Works (SXSW) belonged to before and after 1992.

Planning Influences	Before 1992	After 1992
Organisation Structure*	Very High to High (1.0)	Medium (2.1)
Review Process*	High (1.3)	Medium to Low (2.6)
Strategic Themes, Thursts and Suggestions*	High (1.3)	Medium (2.3)
Long-Term Plans* (Resource Allocation)	High (1.4)	Medium (2.4)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium (1.6)	Medium to Low (3.0)
Internal Responsibility Contracts#	High to Medium (1.6)	Low (3.3)
Management of Inter- dependencies*	Very High to High (0.7)	High (1.5)
Overall Planning Influence	High (1.3)	Medium (2.5)
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.4)	Moderate Financial (2.0)
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (2.0)
Monitoring Results*	Tight Financial (0.9)	Financial (1.1)
Rewards & Incentives*	Tight Financial (1.0)	Moderate Financial (1.9)
Overall Control Influence	Financial (1.1)	Moderate Financial (1.8)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence
Initiaence	Strategic   Financial
High (	Strategic Programming 0 Financial Programming 0
н/м	X
Medium2	
M/L	0
Low 4	Strategic Control 4 Financial Control 4
0 (1.8, 2.5)	) - SXSW Post-1992 X (1.1, 1.3) - SXSW Pre-1992

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Xinhua Iron & Steel Works (SXSW) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

9 July 1995

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 16

Report Date : 29 July 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 16" (7 April 1995).

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### Name of SOE: Guangzhou Lonkey Industrial Co. Ltd. (GLIL)

Staff Interviewed : Miss Huang Yan Qing/Finance Manager

(No. of years in this enterprise : 9 years)

Dates of Visits : First Visit - 29 October 1993

Second Visit - 1 April 1994 Third Visit - 12 August 1994

## Section 1 : History & Background (Q.1.1-5)

1.1 The origin of GLIL was Guangzhou Chemical Oil Refinary Factory which was a wholly state-owned enterprise established in 1959. Since then, the company's name has been changed three times. 1993 was a critical turning point of GLIL since the Guangzhou municipal government approved Lonkey as one of the first four state-owned enterprises in Guangzhou to issue shares to the public and list in the Shenzhen Stock Exchange. This breakthrough has brought GLIL more capital for future development and higher autonomy in operation and management. (Q.1.1)

- 1.2 GLIL is one of the largest cleaning consumables manufacturers in China. Lonkey was ranked in the top 500 Chinese Industrial enterprises in the years of 1990, 1991 and 1992. The current plant site is located at the Eastern suburb of Guangzhou city occupying a total area of 100,000 square metres. The production capacity is able to manufacture over 50 product types of 100,000 tons of washing powder (clothing), 10,000 tons of soap and 20,000 tons of liquid detergent. The total output quantity was 103,331 tons in 1992 and 120,000 tons in 1993. (0.1.2)
- GLIL is manufacturing the following 3 major categories of 1.3 products: (Q.1.3)
  - (1)Washing Powder
    - Ordinary Type Condense Type 1.1
    - 1.2
    - 1.3 BIO Special Type
  - (2) Detergent Liquid
    - 2.1 Kitchen Use
    - 2.2 Bathroom Use
    - 2.3 Toilet Use
    - 2.4 Glass Use
    - 2.5 Matal Use
    - 2.6 Fabric Softener
    - 2.7 Fabirc Pre-wash
  - (3) Bathing Consumables
    - 3.1 Soap
    - 3.2 Foam Bath
    - 3.3 Shampoo
    - 3.4 Hair Conditioner
- Other than the domestic sales (95%) to various provinces and cities, GLIL has been approved the "import and export right" to sell its products to North America, Western Europe, Africa, Middle East, Hong Kong, Macau and other Sotheast Asian countries. (Q.1.4)
- 1.5 After the transformation into a listed public company in 1993, the growth rates of output value, turnover and income before tax were increased to 25%, 34% and 43% respectively. The joint-venture with P&G of the USA since 1993 would further increase the business volume and profit level in the next five years. (Q.1.5)

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# Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 GLIL has been a wholly state-owned enterprise since 1959 and it was converted into a shareholding enterprise and listed in the Shenzhen Stock Exchange on 8 November 1993 by issuing 15% of the authorized shares to the employees and 25% to the general public. The local government is the majority shareholder by holding 60% of the shares. A total of RMB140 million of share capital was raised to finance a series of long term projects. (Q.2.1 & 2.2)
- 2.2 GLIL is neither a holding nor subsidiary enterprise. (Q.2.4)
- 2.3 Under the Board of Directors, the organisation structure of GLIL is based on functional basis led by the General Manager who has a General Manager Office. (Q.2.3)
- 2.4 The organisation structure is listed as follow: (Q.2.5 & 2.9)

Board of Directors\*:
Chairman (also the General Manager)
Vice-Chairman (also the Party Secretary)
Directors - 3 Deputy-General Managers
Chief Engineer
Labour Union Representative

\* The terms of the chairman is usually 5 years. The board of directors usually hold a meeting every month.

Factory Management : Production Department (Deputy-GM) No.1 Washing Powder Factory\* 1.2 No.2 Washing Powder Factory\* 1.3 Soap Factory\* @ 1.4 No.1 Liquid Detergent Factory\* @ No.2 Liquid Detergent Factory\* Energy & Power Factory\* Production Planning Department (2) Technical Support Department (3) (Chief Engineer) Engineering Department\*\* (4)(5) Research Department Quality & Inspection Department (6) Marketing Department (7) (Deputy-GM) (8) Sales Department (9) Import & Export Department (10) Purchasing Department (11) Finance Department (12) Personnel Department (13) Security Department (Deputy-GM) (14) Party & Labour Union Office (15) Employee's Collective Companies#

15.1 Repair & Maintenance Service Company

- 15.2 Transportation Service Company
- 15.3 Industrial Trading Service Company
- 15.4 Packaging & Container Service Company
- 15.5 Human Resource Service Company
- (16) Branch Office in Hong Kong##
- \* The five production factories and the supporting factory are all treated as profit centres having a factory manager, a deputy manager, a few supervisors, technicians and clerical staff. There are three 8-hour production shifts in each factory. Each shift has a leader, deputy leader, group leaders and workers who are all concerning the production target setting very much. They all have entered into Internal Responsibility Contracts (IRCs) with the Factory General Manager on an annual basis.
- \*\* Mainly provides spare parts, repair and maintenance services.
- @ The Soap Factory and No.1 Liquid Detergent Factroy were transferred into a joint-venture with the P&G Corporation of the USA in 1994. Therefore, they have become a separate legal entity and their IRCs were ceased in the same year. Their products are sold back to GLIL for selling to the end-users.
- # The five employee's collective companies are separated legal entities formed and managed by some GLIL's employees. In order to support the formation of these servicing or "tertiary enterprises", GLIL has charged them the rent of premises and other facilities including energy and power provided. They are providing various suporting services to the production factories and other departments of GLIL. They are free to sell their services to outside customers. However, they are formally included in the organisation structure of GLIL.
- ## The branch office in Hong Kong is responsible for importing raw materials (subject to 7% custom duties) for production in Guangzhou and exporting some final products to overseas countries.
- 2.5 GLIL is under the administration of the Guangzhou Light Industrial Bureau. In responding to and implementing of the "SOE Operation Mechanism Transformation Regulations" enacted by the People's Congress in July 1992, the bureau has delegated the planning and control responsibilities to the top management of GLIL to run their own business. Furthermore, the investment autonomy has been delegated and raising capital for project investment can be arranged by GLIL on its own.

The roles played by the Bureau are appointing the chief executives (i.e. chairman, general manager and party secretary), reviewing major capital investment projects and supplying information on government policies. (Q.2.6 & 2.7)

2.6 GLIL is a medium size SOE having 1,450 full-time (including 1,000 workers) and 500 retired employees. All the employees have signed employment contracts with duration from one to ten years since 1993. (Q.2.10)

# Since GLIL is neither a holding nor a subsidiary enterprise, questions Q.2.8 and Q.2.11 are not applicable to GLIL.

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## Section 3: Financial Indicators (Q.3.1-8#)

- 3.1 Total assets : RMB 279M (1993)\* (Q.3.1)
  - \* The total assets (fixed + current) have been revaluated once when changing into shareholding in November 1993.
- 3.2 Turnover : RMB 397M (1992) RMB 530M (1993) RMB 610M (1994)# (Q.3.2 & 3.7)

# The slow down of sales growth was due to keen competition of this industry in Guangzhou and Shenzhen with foreign invested joint-ventures such as from Hong Kong. In addition, the effects of macro-economic control policies implemented by the government in July 1993 was surfaced out in 1994 and 1995.

- 3.3 Income before tax: RMB 30M (1992) 7.6% of sales (Q.3.5, 6 & 7) RMB 43M (1993) 8.1% of sales RMB 44M (1994) 7.2% of sales@
  - @ In light of high inflation in Guangzhou (30% in 1993 and 20% in 1994), GLIL's profit margin was declined significantly in 1994. However, GLIL is subject to some limitations from the government in raising the selling prices because its products are daily necessities for the general public.
- 3.4 Income tax rate : 55% (before November 1993) 15% (from November 1993) + (Q.3.6)

- + Since GLIL is a shareholding enterprise located in one of the 14 economic development cities, it can enjoy a reduced income tax rate of 15% instead of 55% (before 1994) or 33% (from 1994) applied to the other state-owned enterprises. Furthermore, the VAT is 17% instead of the previous sales tax of 14% and as result, the turnover tax has been increased by 0.5% as from 1993.
- 3.5 GLIL is expecting a continuous growth of turnover in the range of 10% to 30% in the 1990s. This financial objective is feasible since the P&G joint-venture can bring in production, marketing and management technologies among the other benefits as well. (Q.3.7 & 3.8)

# Q.3.4 is not applicable to GLIL because it is neither a holding nor a subsidiary enterprise.

# Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 GLIL entered into the first 5-year (1986-1990) ERC with the Guangzhou Finance Bureau in 1986. (Q.4.1)
- 4.2 Based on the profits of the previous three years and substiantial negotiation, the first year target profit was set at RMB14.55 million with an annual growth rate of 5%. The income tax for the target profit level was 55% and any excess profit over the target would be split 25/75 between the government and GLIL. An example is shown in section 4 of Data Analysis 16. (Q.4.2-4 & Q.4.6)
- 4.5 The adoption of ERC seperated the management autonomy out from the government and defined the duties, rights and benefits between the government and the enterprise. It made GLIL to be really a self-operating, self-financing, self-developing and self-regulating enterprise and to initiate the motivation of the management and workers.
  - To facilitate the attainment of the above targets, GLIL has set up regular meetings between the top and middle management; and also guidelines for decision-making procedures. As a result, GLIL achieved all the quantitative targets in all the 5 years. (Q.4.5, 9 & 10)
- 4.6 The top management did participate in the negotiation with the Finance Bureau in setting the above targets. The chosen terms were mutually agreed by both parties. (Q.4.7 & 8)

4.7 In 1991, GLIL signed the second 5-year (1991-1995) ERC with similar terms and conditions. This second ERC was terminated in November 1993 when GLIL was transformed into a shareholding enterprise and no profit target has been assigned since then. After changing into a shareholding enterprise, more autonomy has been delegated by the government to GLIL and almost all the policy and decision making are rest with the board of directors. (Q.4.12 & 13)

#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Medium-Low Corporate (3)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the 5 production factories and the supporting factory were "cost centres" managed by the factory managers. All the other management and service departments were "expenses centres" under tight expense budgets.
- After 1992: it went to some length in 1993 to convert the 5 production factories and the supporting factory into "profit centres" and "semi-profit centres" respectively managed by the factory managers with higher autonomy in management and operation. All the other management and service departments remain "expense centres" whose managers participate in the budgeting process.

Corporate Planning Influence\* : "High (1.5)" to "Medium-Low (3)"

Very High Greatest Influence \* By using a 5-point scale -(0) (consistent with the scale High (1) used in the questionnaire (2) Medium e.g. 5.4.4 to quantify Low (3) some of the parameters or Very Low (4)Least Influence variables)

Very High	[VH]	(0.0 -	0.5)
Very High-High	[VH-H]	(0.6 -	1.0)
High	[H]	(1.1 -	1.5)
High-Medium	[H-M]	(1.6 -	2.0)
Medium	[M]	(2.1 -	2.5)
Medium-Low	[M-L]	(2.6 -	3.0)
Low	[L]	(3.1 -	3.5)
Very Low	[VL]	(3.6 -	4.0)

- (2) Decentralization (Q.5.1.2)
- Before 1992: the factory managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) between the top management and factory managers. Therefore, classifying the factories into cost centres were appropriate.
- After 1992: the primary profit responsibility lies with the factory managers who initiate the annual budgets and IRCs and get their subordinates (middle and lower management) involved. Obviously, changing into profit centres is reasonable.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (3) Appointment (Q.5.1.3)
- Before 1992: the general manager and party secretary were appointed by the Bureau. The general manager could appoint the other senior staff and recommended major organisational changes for Bureau's approval.
- After 1992: the chairman and party secretary are appointed by the Bureau whereas the BOD can appoint the top top management such as the general and deputy managers. The general manager can appoint all the other senior staff such as the factory managers.

  The factory managers can suggest changes in organisation structure and personnel affairs to the general manager for approval.
- Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"
- (4) Interdependencies (Q.5.1.4)
- Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production without any profit margin. Some discussions are allowed for the buyers and sellers.
- After 1992: the transfer prices are based on the standard cost plus or market prices less discounts to provide for some profit margins. Most of the transfer prices setting are suggested by the Enterprise Management Office to the respective units for discussion and compromise.
- Corporate Planning Influence : "High (1.5)" to "Medium-Low (3)"
- Summary of Corporate Planning Influence:

Factors	ť	Before 1992		After 1992	
Responsibility Centre Decentralization Appointment Interdependencies		High High H-M High	(1.5) (1.5) (2.0) (1.5)	M-L M-L Low Medium	(3.0) (3.0) (3.5) (2.5)
Overall Planning Influence		H-M	(1.6) ======	M-L =====	(3.0)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "Medium Corporate (2.3)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: the Bureau reviewed, compromised and approved the long term plans initiated by the top management. The annual planning and budgeting processes have already been delegated to the top management but subject to review and modification by the Bureau.
- After 1992: both the long term and annual planning exercises are fully responsible by the board of directors although some strategic issues are still have to be discussed with the Bureau.
- Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"
- (2) Operation (Q.5.7.1-5)
- Before 1992 : formal planning meetings were held between the Bureau and top management to discuss and compromise the long term plans raised by latter. Formal and rigorous processes have been used for the annual planning and budgeting so that middle management started to be involved.
- After 1992 : long term plans are submitted to the Bureau for review and suggestions, whereas the annual plans or budgets are just sent to the Bureau for information Middle management have to initiated their budgets and get their subordinates involved.
- Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: middle management was only consulted in the long term planning process but they did participate in the annual planning and budgeting processes.
- After 1992: through the formal planning meetings, the middle management is involved in the formulation and review of the long term plans. They have to discuss with the lower management in compiling their own annual budgets and IRCs although some specific suggestions and directions are coming from the board and top management during the negotiation

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management quarterly but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the board and top management during year end and significant changes should be discussed with the Bureau and informed to the employees during the AGM. The annual budgets are reviewed monthly between the top and middle management and amendments can be made and notified to the lower management immediately.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After	1992
Central Planning Operation Participation Review & Communication	Medium Medium H-M H-M	(2.5) (2.5) (2.0) (2.0)	Low Low M-L M-L	(3.5) (3.5) (3.0) (3.0)
Overall Planning Influence	Medium	(2.3)	Low =====	(3.3)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: GLIL has been emphasizing that "quality" is the strategic theme or life of its products. It has been acquiring washing powder and soap production lines from Italy which are capable to generate world-class products.
- After 1992: the production processes have adopted a "quality rejection" system so that to guarantee that all passed outputs attain national or international standards.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: "product development" is a major strategic thrust focused by GLIL. Its research and development department is the most powerful cleaning consumable laboratory in the Guangdong province.
- After 1992 : quality assurance staff are sent out to sample inspect its products selling in the market and listen to the opinion of the consumers.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management always made suggestions on the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix in order to ensure the "profit before income tax" as agreed with the Bureau could be achieved.
- After 1992: after the promotion of the legislation in 1992, the top management still sometimes make suggestions on the above issues. Despite this fact, the top management has given more freedom to the factory managers and department heads to compile their own plans or budgets and to adjust their operations

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	High (1.5) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.5)	Medium (2.5)

# 5.4 Long-Term Plans

[Planning Influence changed from "High-Medium Corporate (1.8)" before 1992 to "Medium-Low Corporate (2.8)" after 1992]

- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of production facilities, volume and mix, product and market development.
- After 1992: the board of directors has to initiate its own long term plans and compromise with the Bureau who may insist on certain macro-targets such as sales and profit targets.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine feasible long term plans acceptable to both sides.
- After 1992 : formal planning meetings and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1991-1995), includes sources of capital, marketing & promotion, product and market development, production capacity, joint-venture, computerisation and diversification.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979 started to allow GLIL to participate in the 5-year's planning with the Bureau and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse
- After 1992: GLIL has to formulate their own long term strategic plans which are submitted to the Bureau for review and approval. Capital and finance required by some long term projects can be arranged by GLIL's board of directors and sometimes guaranteed by the Bureau

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992: 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the board of directors reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the Bureau for endorsement and sometimes assistance such as seeking long term bank loan.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After 1	992
Central Planning Operation Participation Review & Communication	High H-M H-M High	(1.5) (2.0) (2.0) (1.5)	Medium M-L M-L Medium	(3.0) (3.0)
Overall Planning Influence	H-M	(1.8) =====	M-L	(2.8)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because GLIL caters for the capital budgets during the long term planning exercise.

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "Medium Corporate (2.4)"
  before 1992 to "Low Corporate (3.5)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. sales and profit
- After 1992: top management has the full autonomy in the annual planning and budgeting processes which involve the middle management such as the factory managers.
- Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"
- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the factory managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different profit and cost centres.
- After 1992: after transforming into a shareholding enterprise, reference has also been made to the 5-year plan especially to estimate what the sales potential will be from the new product and market situation. Top management provides major guidelines to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (3) Participation (Q.5.5.3 & 5)
- Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.

After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

(4) Review & Communication (Q.5.5.6 & 8)

Before 1992: annual plans and budgets were reviewed quarterly and amendments were sometimes made when under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.

After 1992: top and middle management review the annual plans and budgets monthly and amendments are made due to unavoidable internal and external factors.

A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly general manager office meeting.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992	
Central Planning Operation Participation Review & Communication	Medium (2.5) H-M (2.0) Medium (2.5) Medium (2.5)	Low (3.5) Low (3.5) Low (3.5) Low (3.5)	
Overall Planning Influence	Medium (2.4)	Low (3.5)	

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High-Medium Corporate
  (1.8)" before 1992 to "Medium-Low Corporate (2.6)" after
  1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: the IRC system was started in 1986 and mainly applied to the production factories. The major quantitative targets were production quantities, mix and costs.

After 1992: IRC system has been extended to the supporting factory and other service departments. The major economic target set is internal profit and growth rate. The wages and bonus are linked up with the internal profit directly. Sample of IRC is shown in section 5.6 of the Data Analysis Set 16.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992 : factory managers had to compromised with the top management on the production and cost targets.
- After 1992: factory managers negotiate and agree the IRC targets with the top management during the annual planning cycle.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets agreed with the factory managers were reviewed quarterly and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed monthly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective factory managers and their employees.

Corporate Planning Influence: "High-Medium (2)" to "Medium (2.5)"

- (4) Incentive (Q.5.6.16)
- Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not fully initiated by the middle management.
- After 1992: both the economic and qualitative targets are linked up with the bonus determination, so both the factory managers and their subordinates are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After 1	1992
Target Bias Participation Review & Communication Incentive	High High H-M H-M	(1.5) (1.5) (2.0) (2.0)	Medium Medium Medium M-L	(2.5)
Overall Planning Influence	H-M ======	(1.8) =====	M-L ======	(2.6)

# 5.7 Management of Interdependencies (Transfer Pricing)

Since each of the five production factories of GLIL is independent in manufacturing its own products without any transfer to other factories, the transfer pricing is not applicable. The energy and power supplied by the supporting factory to the production factories or other departments are using "standard cost plus mark up" or "market price" as the transfer prices. Similarly, the transfer prices of the services provided by the five employee's cooprative companies are mainly market prices because they have the ability to render their services to the outside customers after they have satisfied the needs of internal users.

The transfer prices are mainly set by the headquarters, with the involvement of the accounting and finance department, and usually reviwed once every year during the annual planning process. The supplying and receiving departments would be consulted but without much room for negotiation in setting the IRCs.

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### Section 6 : Control System

6.1 Decentralisation & Control [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Strategic (2.1)" after 1992]

	High	(1.5)	Medium	(2.4)
Interactions	H-M	(2.0)	M-L	(3.0)
	_	•		1 1
	_	· · ·		•
Staffing	Hiah	(1.5)	H – M	(2.0)
Structure	VH-H	(1.0)*	H-M	(2.0)
	Before	1992	After 1	
Organisational Design			_	
		Structure VH-H Staffing High Roles & functions H-M Interactions H-M	Structure VH-H (1.0)* Staffing High (1.5) Roles & functions High (2.0) Interactions H-M (2.0)	Before 1992 After 1 Structure VH-H (1.0)* H-M Staffing High (1.5) H-M Roles & functions High (1.5) Medium Interactions H-M (2.0) M-L

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strateg	ic<			-Tight	Financial
Control				Contro	

Tight Financial	(0.0	_	1.0)
Financial	(1.1	_	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	-	4.0)

	=====	======	=========
	H-M	(1.6)	Midium (2.5)
Termination	Hign	(1.5)	H-M (2.0)
			Medium (2.5)
	H-M	•	M-L (3.0)
-	H-M	(2.0)	M-L (3.0)
	High	. (1.5)	Medium (2.5)
Recruitment	VH-H	(1.0)	H-M (2.0)
	' Before	1992	After 1992
Personnel# (Q.6.1.1)			
		Recruitment VH-H Assignment High Training H-M Evaluation H-M Remuneration High Termination High	Recruitment VH-H (1.0) Assignment High (1.5) Training H-M (2.0) Evaluation H-M (2.0) Remuneration High (1.5) Termination High (1.5)

# Miss Huang said that since 1992, more delegation has been given to the general managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the general manager and the party secretary.

		======	======	=====:	======
		High	(1.1)	High	(1.5)
3.6	Communication*	VH-H	(1.0)	H-M	(2.0)
3.5	Qualitative targets	VH-H	(1.0)	High	(1.5)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	High	(1.5)	VH-H	(1.0)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
		Before	1992	After	1992
(3)	Control Mechanisms (Q.	.6.1.2-3, Ç	(.6.4.8)		

\* The control mechanisms are clearly communicated to the factories and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

# Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.5) H-M (1.6) High (1.1)	Medium (2.4) Medium (2.5) High (1.5)
Overall Control Influence	High (1.4)	Medium (2.1)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Financial (1.1)" before 1992 to "Moderate Financial (2)" after 1992]

Factors affecting the types and styles of control mechanisms:  Before 1992 After 1992					
(1)	Precision & detail of				
	targets	VH-H	(1.0)	H-M	(2.0)
(2)	Objective vs subjective				
	targets	VH-H	(1.0)	H-M	(2.0)
(3)	Achieving targets				
	Timeframe	VH-H	(1.0)	H-M	(2.0)
(4)	Stretch built into				
	the targets	VH-H	(1.0)	H-M	(2.0)
(5)	Financial vs non-				
	financial targets	High	(1.5)	H-M	(2.0)
(6)	Manangement influence				
	on setting targets	VH-H	(1.0)	M-M	(2.0)
		High	(1.1)	H-M	(2.0)
		=======	======	=====	

# 6.3 Monitoring Results [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

Before 1992
After 1992

		======	=====	======	=====
	•	High	(1.1)	H-M	(1.8)
1.10	Computerization	High	(1.5)	Medium	(2.5)
1.9	Follow-up	High	(1.5)	H-M	(2.0)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.5			•		
	Review	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	H-M	(2.0)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.1	Policy	VH-H	(1.0)	H-M	(2.0)
		perore	1992	Arcer T	. フ フ ム

# Miss Huang has mentioned that the monthly condensed report format is unique for each factory. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the general manager. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production factories were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: production volume and internal profit are the major economic targets, however, more qualitative targets such as production technology, facilities and quality are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings.

Corproate Control Influence: "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Reporting Requirements Performance Measurement Review & Communication	High VH-H VH-H	(1.1) (1.0) (1.0)	H-M H-M H-M	(1.8) (2.0) (2.0)
Overall Control Influence	VH-H	(1.0)	H-M	(1.9)

# 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.1)" before 1992 to "Moderate Financial (2)" after 1992]

		======	======	======	=====
		High	(1.4)	H-M	(2.0)
1.8	Redundancy	Low	(3.5)	Medium	(2.5)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	VH-H	(1.0)	H-M	(2.0)
1.2	Allowances	VH-H	(1.0)	H-M	(2.0)
	Basic wages	VH-H	(1.0)	H-M	(2.0)
		Before		After 1	
(1)	Incentives* (Q.6.5.1-7,1	•	· · · · · · · · · · · · · · · · · · ·		

\* After transforming into a shareholding enterprise, GLIL has merged the basic wages and bonus together which is evaluated mainly according to the accomplishment of the IRCs for the production factories and supporting factory. The basic salaries of other non-production or servicing departments are based on grades and points on the scale.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Guangzhou municipal government at least once in each year to combat inflation. The second part is decided by the GLIL which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the factory manager decides what level of group bonus will be given to the factory. It is up to a factory manager to award that lump sum of group bonus to his or her individual subordinates. The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well.

One way to alleviate the redundant employees is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 40-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and combined with the basic wages. Wages and bonus to individual employees is according to seniority, post, skill and performance. The middle management can lay off the redundant employees with good reasons.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided

by the top management and government.

After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

underwritten by the government.

- (4) Review & Communication (Q.6.5.8,13-14,20-21)
- Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

  Pension and other benefits were seldom changed.

  Performance and reward were made known to employees every month via the factory or department managers

After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the factory or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Incentives Performance Orientation Participation Review & Communication	High (1.4) VH-H (1.0) VH-H (1.0) VH-H (1.0)	H-M (2.0) H-M (2.0) H-M (2.0) H-M (2.0)
Overall Control Influence	High (1.1)	H-M (2.0)

# Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Guangshou Lonkey Industrial Co. Ltd. (GLIL) belonged to before and after 1992.

\_\_\_\_\_ Before 1992 After 1992 Planning Influences \_\_\_\_\_\_ Organisation Structure\* High to Medium Medium (1.6) to Low (3.0)Review Process\* Medium (2.3) Low (3.3)Strategic Themes, Thursts and Suggestions\* High (1.5) Medium (2.5)Long-Term Plans\* High to Medium (Resource Allocation) Medium (1.8) to Low (2.8) Short-Term Planning/ Medium (2.4) Budgeting\* Low (3.5) (Resource Allocation) Internal Responsibility High to Medium Medium (1.8) to Low (2.6) Contracts# Management of Inter-N/A N/Adependencies\* Overall Planning Influence H-M (1.9) \_\_\_\_\_\_ Control Influence Before 1992 After 1992 \_\_\_\_\_\_ Moderate Decentralisation & Financial (1.4) Strategic (2.1) Control# Agreeing Objectives\* Moderate Financial (2.0) Financial (1.1) Moderate Monitoring Results\* Tight Financial (1.9) Financial (1.0) Rewards & Incentives\* Moderate Financial (1.1) Financial (2.0) Overall Control Influence Moderate Financial (1.2) Financial (2.0) ==========

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning	Control Influence	
Influence	Strategic   Finan	cial
High (	0 Strategic Programming 0 Financial Programming	ng 0
H/M Medium2	x	2
M/L		Ī
	) 3 	3
Low	4 Strategic Control 4 Financial Control	4
0 (2.0, 2.9)	9) - GLIL Post-1992 X (1.2, 1.9) - GLIL Pre-1	992

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Lonkey Industrial Co. Ltd. (GLIL) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

29 July 1996

## UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 17 Report Date : 7 August 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to :

trace each planning and control parameter to the respective (1) questions in the semi-structured questionnaire (Appendix 1);

identify the factors affecting each planning and control (2) parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

summarise all the planning and control parameters and represent the final result into the responsibility (4)accounting style grid.

For further details, please refer to the case writing of "Data Analysis 17" (3 June 1995).

\_\_\_\_\_\_

#### Name of SOE: Xiamen Luquan Industries General Company (XLIG)

Staff Interviewed: Miss Lin Chu Zhi, Deputy General Manager &

Finance Manager

(No. of years in this enterprise : 8 years)

Mr Ye Ren Chu, Administration Manager (No. of years in this enterprise : 10 years)

- 17 September 1993 Dates of Visits : First Visit

Second Visit - 14 September 1994

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#### Section 1: History & Background (Q.1.1-5)

The Xiamen Beverage Factory was the largest beverage 1.1 manufacturing enterprise in Xiamen established in 1985. On 8 June 1993, Xiamen Beverage Factory merged with an old an small enterprise called Xiamen Preserved Fruits Factory to form the present Xiamen Luquan Industries General Company (XLIG) which is a state-owned enterprise. (Q.1.1)

- 1.2 XLIG's core business is manufacturing and distributing domestically various kinds and brands of beverage including softdrinks, milkdrinks, fruitdrinks and tea. XLIG also produces preserved fruits selling domestically as well as export to overseas countries to gain foreign exchanges. (Q.1.2, 1.3 & 1.4)
- 1.3 XLIG is a holding enterprise (having 85 administrative staff in the headquarters) under which it has the following subsidiaries and joint-ventures: (Q.1.1-5)
- (1) Xiamen Beverage Factory
- 1.1 Establishment date : 1 April 1985
- 1.2 Ownership (Joint-venture): XLIG (45%), Hong Kong Swire Bottle Coca-Cola (55%)
- 1.3 No. of employees (1994) : 325
- 1.4 Products (Softdrinks) : Coca-Cola, Sprite, Fanda (in can, bottle & condensed container) \*
- 1.5 Output quantity : 40,000 tons per annum
- 1.6 Sales markets : domestic (Fujian, Guangdong, Jia
  - jiang, Suzhou, Northeast and some
    Western provinces)
- 1.7 Turnover : RMB145 million (1993)
  - RMB200 million (1994)
- 1.8 Income before tax : RMB 11 million (1993)
  RMB 18 million (1994)
  - \* XLIG has entered into a franchaise contract with the Coca-Cola Corporation in the USA to manufacture and distribute the three brands of softdrink in China.
- (2) Xiamen Preserved Fruits Factory
- 2.1 Establishment date : 31 December 1955
- 2.2 Ownership : wholly state-owned
- 2.3 No. of employees (1994) : 26
- 2.4 Products : over 80 types of preserved fruits
- 2.5 Output quantity : 4,000 tons per annum
- 2.6 Sales markets : mainly domestic with some export
- 2.7 Turnover : RMB8 million (1993)
  - RMB7 million (1994)
- 2.8 Income before tax : RMB15,000 (1993) RMB10,000 (1994)
- (3) Xiamen Huarong Food Factory
- 3.1 Establishment date : 1989
- 3.2 Ownership (Joint-venture): XLIG (65%), Hong Kong (35%)
- 3.3 No. of employees (1994) : 33
- 3.4 Products : paperbag milk & fruit drinks
- 3.5 Output quantity : 12,000 tons per annum
- 3.6 Sales markets : domestic (to many provinces in
  - China)

3.7 Turnover : RMB45 million (1993) RMB60 million (1994) : RMB 4 million (1993) 3.8 Income before tax RMB 5 million (1994) (4)Xiamen Huayi Food Factory 4.1 Establishment date : 1987 4.2 Ownership (Joint-venture): XLIG (31%), Beijing (17%) Xiamen (17%), Japan (35%) No. of employees (1994) : 20 4.3 4.4 Products : Chinese tea leaves 4.5 Output quantity 4.6 Sales markets : export (to Japan, Taiwan, Macau, Hong Kong & other Southeast Asian countries) 4.7 Turnover : RMB10 million (1993) RMB20 million (1994) Income before tax : RMB 2 million (1993)
RMB 4 million (1994) 4.8 (5) Xiamen Huacheng Packing Factory 5.1 Establishment date : 1993 5.2 Ownership : Collective owned with another enterprise in Xiamen ·5.3 No. of employees (1994) : 25 5.4 Products : paper & cartoon boxes & packs for XLIG's products and external customers : 3 million square metres Output quantity 5.5 5.6 Sales markets : other factories within the group and external customers in Xiamen 5.7 Turnover 5.8 Income before tax : --(6) Xiamen Huacheng Packing Factory
6.1 Establishment date : 5 January 1993 6.2 Ownership : Cooperative (owned by employees) 6.3 No. of employees (1994) : 61 6.4 Products : shopping mall, import & export trade 6.5 Output quantity 6.6 Sales markets : provide services to subsidiaries of XLIG and external customers 6.7 : --Turnover 6.8 Income before tax : --The headquarters and all the subsidiaries/joint-ventures are located in the same site having a land area of 48,500 square

metres and building floor space of 59,300 square metres.

# Section 2 : Legal Form & Organisation Structure (Q.2.1-11)

- 2.1 XLIG has been a wholly state-owned enterprise before and after 1992. There is no plan to transform into a shareholding enterprise in the next three years because there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise. (Q.2.1)
- 2.2 XLIG has six subsidiaries and joint-ventures as shown in 1.3 above. (Q.2.2, 2.4, 2.8 & 2.11)
- 2.3 Under the General Manager, who has an Enterprise Management Office (mainly responsible for long term planning and development), the organisation structure of XLIG's headquarters is as follow: (Q.2.3, 2.5 & 2.9)
  - (1) Finance Department (Deputy-GM)
    - 1.1 Accounting
    - 1.2 Internal Audit
    - 1.3 Computing Centre
  - (2) Research & Technology (Deputy-GM)
    - 2.1 Product Reserch & Development
    - 2.2 Production Technology & Facility
  - (3) Facility & Estate Department (Deputy-GM)
    - 3.1 Power & Gas
    - 3.2 Building & Facility
    - 3.3 General Supply
  - (4) Administration Department (Deputy-GM)
    - 4.1 Personnel
    - 4.2 Safety & Security
    - 4.3 Education & Training
    - 4.4 Medical & Housing
    - 4.5 Canteen
  - (5) Party Office (Party Secretary)

Under the headquarters of XLIG, the Xiamen Beverge Factory has the following decentralized structure :

- (1) Factory Manager (in charge of sales as well)
- (2) Deputy-Factory Manager (in charge of production, purchasing and supply)
- (3) Purchasing Department
- (4) Production Department
- (5) Quality Control & Inspection Department
- (6) Sales Department
- (7) Repair & Maintenance Department
- (8) Accounting Department
- (9) Personnel & General Affairs Department

The other three beverge, tea and packing material manufacturing factories have the similar organisation structure as above. All the factories and the trading company are treated as independent profit centres with high degree of operating, planning and control autonomy.

- 2.4 XLIG is under the administration of the Xiamen Economic and Trade Commission which has delegated the planning and control responsibilities to the top management of XLIG to run their own business. (Q.2.6 & 2.7)
- 2.5 XLIG had a total of 540 working, 40 not in post (non-working) and 130 retired employees at the end of 1994. It is classified as a small size enterprise in China. All the employees have signed employment contracts with duration from one to ten years since 1993. (Q.2.10)

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## Section 3: Financial Indicators (Q.3.1-8)

3.1 : RMB 56M (1993) (Q.3.1) Total assets

3.2 Turnover : RMB110M (1992)

RMB208M (1993)

(1994)@ (Q.3.2 & 3.7) RMB287M

@ Market demand for the softdrinks exceeds the supply which requires the expansion of the production capacity in the 1990s.

Income before tax : RMB11M (1992) - 10.0% of sales RMB17M (1993) - 8.2% of sales\* 3.3

RMB27M (1994) - 9.4% of sales\*\*

- \* In light of high inflation (25% in 1993 and 20% in 1994) and wages increases in Xiamen, XLIG expects the profit margin will continue to be less than 10%. In order to maintain the profit growth, XLIG has to increase the production and sales volumes substaintially in the next few years. Fortunately, XLIG does not have cashflow problem because most of the sales are "cash on delivery" especially during the peak (summer) seasons when demands for softdrinks are higher than supplies.
- \*\* The profit margin in 1994 was improved compared with 1993 mainly because of great increase in turnover and selling prices for the products sold within Fujian province could be maintained at higher levels than the same products sold to the other provinces. Furthermore, production and management efficiency have been enhanced. (Q.3.5, 3.6, 3.7 & 3.8)

3.4 Income tax rate : 15%# (Q.3.6)

# Since Xiamen is one of the five Special Economic Development Zones, most of the state-onwed enterprises are subject of 15% income tax instead of 33% applied to the enterprises in other cities.

3.5 Information related to Q.3.4 is shown in 1.3 above.

# Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

- 4.1 When Xiamen Beverage Factory (XBF), the major subsidiary of XLIG, was established in 1985, it signed the first 5-year ERC with the Xiamen Economic and Trade Commission. (Q.4.1)
- 4.2 The first year profit target was set at RMB2 million which is subject to 55% of income tax. In order to repay the initial bank loan, XBF was exempted from income tax in the first two years. In 1988, the terms were changed to 15% income tax rate and handing over 27% of income before tax to the government. (Q.4.2-4 & 6)
- 4.3 The chosen terms were mutually agreed between the government and XLIG. (Q.4.7)
- 4.4 The top management did participate in the negotiation with the government in setting the above targets. The new arrangement in 1988 made XBF better off in terms of retained earnings. (Q.4.5,7-10)
- 4.5 Although, no formal ERC has been continued since 1990, XBF was still subject to the 1988 terms until 1995 when XBF became an equity joint-venture enterprise with the Hong Kong Swire Group. As from 1995, 55% of the actual income before tax would belong to the Swire Group and subject to 15% income tax, whereas the XBF's 45% share of profit would be subject to 15% income tax and 27% hand-over to the government.

Compared with the pre-1995 type of ownership in which 100% of the income after tax was retained by XBF, the new equity joint-venture should at least double the turnover and profit in the next few years in order to be equal footing with the old joint-venture. This is very likely to be the case since the Hong Kong Swire Group will bring in not only capital for production capacity expansion, but alos production and management technology as well. XLIG is aiming at the long term growth in terms of turnover, efficiency and profitability at the end of the day. (Q.4.12 & 13)

## Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "Medium Corporate (2.1)"
  before 1992 to "Medium-Low Corporate (2.9)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: all the production factories were treated as profit centres managed by the factory managers responsible for product volume, cost and internal profit which were compromises bewteen the factory managers and the headquarters.
- After 1992: the beverage factory is treated as an independent investment centre measured on the return as well.

  All the factory managers are responsible for the planning process including the formulation of the internal responsibility contact (IRC).

Corporate Planning Influence\* : "High-Medium (2)" to " Medium-Low (3)"

Greatest Influence \* By using a 5-point scale -Very High (0) (consistent with the scale (1) Hiah (2) used in the questionnaire Medium e.g. 5.4.4 to quantify Low (3) Least Influence some of the parameters or Very Low (4) variables)

Very High	[VH]	(0.0 - 0.5)
Very High-High	[VH-H]	(0.6 - 1.0)
High	[H]	(1.1 - 1.5)
High-Medium	[H-M]	(1.6 - 2.0)
Medium	[M]	(2.1 - 2.5)
Medium-Low	[M-L]	(2.6 - 3.0)
Low	[L]	(3.1 - 3.5)
Very Low	[VL]	(3.6 - 4.0)

- (2) Decentralization (Q.5.1.2)
- Before 1992: since the production factories were profit centres, the factory managers were responsible for the profit planning and control although specific guidelines and suggestions were provided by the headquarters and sometimes they were dominant.
- After 1992: the headquarters inserts less interference in the planning and control aspects related to the production factories as long as the agreed economic and quality targets can be achieved.

Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"

(3) Appointment (Q.5.1.3)

Before 1992: except the general manager and party secretary who were still appointed by the government, all the other management staff and production workers were recruited by the top management. The organisation structure was mainly decided by the headquarters.

After 1992: the general manager and party secretary are still appointed by the government. The foreign partners of the joint-ventures can appoint a few senior management staff and decide their own organisation structures and personnel affairs after discussion with the Chinese partner.

Corporate Planning Influence: "Medium (2.5)" to "Medium-Low (3)"

(4) Interdependencies (Q.5.1.4)

Before 1992: although interdependencies among the factories or profit centres were minimal, decisions were made by the headquarters if there was any.

After 1992 : some negotiations and compromises are allowed to the profit centres as well as the foreign partners.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Responsibility Centre Decentralization Appointment Interdependencies	H-M Medium Medium High	(2.0) (2.5) (2.5) (1.5)	M-L Low M-L H-M	(3.0) (3.5) (3.0) (2.0)
Overall Planning Influence	H-M ======	(2.1) =====	M-L =====	(2.9)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High-Medium Corporate
  (1.9)" before 1992 to "Low Corporate (3.1)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992 : since Xiamen is one of the five special economic zones, some favourable policies have been given to the SOEs by the central government in terms of lower taxes, free import/export rights and generous land use rights which in some ways have left more freedom to the SOE's planning and control aspects but interferences from the government still existed
- After 1992: in order to speed up the implementation of the "SOE Mechanism Transformation Legislation" enacted in 1992, the Xiamen municipal government issued ten specific additional policies for the SOEs at the end of 1992. These 10 policies explain the different rights that the SOEs in Xiamen could exercise in order to enjoy futher autonomy in planning and controlling their businesses.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: long term plans were initiated by the top management after consultation with the middle management.

  Most of the long term plans had to be discussed and compromised with the government. The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (3) Participation (Q.5.7.6-8)
- Before 1992: the middle management was consulted in the long term planning which was almost a top-down process but did involved in the annual planning and budgeting processes.

After 1992: middle management is involved in the formal long term planning process but decisions still rest in the hands of the top management. Factory and department managers have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence : "High (1.5)" to "Medium-Low (3)"

- Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992 : the top management reviewed and amended the long term plans with the middle management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management twice every year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992 : the long term plans are reviewed by the top and middle management twice every year and significant changes are made at the year end and informed the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notify to lower management immediately.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning				
Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	H-M H-M High H-M	(2.0) (2.0) (1.5) (2.0)	M-L Low M-L M-L	(3.0) (3.5) (3.0) (3.0)
Overall Planning Influence	H-M ======	(1.9) =====	Low	(3.1)

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- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "Very High-High Corporate
  (1)" before 1992 to "Medium Corporate (2.2)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "Quality" has been the major strategic theme given to and imbedded into the planning and control system. XLIG has imported some modern plant and equipment to replace the old ones since the late 1980s.
- After 1992: each factory has a quality control department responsible for designing policies, setting production and product standards, testing new products and providing training. The inspection section is responsible for controlling the input materials and output products quality, and enforcing the compliance of quality procedures in production.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: technology improvement, efficiency enhancement and product development have been the major strategic thrusts which were incorporated into long term plans formulated by the government and the top management.
- After 1992 : the following strategic thrusts are clearly written down in the company's information booklet :
  - 1. Company's goodwill and reputation must be maintained at all times.
  - 2. Every employee should be trustworthy and faithful to the company.
  - 3. Every employee should maintain good discipline in the company.
  - 4. Product innovation and development should be the life-blood for company's grwoth.
  - Economic efficiency should be enhanced year after year.
  - 6. Operation efficiency should be promoted at all times.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

# (3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as selling prices, marketing strategies and production quantity and mix. Financial indicators and performance were followed closely by the top management who was quick to make suggestions if they did not match with the overall long and short term plan.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the factory managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate. Furthermore, the top management allow certain degree of freedom to the factory manager to promulgate some strategic ideas if they are not out of line with those prescribed by the headquarters.

Corporate Planning Influence : "Very High-High (1)" to "Medium (2.5)"

# Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992	
Theme Thrust Suggestions	VH-H (1.0) VH-H (1.0) VH-H (1.0)	H-M (2.0) H-M (2.0) Medium (2.5)	
Overall Planning Influence	VH-H (1.0)	Medium (2.2)	

# 5.4 Long-Term Plans [Planning Influence changed from "High-Medium Corporate (2)" before 1992 to "Medium-Low Corporate (2.9)" after 1992]

#### (1) Central Planning (Q.5.4.2,4 & 8)

Before 1992: since early 1980s, Xiamen has been one of the five special economic development zones. It has been authorized by the central government to enjoy many favourable economic policies. Xiamen Light Industry Committee started to allow XLIG to actively participate in the 7th 5-year (1986-1990) long term planning process.

- After 1992: the subsequent (8th 5-year (1991-1995) long term plan has further encourged XLIG to initiate its own blueprint for development.
- Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"
- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the government to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine fesible long term plans acceptable to both sides.
- After 1992: the top management has to initiate its own long term plans and compromise with the government who may insist on certain macro-targets such as output volume and mix. The current 5-year planning (1996-2000), lays down the developments of all the joint-ventures and subsidiaries.
- Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"
- (3) Participation (Q.5.4.4 & 6)
- Before 1992: factory and department mangers are members of the planning committee (i.e. senior management committee) but they seldom initiate changes but mainly concern the impact on their annual budgets and IRCs which they are measured on.
- After 1992: formal planning committee and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. It is a way for the top management to allocate limited resources to different divisions according to the market demand, product profitability and government suggestions.
- Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"
- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992: 5-year long term plan was reviewed annually by the government with the top management and changes made were notified to the employee's representatives during the annual general meeting.

After 1992: the planning committee reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the government for endorsement and sometimes assistance such as seeking a long term bank loan. A summary of the long term plans is distributed to all members of the planning committee.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992		After 1992	
Central Planning Operation Participation Review & Communication	Medium H-M H-M High	(2.5) (2.0) (2.0) (1.5)	Low M-L M-L H-M	(3.5) (3.0) (3.0) (2.0)
Overall Planning Influence	H-M	(2.0)	M-L =====	(2.9)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because XFLT caters for the capital budgets during the long term planning exercise.

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- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "Medium Corporate (2.3)"
  before 1992 to "Low Corporate (3.4)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government has devolved the short term planning autonomy to the top management but specific suggestions may be provided i.e. production volume and mix, sales and inventory level.
- After 1992: top management has the full autonomy in the annual planning and budgeting processes which involve the middle management such as the factory managers.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the factory managers. Expense budgets were suggested to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and expense centres.
- After 1992: top management provided major guidelines to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (3) Participation (Q.5.5.3 & 5)
- Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (4) Review & Communication (0.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed quarterly and amendments were made under significant environmental changes. Annual plans were communicated to middle and lower management in terms of a budget book.
- After 1992: senior management committee reviews the annual plans and budgets monthly and amendments are made due to unavoidable internal and external factors. A fixed budget concept is still in force. Other than AGM and budget book, the budget information is further communicated between top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	H-M (2.0) H-M (2.0) Medium (2.5) Medium (2.5)	Low (3.5) M-L (3.0) Low (3.5) Low (3.5)
Overall Planning Influence	Medium (2.3)	Low (3.4)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "Medium Corporate (2.1)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: before the IRC was established in 1994, major economic targets set were production quantity and cost control while qualitative targets such as quality and safety had the veto effects on the bonus which was linked up with the performance.
- After 1992: major targets included in the IRC are production quality, production management and material consumption. Volume of sales and cash collected are major economic targets for the sales function. Samples of IRC are shown in section 5.6 of the Data Analysis Set 17.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: factory managers negotiated and compromised the suggested targets during the annual planning cycle.
- After 1992: factory managers have to initiate, quantify and justify the major IRC targets before negotiating with the top management. According to Miss Lin, the workshop managers are more proactive in setting the targets in the IRC.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

#### (3) Review & Communication (Q.5.6.9-15)

Before 1992: targets were reviewed in the middle of the year and amendments could be made when mutually agreed by the top management and factory managers. Terms and conditions are documented and informed to the respective factory managers and their employees.

After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. Miss Lin agreed that IRC was an effective way to achieve the short term targets on one hand and improve the budget communication between the different levels of management on the other hand. Furthermore, IRC can link up performance with the incentive scheme as a fair means for resource (i.e. bonus) distribution.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

# (4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the production and cost targets which might not be attainable or could be overshot mainly because they were not formulated by the middle management.

After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the factory managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before :	1992	After	1992
Target Bias Participation Review & Communication Incentive	H-M H-M Medium H-M	(2.0) (2.0) (2.5) (2.0)	M-L Low Low M-L	(3.0) (3.5) (3.5) (3.0)
Overall Planning Influence	Medium	(2.1) =====	Low	(3.3)

# 5.7 Management of Interdependencies (Transfer Pricing)

Except the Xiamen Huacheng Packing Factory (XHPF), all the other production factories of Xiamen Luquan Industries General Company (XLIG) are independent in manufacturing their own products without any transfer to other factories. The packing materials supplied by XHPF internally are charged at the market prices less a small percentage for the savings of selling and administration expenses. The ultimate transfer prices are determined by the negotiation between the seller and buyer without interference from the XLIG.

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# Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.5)" before 1992 to "Moderate Strategic (2.2)" after 1992]

		======		======	=====
		High	(1.5)	Medium	(2.4)
1.4	Interactions	H-M	(2.0)	Low	(3.5)
	Roles & functions	H-M	(2.0)	M-L	(3.0)
	Staffing	VH-H	(1.0)	High	(1.5)
1 0	<del>-</del>	·			
1.1	Structure	VH-H	(1.0)*	High	(1.5)
		Before	1992	After :	1992
(1)	Organisational Design				

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very High(0)
Tight Strateg:	ic<			-Tight Financial
Control				Control

Tight Financial	(0.0	_	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	_	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	-	4.0)

(2) Personnel# (Q.6.1.1)

		Before	1992	After	1992
2.1	Recruitment	High	(1.5)	H-M	(2.0)
2.2	Assignment	H-M	(2.0)	M-L	(3.0)
2.3	Training	H-M	(2.0)	M-L	(3.0)
2.4	Evaluation	H-M	(2.0)	M-L	(3.0)
2.5	Remuneration	H-M	(2.0)	M-L	(3.0)
2.6	Termination	VH-H	(1.0)	High	(1.5)
		H-M	(1.8)	M-L	(2.6)
,		=====	=========		======

# Miss Lin said that since 1992, more delegation has been given to the factory managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the factory manager and the party secretary.

=======================================	:======	====		
3) H-M (1.6)	(1.3	High		
			o communicación	J.O COMMUNIT
	(1.5	High		
5) VH-H (1.0)	(1.5	s High	5 Qualitative targets	3.5 Qualit
0) High (1.5)	(1.0	ts VH-H	4 Quantitative targets	3.4 Quanti
· ·	(1.5	High		
	(1.0	VH-H		
	(1.0	VH-H		_
After 1992	e 1992		1 D. J	2 1 Dudmat
			) Control Mechanisms	(3) Contro
	~ ~ 4	10 6 1 0 1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(2) 4

\* The control mechanisms are clearly communicated to the workshops and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Organisational Design Personnel Control Mechanisms	High H-M High	(1.5) (1.8) (1.3)	Medium M-L H-M	(2.4) (2.6) (1.6)
Overall Control Influence	High	(1.5) =====	Medium	(2.2)

6.2 Agreeing Objectives (Q.6.2.1-2)
[Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Factors affecting the types and styles of control mechanisms : Before 1992 After 1992 Precision & detail of (1) VH-H (1.0)H-M(2.0)targets Objective vs subjective (2) (1.0)VH-H H-M(2.0)targets (3) Achieving targets (1.0)(2.0)Timeframe VH-H H-M(4) Stretch built into (2.0)VH-H (1.0)H-Mthe targets (5) Financial vs nonfinancial targets High (1.5)H-M(2.0)(6) Manangement influence (2.0)on setting targets VH (0.5)M-MVH-H H-M---------=========

# 6.3 Monitoring Results [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

		==========		=========	
		High	(1.1)	H-M	(1.8)
	-				
1.10	Computerization	H-M	(2.0)	M-L	(3.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.1	Policy	VH-H	(1.0)	High	(1.5)
		Before	1992	After ]	.992

# Miss Lin has mentioned that the monthly condensed report format is unique for each workshop. The actuals are compared with the budgets or IRCs. The qualitative targets are usually subjectively measured by the factory manager and enterprise management office and written in the monthly reports as well. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

#### (2) Performance Measurement (0.6.4.1-2)

Before 1992: production factories were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety are accounted for less weightings.

After 1992: production quantity and cost control are still the major economic targets, however, more qualitative targets such as production management and quality are measured.

Corporate Control Influence: "High (1.5)" to "High-Medium (2)"

(3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)

Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.

After 1992: the planning committee holds a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings.

Corproate Control Influence : "High (1.5)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before :	1992	After 1	L992
Reporting Requirements Performance Measurement Review & Communication	High High High	(1.1) (1.5) (1.5)	H-M H-M H-M	(1.8) (2.0) (2.0)
Overall Control Influence	VH-H	(1.4) =====	H-M	(1.9)

6.4 Rewards & Incentives
[Control Influence changed from "Financial (1.3)" before
1992 to "Moderate Financial (1.9)" after 1992]

(1) Incentives\* (Q.6.5.1-7,15-16,22-23) After 1992 Before 1992 (1.0)H-M (2.0)1.1 Basic wages VH-H H-M(2.0)1.2 Allowances (2.0)H-M1.3 Bonuses - monthly (1.0)High (1.5)VH-H 1.4 Bonuses - annual H-M (2.0)High (2.5)(2.0)Other benefits VH-H (1.0)H-M 1.5 VH-H (1.0)Pension VH (0.5)1.6 Recognition (intangible) VH-H H-M(2.0)1.7 (1.0)H-MLow 1.8 Redundancy (3.5)(2.0)\_\_\_\_\_ H-M (1.9) High (1.5) ======== ------- \* The "basic wages" is reviewed every year depending on grade and seniority, qualification and skill. There are totally eight grades in the wages scale and there are some points in each grade for annual increase of wages but the parity between two consecutive points is only RMB10-20.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Xiamen municipal government at least once in each year to combat inflation. The second part is decided by the XLIG which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the factory manager decides what level of group bonus will be given to the factory. It is up to a factory manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well.

One way to alleviate this problem is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 50-60% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 45-50% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

# (3) Participation (Q.6.5.16417)

Before 1992 : factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided

by the headquarters and government.

After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and planning committee. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence: "High (1.5)" to "High-Medium (2)"

(4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the factory or department managers

After 1992 : IRC's targets are subject to situation and negotiation very year. Planning committee reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the factory or department managers

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

			After 1992	
High	(1.5)	H-M	(1.9)	
VH-H	(1.0)	High	(1.5)	
High	(1.5)	H-M	(2.0)	
VH-H	(1.0)	H-M	(2.0)	
High	(1.3)	H-M	(1.9)	
======		======	======	
	VH-H	VH-H (1.0)	VH-H (1.0) High	
	High	High (1.5)	High (1.5) H-M	
	VH-H	VH-H (1.0)	VH-H (1.0) H-M	

## Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Xiamen Luquan Industries General Company (XLIG) belonged to before and after 1992.

\_\_\_\_\_\_

Planning Influences Before 1992 After 1992 \_\_\_\_\_\_ Organisation Structure\* Medium Medium (2.1) to Low (2.9) Review Process\* High to Medium (1.9) Low (3.1)Strategic Themes, Thursts Very High and Suggestions\* to High (1.0) Medium (2.2)Long-Term Plans\* High to Medium (Resource Allocation) Medium (2.0) to Low (2.9) Short-Term Planning/ Medium (2.3) Budgeting\* Low (3.4) (Resource Allocation) Internal Responsibility Contracts# Medium (2.1) Low (3.3) Management of Inter-N/A dependencies\* N/A \_\_\_\_\_ \_\_\_\_\_ High to Overall Planning Influence Medium Medium (1.9) to Low (3.0) Before 1992 After 1992 Control Influence \_\_\_\_\_\_ Moderate Decentralisation & Financial (1.5) Strategic (2.2) Control# Agreeing Objectives\* Tight Moderate Financial (1.0) Financial (2.0) Monitoring Results\* Moderate Financial (1.9) Financial (1.4) Rewards & Incentives\* Moderate Financial (1.9) Financial (1.3) \_\_\_\_\_\_ Moderate Overall Control Influence Financial (2.0) Financial (1.3) =============== 

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

	Planning Influence	Control Influence					
	Infraence	Strategic   Financial					
	High (	Strategic Programming 0 Financial Programming 0					
	н/м	.x					
•	Medium2	22 					
	M/L						
	Low 4	Strategic Control 4 Financial Control 4					
(	0 (2.0, 3.0)	- XLIG Post-1992 X (1.3. 1.9) - XLIG Pre-1992					

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Xiamen Luquan Industries General Company (XLIG) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992). Although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style, it is moving towards the "Strategic Control".

7 August 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

\_\_\_\_\_\_\_

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 18
Report Date : 11 August 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control **parameter** to the respective **questions** in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 18" (5 December 1995).

Name of SOE: Beijing No.3 Cotton Mill (BCM3)

Staff Interviewed: Mr Hsu Ching Soon/Chief Accountant

(No. of years in this enterprise : 38 years)

Dates of Visits : First Visit - 4 September 1993

Second Visit - 31 August 1994 Third Visit - 13 September 1995

\_\_\_\_\_\_

## Section 1 : History & Background (Q.1.1-5)

1.1 BCM3 is a large, cotton cloth exported-oriented enterprise established in 1956 and started production since May 1957. It possesses 120,980 ring spindles, over 3,200 looms, 11,240 twisting spindles, and 1,600 open-end heads. Among its counterparts in Beijing, it is the only one which has been awarded the state's first grade enterprise. As one of the major textile enterprises in China, BCM3 has provided a large number of execellent products to the clients at home and abroad. (Q.1.1)

- 1.2 BCM3 upholds the principle of "customer first and quality first". Bearing in mind that quality is the life of the mill, BCM3 has been devoting to promote the quality of its products. Over 20 types of yarn and cloth have won national, municipal and ministerial prizes. Its Tex29 grey cotton cloth series which is mainly for export once won national gold prize, and Peng Chentex 19.5 and 29 grey cotton plain cloth series are highly acclaimed by the overseas customers. (Q.1.2)
- 1.3 The main products are cotton and T/R yarn, cotton and T/R cloth of full widths, cotton ramie yarn as well as Vinylon and Jinlun products. The annual production capacity is 23,000 tons of cotton yarn and 90 million metres of grey cotton cloth which can earn over US\$40 million. (Q.1.3)
- 1.4 Products of BCM3 are exported mainly to European Commom Market, accounting for 25% of total Chinese cotton cloth export to Europe. The products are also popularly received by overseas clients in the USA, Canada, Africa and Southeast Asian countries and regions. BCM3 enjoys a good reputation in the international market. (0.1.4)
- 1.5 BCM3 attaches great importance to its equipment renovation. During the current 8th 5-year plan (1991-1995), BCM3 has imported and will continue to import a great deal of advanced technology and critical machine parts from Germany, Switzerland and Japan. To become more competitive, BCM3 is steeping up the efforts for technical renovation. When the overall technical renovation plan is fulfilled at the end of 1995, SCM3 will be equiped with the advanced fore-spinning equipment of the 1990s, and other machinery of the 1980s to 1990s. The quality of the finished cotton yarn will reach upper middle international level. The international standard will be adopted for grey cloth production, and indirect weft will be used, consequently, the quality will reach level "A". (Q.1.5)

## Section 2: Legal Form & Organisation Structure (Q.2.1-11#)

2.1 BCM3 has been a wholly state-owned enterprise since 1956 and previously under the administration of the Ministry of Textile in Beijing which was transformed into the National Textile Industry Council in 1994. All the cotton mills and related industries such as textile machines manufacturing are treated as subsidiaries under the Council which is one of the 8 institutions under the State Council and has less political influences on its member enterprises.

The major role played by the Council, which is similar to a trade association, is to control the supply of cotton (raw materials), total number of employees and appointment of the top management such as general manager and party secretary of each member enterprise under its umbrella. Another important function of the Council is raising capitals for the approved projects or investments initiated by the member enterpirses. Depsite the latter fact, BCM3 has the autonomy to obtain bank loan independently. (Q.2.1, 4, 6 & 7)

- 2.2 Under the Factory General Manager, who has an Enterprise Management Office, the organisation structure of BCM3 is (Q.2.3, 5 & 9) listed as follow:
  - Production Division (Deputy-GM) (1)
    - 1.1 No.1 Spinning Factory\*
    - 1.2 No.2 Spinning Factory\*
    - 1.3 No.3 Spinning Factory\*
    - No.4 Spinning Factory\* 1.4
    - No.5 Spinning Factory (Macau Joint-Venture[JV]) 1.5
    - 1.6 No.1 Weaving Factory\*
    - 1.7 No.2 Weaving Factory\*
    - 1.8 Production Support Factory (supplying electricity, gas, consumables, spares, tools etc.)\*\*
      Technical Support Department (Chief Engineer)

    - 1.10 Production Facilities Department (Chief Engineer)
    - 1.11 Quality Control Department (Chief Engineer)
  - Operation Division (Deputy-GM) (2)
    - 2.1 Purchasing Department
    - 2.2 Supplies Department
    - 2.3 Sales Department
    - Accounting & Finance Department (Chief Accountant) 2.4
  - Administration Division (Deputy-GM) (3)
    - Personnel Department 3.1
    - 3.2 Manpower & Wages Department
    - 3.3 Safety & Security Department
    - Education & Training Department
    - 3.5 Tertiary Enterprises#

      - 3.5.1 No.1 Knitting Factory (Shenzhen JV) 3.5.2 No.2 Knitting Factory (Shenzhen JV)
      - No.71 Cotton Weaving Factory (Shenzhen JV) 3.5.3
      - 3.5.4 Beijing Colour Weaving Factroy (Hainan JV)
      - 3.5.5 Cotton Printing Factory
      - 3.5.6 Import & Export Company
      - 3.5.7 Textile Retailing Shop
      - 3.5.8 Repair & Maintenance Centre
      - 3.5.9 Restaurant
      - 3.5.10 Nursary
  - (4)Communist Party Office
  - Labour Union Office (5)

- All the production factories have a factory manager, a deputy factory manager, section supervisors and group leaders. Each factory is responsible for its own repair and maintenance work. All the production factories are treated as cost centres and have entered into Internal Responsibility Contracts (IRC) with the General Manager on an annual basis.
- \*\* The production support factory is a cost centre and allocates its operating costs to the other production factories or departments according to actual usages.
- The tertiary enterprises are independent investment centres having their own management teams and bank accounts, and they have signed IRCs with the General Manager on an annual basis.
- 2.4 BCM3 had a total of 8,000 working employees (10% are administrative staff) and 3,000 retired employees at the end of 1994. It is classified as a "large-size SOE" in China. (Q.2.10)

# Although BCM3 is a subsidiary enterprise, insufficient information has been obtained for questions Q.2.2, Q.2.8 and 0.2.11.

#### Section 3: Financial Indicators (Q.3.1-8)

: RMB 240M (1994) (Q.3.1) 3.1 Total assets

3.2 Turnover : RMB 300M (1992) RMB 330M (1993)

RMB 410M (1994)

RMB 430M (1995 forecast) (Q.3.2 & 7)

Income before tax\* : RMB 1.2M (1992) - 0.4% of sales\*\* 3.3 (Q.3.5, 6, 7 & 8) RMB 0M (1993) - 0% of sales@ RMB 1.5M (1994) - 0.4% of sales#

(1995 forecast) RMB OM

Income before tax has deducted the value added tax already which is 17% on sales (output VAT) but only 13% on cotton purchased (input VAT) can be deducted according to the new taxation system implemented in January 1994. As a result, the VAT paid in 1994 was higher than the previous known sales tax in 1993.

\*\* The low profit margin was mainly because of selling prices have to be reduced in order to bid the orders. Furthermore, inflation and heavy payroll and benefits in kind (including retired employees) increased the total expenditures or fixed overheads. The purchase prices of raw materials (i.e. cotton) have been increased from RMB11,000 per ton in 1993 to RMB18,000 per ton in 1994 (or 64% increase) due to reduction of domestic production. The farmers do not have the incentive to grow cotton because of low selling prices set by the government and high inflation of input materials like fertilisers.

The domestic produced cotton is centrally purchased from the farmers and distributed to the mills by the National Textile Industry Council, Ministry of Commerce and Ministry of Agriculture at predetermined prices. In view of domestic short supply, 30% of the cotton demand was imported from foreign countries in 1995. BCM3 is importing about 30% of its cotton requirements from overseas countries.

@ Since BCM3 did not have the "import and export right" before 1994, the export products had to be sold to the trading entities under the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) at a fixed exchange rate of US1=RMB5.8. Then these trading enterprises sold the products overseas at the market exchange rate of US\$1=RMB8.7 to make a handsome profit out from the exchange gap. Therefore, most of the export profit is taken away by the government.

# Another major reason of low or no profit before tax making was the annual payment of RMB36 million of bank interest due to capital investment and working capital loans of over RMB300 million in both 1994 and 1995.

3.4 Income tax rate : 55% (before 1992) 33% (from 1992) (Q.3.6)

+ Since BCM3 is neither a holding or subsidiary enterprise, Q.3.4 is not applicable.

# Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

4.1 BCM3 is one of the earliest state-owned enterprises in Beijing entered into the first five-year Economic Responsibility Contract with the Beijing Textile Bureau and the Beijing Finance Bureau (representing the Beijing Municipal government) in 1986. (Q.4.1)

- 4.2 The major financial targets set in this ERC were income before tax and foreign exchange created from export. (Q.4.2 & 4)
- 4.3 An annual growth factor was also set for the income before tax target. In addition, production quantity, product quality and safety are also other targets to be determined in the ERC as well. (Q.4.3)
- 4.4 The annual total gross wages was linked up with the above financial targets. (Q.4.6)
- 4.5 Under the ERC system, once the target profit has been achieved, the predetermined wages, bonuses and benefits-in-kind would be awarded plus other favourable terms like bank loan repayment could be tax deductable. Therefore, all the personnel in BCM3 have been facing higher pressure and challenge to enhance the overall economic efficiency year after year. (Q.4.5, 9 & 10)
- 4.6 The top management did participate in the negotiation with the government and bureau in setting the above targets. The chosen terms were mutually agreed among the three parties. (Q.4.7-8)
- 4.5 BCM3 could easily achieve the foreign exchange target because its quality products were yarn and cloth which were input materials for the clothing industry having high demands overseas. Contrary, the clothing industry was constrainted by many customer factors like fashion, season, culture and taste. The first ERC was successfully completed in 1990, and then the second 5-year ERC (1991-1995) was signed immediately. (Q.4.12 & 13)

#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.1)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992 : all the production factories were "cost centres" managed by the factory managers. All the other management and service departments were "expense centres" under tight expense budgets.
- After 1992: the production factories are still treated as "cost centres" under budget/IRC control but higher autonomy of internal management and operation has has been delegated to the factory managers.

Corporate Planning Influence\* : "Very-High-High (1)" to "High-Medium (2)"

\* By using a 5-point scale -Very High (0) Greatest Influence (consistent with the scale High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) some of the parameters or Very Low (4)Least Influence variables)

Very High	[VH]	(0.0 - 0.5)
Very High-High	[VH-H]	(0.6 - 1.0)
High	[H]	(1.1 - 1.5)
High-Medium	[H-M]	(1.6 - 2.0)
Medium	[M]	(2.1 - 2.5)
Medium-Low	[M-L]	(2.6 - 3.0)
Low	[L]	(3.1 - 3.5)
Very Low	[VL]	(3.6 - 4.0)

# (2) Decentralization (Q.5.1.2)

Before 1992: the factory managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.

Therefore, classifying the factories into cost centres were appropriate.

After 1992: the top management has been decentralizing more planning responsibility to each production factory and department such as participation in formulating the annual plan and the IRC. The production and cost control responsibility primarily lies with the production managers but the top management keeps a surveillance quantity and quality control on each production factory through monthly or weekly report

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

#### (3) Appointment (Q.5.1.3)

Before 1992: the general manager and party secretary were appointed by the Council, and some senior appointments and major organisational changes required Council's approval.

After 1992: the general manager and party secretary are still appointed by the Council. The general manager can appoint all the other senior staff such as the factory managers. The factory and department managers can suggest changes in organisation structure and personnel affairs to the general manager for approval.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

(4) Interdependencies (Q.5.1.4)

Before 1992: the transfer prices of internal cross-supplies were determined by the top management by using standard cost of production without markup.

After 1992: standard cost is still used for the transfer prices which together with the transfer quantities are set by the top management without much negotiation among the spinning and weaving factories because the spinning factories do not have much autonomy to sell the intermediate products externally.

Corporate Planning Influence : "Very High-High (1)" to "High (1.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	VH-H (1.0) High (1.5) High (1.5) VH-H (1.0)	H-M (2.0) Medium (2.5) Medium (2.5) High (1.5)
Overall Planning Influence	High (1.3)	Medium (2.1)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.4)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992: long term planning was initiated, monitored, reviewed and modified by the top management after discussion and agreement with Bureau. The annual budgeting process was initiated by the top management but sanction should be required after discussion with the Bureau.

After 1992: Council has delegated the long term planning and annual budgeting autonomy to the top management but strategic plans and annual financial targets still have to be reviewed, discussed and modified with with the Council.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

(2) Operation (Q.5.7.1-5)

Before 1992: formal planning meetings were held between the Bureau and top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management (i.e. factory managers) was limited.

After 1992: more formal processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the general manager to the factory managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(3) Participation (Q.5.7.6-8)

Before 1992: long term planning was top-down process but middle management (i.e factory managers) did participate in the annual planning and budgeting processes but initiation was constrained.

After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(4) Review & Communication (5.7.9-14, 5.8.8-11)

Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management in mid-year but amendments were made due to significant changes which were communicated to lower management through revised budgets.

After 1992: long term plans are reviewed by the top management twice every year and significant changes should be discussed with the Council and informed to the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notified to the lower management immediately.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	VH-H (1.0) High (1.5) High (1.5) High (1.5)	H-M (2.0) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.4)	Medium (2.4)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "Very High-High Corporate
  (1)" before 1992 to "High-Medium Corporate (2)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "improve efficiency" and "increase profit or cost control" were the major strategic themes given to and imbedded into the planning and control system.
- After 1992 : the following strategic themes have laid down :
  - 1. customer and quality are always number one
  - 2. production facilities and technology should be renovated to further enhance product quality to international standards
  - 3. expand the domestic market share and explore the overseas markets
  - 4. employ advanced management techniques to achieve a modern enterprise system

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

\* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.

#### (2) Thrusts (0.5.3.1 & 4)

Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.

After 1992: quality is still the most important strategic thrust directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

# (3) Suggestions (Q.5.3.2 & 3)

Before 1992 : top management always made suggestions on the planning and review process such as production quantity and mix, selling price, personnel, incentive scheme, sales and marketing etc.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the factory managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the ultimate annual sales and profit targets.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Factors	Influence : Before 1992	After 1992
Theme Thrust Suggestions	VH-H (1.0) VH-H (1.0) VH-H (1.0)	H-M (2.0) H-M (2.0) H-M (2.0)
Overall Planning Influence	VH-H (1.0)	H-M (2.0)

# 5.4 Long-Term Plans [Planning Influence changed from "High Corporate (1.5)" before 1992 to "Medium Corporate (2.5)" after 1992]

# (1) Central Planning (Q.5.4.2,4 & 8)

Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government.

Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of production facilities, volume and mix, product and market development.

After 1992: the top management has to initiate its own long term plans and compromise with the textile council who may insist on certain macro-targets such as output volume and profit level.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine feasible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1996-2000), includes competitive edge, research and development, product and market development, facility relocation, joint ventures, and reducing headcount.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979 started to allow BCM3 to participate in the 5-year's planning with the Bureau and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse
- After 1992: has to formulate their own long term strategic plans which are submitted to the textile council for review and approval. Some projects involved significant capital investment require financial arrangement by the council.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992 : 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.

After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the council for endorsement and sometimes assistance such as seeking long term bank loan.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After 1992
Central Planning Operation Participation Review & Communication	High High High High	(1.5) (1.5) (1.5) (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High	(1.5)	Medium (2.5)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because BCM3 caters for the capital budgets during the long term planning exercise.

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- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "Medium Corporate (2.1)"
  before 1992 to "Low Corporate (3.3)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992: government had devolved the short term planning autonomy to the top management but specific suggestions were provided i.e. production volume and mix, sales and profit level.
- After 1992: top management has the full autonomy in the annual planning and budgeting processes yet compromises on key indicators still have been sought from the textile council.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management reviewed the key budgets i.e. sales production volume and mix, labour and materials, and then compromised with the factory managers. Expense budgets were given to the management and service departments. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and and expense centres.
- After 1992: top managers provided major guidelines (see section 5.5 of Data Analysis 18) to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (3) Participation (Q.5.5.3 & 5)
- Before 1992: The middle management had to formulate, evaluate, approve and review the annual budgets with the top management.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed quarterly and amendments were seldom made except under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.
- After 1992: top and middle management review the annual plans and budgets monthly and amendments are made due to unavoidable internal and external factors.

  A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	H-M (2.0) H-M (2.0) Medium (2.5) H-M (2.0)	Low (3.5) M-L (3.0) Low (3.5) M-L (3.0)
Overall Planning Influence	Medium (2.1)	Low (3.3)

5.6 Internal Responsibility Contracts (IRC)
[Planning Influence changed from "High Corporate (1.5)"
before 1992 to "Medium Corporate (2.5)" after 1992]

(1) Target Bias (Q.5.6.1-6\*)

Before 1992: IRC was established in 1988 in order to motivate the efficiency, profitability and cost reduction in the production workshops.

After 1992 : the following performance targets are set :

- 1. controllable targets
  - 1.1 production quantities
  - 1.2 product quality
  - 1.3 materials and resources consumption
  - 1.4 facility and equipment condition
  - 1.5 production safety
- 2. management targets
  - 2.1 production/operation management
  - 2.2 human resource management
  - 2.3 technology innovation/renovation management
  - 2.4 scientific research management
  - 2.5 education and training
  - 2.6 sanity and environmental protection
- 3. other targets
  - 3.1 serious accidents and fire events
  - 3.2 serious quality incidents
  - 3.3 repair and maintainence
  - 3.4 family planning

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

\* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.

- (2) Participation (Q.5.6.8)
- Before 1992: factory managers had to discuss and compromise the production quantity and cost targets with the top management.
- After 1992: factory managers negotiate and agree the IRC targets with the general manager during the annual planning cycle.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets agreed by the production managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective factory managers and their employees.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (4) Incentive (0.5.6.16)
- Before 1992: the bonus was determined by the accomplishment of the production and cost targets and qualitative factors such as quality and safety had veto effect on the bonus to be awarded.
- After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the factory managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (2.5)"

Summary of Corporate Planning Factors	Influence : Before 1992		After 1992		
Target Bias Participation Review & Communication Incentive		(1.5) (1.5) (1.5) (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)		
Overall Planning Influence	High	(1.5)	Medium (2.5)		

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "High Corporate (1.2)"
  before 1992 to "Medium Corporate (2.2)" after 1992]
- (1) Characteristics (0.5.9.1-7) Before 1992 After 1992 Production & service Production & service 1.1 Interdependencies departments involved departments involved Transfer standard cost standard cost 1.2 Price Basis Very little between Transfer Price all determined by 1.3 Negotiation top management buver and seller Intermediate 1.4 Little buy and sell are Some buy & sell are Product available in market available in market 1.5 Transfer All determined by Mostly determined by Quantity the top management the top management 1.6 Arbitration Prices and quantities Mainly determined by mainly determined by top management with little negotiations top management No, except the output No, only suggest 1.7 Government Interference volumes & selling volumes & prices of prices of products final products

Corporate Planning Influence: "Very High-High (1)" to "High-Medium (2)"

- (2) Participation (Q.5.9.8)
- Before 1992: All the transfer prices and quantities were determined by the top management and the factory managers were consulted sometimes. Any conflicts were arbitrated by the general manager. Factory managers didn't care much because they were measured by production volume and cost.
- After 1992: most of the transfer prices and quantities are still controlled by the top management although some negotiations are allowed for the factory managers. Interference from and arbitration by the general manager are necessary.

Corporate Planning Influence : "Very High-High (1)" to "Medium-High (2)"

- (3) Review (Q.5.9.9-12)
- Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise without much inputs from the middle management.

  The transfer prices were reviewed half-yearly and some amendments were allowed.

After 1992: the transfer prices at standard cost are reviewed quarterly and amendments can be made after consultation with the factory managers.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Characteristics Participation Review	VH-H (1.0) VH-H (1.0) High (1.5)	H-M (2.0) H-M (2.0) Medium (2.5)
Overall Planning Influence	High (1.2)	Medium (2.2)

\_\_\_\_\_

# Section 6 : Control System

- 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (2)" after 1992]
- (1) Organisational Design (Q.6.1.1)

		=====	======	
		High	(1.4)	Medium (2.1)
	Roles & functions Interactions	High High	(1.5) (1.5)	Medium (2.5) Medium (2.5)
	Staffing	High	(1.5)	H-M (2.0)
1.1	Structure	VH-H	(1.0)*	High (1.5)
		Before	1992	After 1992

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strateg	ic<			-Tight	Financial
Control				Contro	ol

Tight Financial	(0.0	_	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	_	3.0)
Tight Strategic	(3.1	-	4.0)

		======	======	=========
		High	(1.3)	Medium (2.2)
2.6	Termination	VH-H	(1.0)	High (1.5)
	Remuneration	High	(1.5)	Medium (2.5)
	Evaluation	High	(1.5)	Medium (2.5)
	Training	_	(1.5)	Medium (2.5)
	Assignment	High	(1.5)	Medium (2.5)
	Recruitment	VH-H	(1.0)	High (1.5)
		Before	1992	After 1992
(2)	Personnel# (Q.6.1.1)	f		

# Mr Hsu said that since 1992, more delegation has been given to the factory managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the general manager and the party secretary.

		======	======	=====	======
		VH-H	(1.0)	H-M	(1.6)
3.6	Communication*	VH-H	(1.0)	H-M	(2.0)
3.5	Qualitative targets	VH-H	(1.0)	High	(1.5)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	VH-H	(1.0)	High	(1.5)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
		Before		After	
(3)	Control Mechanisms (Q.			_ =.	

\* The control mechanisms are clearly communicated to the factories and departments through the annual plan, IRC and other enterprise policies, rules and regulations.

# Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.4) High (1.3) VH-H (1.0)	Medium (2.1) Medium (2.2) H-M (1.6)
Overall Control Influence	High (1.2)	H-M (2.0)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Fact	ors affecting the types a	nd styles Before 1		mechani After 1	
(1)	Precision & detail of				
	targets	VH-H	(1.0)	H-M	(2.0)
(2)	Objective vs subjective				
	targets	VH-H	(1.0)	H-M	(2.0)
(3)	Achieving targets		(5.0)		(0.0)
	Timeframe	VH-H	(1.0)	H-M	(2.0)
(4)	Stretch built into		/a a)		(0.0)
<i>(</i> <b>-</b> <i>)</i>	the targets	VH-H	(1.0)	H-M	(2.0)
(5)	Financial vs non-	! . 1.	(1 5)		(0.0)
11	financial targets	High	(1.5)	' H-M	(2.0)
(6)	Manangement influence	• • • •	(0 5)		(0.0)
	on setting targets	VH	(0.5)	M-M	(2.0)
		77TT TT	(1.0)	H-M	(2.0)
		VH-H	•	H-M	(2.0)
			<b>:====</b>		

6.3 Monitoring Results [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (1.9)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

		======	=====	======	=====
		VH-H	(1.0)	H-M	(1.7)
1.10	Computerization	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.1	Policy	VH-H	(1.0)	High	(1.5)
		Before	1992	After:	1992

# Miss Hsu has mentioned that the monthly condensed report format is unique for each factory. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the general manager. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: production factories were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: production volume and resources consumption are the major economic targets, however, more qualitative targets such as production management, product quality, human resource management are measured.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings.

Corproate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before 1992		After 1992	
Reporting Requirements Performance Measurement Review & Communication	High VH-H VH-H	(1.1) (1.0) (1.0)	H-M H-M H-M	(1.7) (2.0) (2.0)
Overall Control Influence	VH-H	(1.0)	H-M =====	(1.9)

# 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

(1)	Incentives* (Q.6.5.1-7,19	5-16,22	-23)		
	•	Before	1992	After 1	992
1.1	Basic wages	H-M	(2.0)	VH-H	(1.0)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
1.3	Bonuses - monthly	VH-H	(1.0)	High	(1.5)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
1.8	Redundancy	Very L	ow(4.0)	H-M	(2.0)
		H-M	(1.7)	H-M	(1.8)
		=====	======	======	=====

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Beijing municipal government at least once in each year to combat inflation. The second part is decided by the BCM2 which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the factory manager decides what level of group bonus will be given to the factory. It is up to a factory manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the BCM2's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 30-50% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 20-30% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided by the headquarters and government.
- After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

#### Review & Communication (Q.6.5.8,13-14,20-21) (4)

Before 1992 : targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation. Pension and other benefits were seldom changed. Performance and reward were made known to employees every month via the factory or department managers.

: IRC's targets are subject to situation and After 1992 negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies. Performance and reward are made known to employees every month via the factory or department managers.

Influence: "Very High-High (1)" to Corporate Control "High-Medium (2)"

# Summary of Corporate Control Influence :

			After 1992	
H-M	(1.7)	H-M	(1.8)	
VH-H	(1.0)	High	(1.5)	
VH-H	(1.0)	H-M	(2.0)	
VH-H	(1.0)	H-M	(2.0)	
High	(1.2)	H-M =====	(1.8)	
	VH-H	VH-H (1.0)	VH-H (1.0) High	
	VH-H	VH-H (1.0)	VH-H (1.0) H-M	
	VH-H	VH-H (1.0)	VH-H (1.0) H-M	

# Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing No.3 Cotton Mill (BCM2) belonged to before and after 1992.

Planning Influences	Before 1992	After 1992
Organisation Structure*		
Review Process*	High (1.4)	Medium (2.4)
Strategic Themes, Thursts and Suggestions*	Very High to High (1.0)	High to Medium (2.0)
Long-Term Plans* (Resource Allocation)	High (1.5)	Medium (2.5)
Short-Term Planning/ Budgeting* (Resource Allocation)	Medium (2.1)	Low (3.3)
Internal Responsibility Contracts#	High (1.5)	Medium (2.5)
Management of Inter- dependencies*	High (1.2)	Medium (2.2)
Overall Planning Influence	High (1.4)	Medium (2.4)
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.2)	Moderate
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (2.0)
Monitoring Results*	Tight Financial (1.0)	Moderate Financial (1.9)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.8)
Overall Control Influence	Financial (1.1)	Moderate Financial (1.9)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning  Influence	Control Influence
Influence	Strategic   Financial
High	Strategic Programming 0 Financial Programming 0
H/M Medium2	X X
M/L	0
Low	Strategic Control 4 Financial Control 4
0 (1.9, 2.4)	- BCM3 Post-1992 X (1.1, 1.4) - BCM3 Pre-1992

Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing No.3 Cotton Mill (BCM3) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

# 11 August 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

: Professor Clive Emmanuel Supervisor Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

: Case Analysis 19 Report Title : 1 September 1996 Report Date

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to :

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

identify the factors affecting each planning and control (2) parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

summarise all the planning and control parameters and represent the final result into the responsibility (4) accounting style grid.

For further details, please refer to the case writing of "Data Analysis 19" (12 January 1996).

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Name of SOE : Beijing Friendship Hotel (BFSH)

Staff Interviewed: Miss Zhang Lin/Finance Manager

(No. of years in this enterprise : 20 years) Mr Sun Yu Qing/Assistant Finance Manager (No. of years in this enterprise : 18 years)

Dates of Visits : First Visit - 4 September 1993

Second Visit - 31 August Third Visit - 11 September 1995

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#### Section 1: History & Background (Q.1.1-5)

Built in 1954, BFSH covers an area of 330,500 square metres and it has a construction area of 320,000 square metres. is the largest hotel in Beijing in terms of land area. BFSH is situated at the west side of Beijing with a distance of 33 km and 14km from the airport and city centre respectively. (Q.1.1)

- 1.2 BFSH is a very traditional, cultural and elegant hotel composed of a main building, four hotel buildings and 48 stand-alone apartments. The gardens and recreation facilities occupy most of the space of this big piece of land. Hundred kinds of trees and flowers are growing in the gardens and along the lanes, so that the guests can enjoy the green peace all around the year. It is equipped with complete service and recreational facilities of international standard. (Q.1.2)
- 1.3 BFSH has 2,600 standard rooms, suites, deluxe suites and apartments, 3,000 beds, 9 restaurants and other facilities including conference building, academic hall, business centre, theatre, dancing hall, swimming pool, tennis court, fitness centre, sauna room, billard room, penthouse garden, coffee lounge, bars, department stores, foreign exchange counter, medical clinic, hair saloon, post office, bookshop, photoshop, flowershop, etc. (Q.1.3)
- 1.4 BFSH has been under the administration of the State Foreign Experts Bureau because during the 1950s and 1960s, BFSH mainly provided accommodations to the foreign experts, such as the previously USSR's experts, who were invited by and worked for the China government. Since the economic reform in late 1970s, BFSH has been opened up for customers from all kinds of walk. (Q.1.4)
- 1.5 BFSH is planning to increase the number of Guest Houses from 48 to 130 in the next few years in order to provide more apartments for the higher demand from the foreign investors and expatriates in Beijing. On the other hand, BFSH will continue to expnad and diversify its tertiary enterprises in order to allocate the resources better on one hand and to transfer many excess employees to these independent self-financing entities on the other hand. (Q.1.5)

# Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

- 2.1 BFSH has been a wholly state-owned enterprise since 1954.
  BFSH is under the administration of the State Foreign
  Experts Bureau because during the 1950s and 1960s, BFSH
  mainly provided accommodations to the foreign experts who
  were invited by and worked for China government. (Q.2.1)
- 2.2 Since the economic reform started in 1979, instead of dictatorship from the bureau, BFSH has been delegated autonomy in the business decisions and operations although the bureau still imposed influences on some affairs like personnel, pricing, investment, finance and wages.

In responding to and implementing of the "SOE Operation Mechanism Transformation Regulations" enacted by the People's Congress in July 1992, both the government and bureau have delegated the planning and control responsibilities to the top management of BFSH to run their own business. (Q.2.4, 6 & &)

2.2 Under the Factory General Manager, who has an Enterprise Management Office, the organisation structure of BFSH is listed as follow: (Q.2.3, 5 & 9)

#### Profit Centres -

- 1. Guest Houses Department (5 buildings)
- 2. Expert Houses Department (48 apartments)
- 3. Customer Service Department
- 4. Meal & Beverage Department
- 5. Commodity Selling Department
- 6. Transportation Service Department
- 7. Friendship Palace (entertainment complex)
- 8. Beidaihu Hotel\*
- 9. Tertiary Enterprises:
  Friendship Shopping Malls
  Trading Companies
  Engineering & Decoration Company
  Entertainment Company
  Distill Water Company

#### Cost Centres -

- 10. Purchasing & Storage Department
- 11. Repair & Maintenance Department
- 12. Accounting & Finance Department
- 13. Personnel Department
- 14. Security Department
- 15. Quality Control Department
- 16. Education & Training Department
- 17. Organisation & Promotion Department
- 18. Labour Union Office
- 19. Communist Party Office
- \* This is a small hotel in Beidaihu which is about 150km Northeast of Beijing. This small hotel has 180 employees.
- 2.4 BFSH had a total of 3,800 employees at the end of 1994 and about 600 retired employees whose wages and benefits had to be borne by BFSH. It is classified as a medium size state-owned enterprise in China. (Q.2.10)
- # Although BFSH is a subsidiary enterprise, insufficient information has been obtained for questions Q.2.2, Q.2.8 and Q.2.11.

# Section 3: Financial Indicators (Q.3.1-8)

3.1 Total assets : RMB 290M (1993) (Q.3.1)

3.2 Turnover : RMB 130M (1993)

RMB 200M (1994)

RMB 230M (1995) (Q.3.2 & 7)

3.3 Income before tax\*: RMB 23M (1993) - 17.7% of sales (Q.3.5, 6, 7 & 8) RMB 20M (1994) - 10.0% of sales\* RMB 20M (1995) - 8.7% of sales\*

\* The significant reduction of profit margin in 1994 and 1995 was mainly due to the inflation effect on the cost of sales. Despite the drop of profitability, BFSH's cash position is rather healthy. It repaid RMB30M in 1995 and had a bank credit balance of RMB20M at the end of the same year.

3.4 Income tax rate : 55% (before 1993) 15% (since 1993)# (Q.3.6)

# The income tax rate may be unified at 33% in 1996 pending for the government fianl decision.

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# Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

BFSH has never entered into any formal ERC with the government but instead major financial targets such as turnover, profit, foreign exchange and capital expenditure have been assigned by the State Foreign Expert Bureau since the 1950s.

#### Section 5 : Planning System

- 5.1 Organisation Structure [Planning Influence changed from "High Corporate (1.1)" before 1992 to "Medium Corporate (2.1)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992 : all the departments were treated as "cost centres" managed by the department managers who were mainly responsible for the cost control and personnel affairs.
- After 1992: after some reorganisation, 9 departments as shown in section 2.3 above have been converted into "profit centres" and their managers are responsible for generating income.

Corporate Planning Influence\*: "High (1.5)" to "Medium (2.5)"

\* By using a 5-point scale -Very High (0) Greatest Influence (consistent with the scale High (1) used in the questionnaire Medium (2) e.g. 5.4.4 to quantify Low (3) some of the parameters or Very Low (4) Least Influence variables)

Very High	[VH]	(0.0 - 0.5)
Very High-High	[VH-H]	(0.6 - 1.0)
High	[H]	(1.1 - 1.5)
High-Medium	[H-M]	(1.6 - 2.0)
Medium	[M]	(2.1 - 2.5)
Medium-Low	[M-L]	(2.6 - 3.0)
Low	[L]	(3.1 - 3.5)
Very Low	[VL]	(3.6 - 4.0)

#### (2) Decentralization (Q.5.1.2)

Before 1992: the department managers were responsible for the cost control and personnel affairs as agreed in the annual budgets and internal responsibility contract (IRC) with the top management.

After 1992: the top management has been decentralizing more planning responsibility to each department such as initiating the annual plan and the IRC. The income profit and expense responsibilities primarily lie with the department managers but the top management keep a close eye on the financial performance of each profit or cost centre through monthly, weekly and daily report.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

# (3) Appointment (Q.5.1.3)

Before 1992: the general manager, party secretary and key managers were appointed by the Bureau. Major organisational changes must be approval by the Bureau.

After 1992: the general manager and party secretary are still appointed by the Council. The appointment of senior managers may be influenced by the Bureau.

Top management can decide changes in organisation structure and personnel affairs.

Corporate Planning Influence: "Very High-High (1)" to "High-Medium (2)"

# (4) Interdependencies (Q.5.1.4)

Before 1992: although inter-department product and service transfer was minimal, any such transactions were valued at either standard cost or selling price as determined by the top management annually.

After 1992: similar to before 1992 except very limited negotiation is allowed to the department managers.

Corporate Planning Influence: "Very High-High (1)" to "High (1.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	High (1.5) High (1.5) VH-H (1.0) VH-H (1.0)	Medium (2.5) Medium (2.5) H-M (2.0) High (1.5)
Overall Planning Influence	High (1.1)	Medium (2.1)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High Corporate (1.4)"
  before 1992 to "Medium Corporate (2.4)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992 : long term planning was initiated, monitored, reviewed and modified by the Bureau together with the top management. Given the key finanical targets by the Bureau, the top management initiated the annual budgets which should be discussed with and approved by the Bureau.
- After 1992: Council has delegated the long term planning and annual budgeting autonomy to the top management but strategic plans and annual financial targets still have to be decided by the Bureau.

Corporate Planning Influence: "Very High-High (1.5)" to "Medium (2.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992: formal planning meetings were held between the Bureau and top management to formulate, evaluate, approve and review the long term plans and annual budgets but initiation from the middle management (i.e. department managers) was limited.
- After 1992: more formal processes are used for reviewing, discussing and sanctioning the annual plans and IRCs. Major guidelines are provided by the general manager to the department managers to formulate their own budgets and IRCs. They are also consulted in the long term planning.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was initiated by the Bureau although top management was actively involved.

  Annual planning and budgeting were initiated by the top management in consultation with the Bureau.
- After 1992: long term planning is initiated by the top management in consultation with the Bureau. The top management is fully responsible for the annual plan and budgeting which involve the initiation from the department managers.
- Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"
- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management in mid-year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the top management twice every year and significant changes should be be discussed with the Bureau and informed to the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notified to the lower management immediately.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	High (1.5) High (1.5) VH-H (1.0) High (1.5)	Medium (2.5) Medium (2.5) H-M (2.0) Medium (2.5)
Overall Planning Influence	High (1.4)	Medium (2.4)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.2)" after 1992]
- (1) Themes (0.5.2.4-7\*)
- Before 1992: "improve efficiency" and "increase profit or cost control" were the major strategic themes given to and imbedded into the planning and control system.
- After 1992 : the following strategic themes are stressed :
  - 1. friendly atmosphere;
  - 2. considerate and quality service; and
  - 3. beautiful surroundings.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts in Beijing.
- After 1992: quality of service is still the most important strategic thrust directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise.

Corporate Planning Influence: "High (1.5)" to "High-Medium (2)"

# (3) Suggestions (Q.5.3.2 & 3)

Before 1992: top management always made suggestions on the planning and review process such as cost control, personnel affairs, incentive scheme, and marketing.

After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the department managers to adjust their plans and operations as long as they would not deviate much from the long term plan and the ultimate sales and profit targets.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	VH-H (1.0) High (1.5) High (1.5)	H-M (2.0) H-M (2.0) Medium (2.5)
Overall Planning Influence	High (1.3)	Medium (2.2)

# 5.4 Long-Term Plans [Planning Influence changed from "High Corporate (1.4)" before 1992 to "Medium Corporate (2.4)" after 1992]

# (1) Central Planning (Q.5.4.2,4 & 8)

Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the service capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of service facilities, volume and mix, marketing and promotion.

After 1992: the top management has to initiate its own long term plans and negotiate with the Bureau who used to insist on certain macro-targets such as turnover and profit growth.

Corporate Planning Influence: "Very High-High (1)" to "High-Medium (2)"

- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine feasible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence between the Bureau and the top management to formulate the strategic plans. The current 5-year planning (1996-2000), includes facilities expansion, joint ventures, import/export, retailing and other tertiary enterprises.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979
  started to allow BFSH to participate in the 5year's planning with the Bureau and the municipal
  government but specific directives and suggestions
  were always coming from the top by using the term
  "macroeconomic control and adjustment" as an excuse
- After 1992: has to initiate their own long term strategic plans which are negotiated with the Bureau for review and approval. Some projects involved significant capital investment require financial arrangement by the Bureau.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (4) Review & Communication (Q.5.4.7 & 9)
- Before 1992 : 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.
- After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the Bureau for endorsement and sometimes assistance such as seeking long term bank loan.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	VH-H (1.0) High (1.5) High (1.5) High (1.5)	H-M (2.0) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.4)	Medium (2.4)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because BFSH caters for the capital budgets during the long term planning exercise.

- 5.5 Short-Term Plans/Budgets
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Medium-Low Corporate (3)" after 1992]
- (1) Central Planning (Q.5.5.1)
- Before 1992 : government had devolved the short term planning autonomy to the top management but specific suggestions were provided i.e. service capacity and

mix, sales and profit level.

After 1992: top management has the full autonomy in the annual planning and budgeting processes yet compromises on key indicators still have been sought from the Bureau.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: top management initiated the financial budgets and discussed and compromised with the department managers. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and expense centres.
- After 1992: top managers provided major guidelines (see section 5.5 of Data Analysis 18) to the department managers

for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

(3) Participation (Q.5.5.3 & 5)

Before 1992: top management involved the department management to formulate, evaluate, approve and review the annual budgets with the top management.

After 1992: formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

(4) Review & Communication (Q.5.5.6 & 8)

Before 1992 : annual plans and budgets were reviewed bi-annually

and amendments were seldom made except under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.

After 1992: top and middle management review the annual plans and budgets quarterly and amendments are made due to unavoidable internal and external factors.

A fixed budget concept is still in force. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before	1992	After	1992
Central Planning Operation Participation Review & Communication	H-M H-M H-M H-M	(2.0) (2.0) (2.0) (2.0)	M-L M-L M-L M-L	(3.0) (3.0) (3.0) (3.0)
Overall Planning Influence	H-M =====	(2.0)	M-L ====	(3.0)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: IRC was established in 1988 in order to motivate the various departments to attain at least the financial targets set in the ERC signed with the government.
- After 1992 : the following performance targets are set :
  - 1. income and profit targets
  - 2. expense targets
  - 3. total wages underwritten
  - 4. service targets
  - 5. materials supplied
  - (a sample of IRC is shown in section 5.6 of Data Analysis 19)
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- \* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.
- (2) Participation (Q.5.6.8)
- Before 1992: the IRC's targets were suggested by the top management so that the department managers had to negotiate and compromise the terms and conditions.
- After 1992: the top management and department managers develop the IRC's terms and conditions during the annual planning process. More room for discussion and negotiation is allowed for the department managers.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets agreed by the department managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective department managers and

# their employees.

Corporate Planning Influence : "High (1.5)" to "Medium (2.5)"

(4) Incentive (Q.5.6.16)

Before 1992: the bonus was determined by the accomplishment of the financial targets. The total basic wages for the whole department was also based on the achievement of the income/profit/expense levels.

After 1992: apart from the financial targets, other qualitative targets such as service quality, facilities repair and maintenance, education and training are also measured against to determine wages and bonus.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (2.5)"

Summary of Corporate Planning Factors	Influence : Before 1992	After 1992
Target Bias Participation Review & Communication Incentive	High (1.5) High (1.5) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.5)	Medium (2.5)

# 5.7 Management of Interdependencies (Transfer Pricing)

Because the 8 departments or profit centres in BFSH are all independent with very minimal interactions and interdependencies, therefore, if there is any internal product/service transfer, acutal or standard cost is used to settle the transactions.

\_\_\_\_\_\_

# Section 6 : Control System

# 6.1 Decentralisation & Control [Control Influence changed from "Financial (1.3)" before 1992 to "Moderate Finance (2)" after 1992]

		======	======	=========
		High	(1.4)	Medium (2.1)
1.4	Interactions	High	(1.5)	Medium (2.5)
	Roles & functions	High	· · · · · · · · · · · · · · · · · · ·	Medium (2.5)
	Staffing			H-M (2.0)
1.1	Structure	VH-H	(1.0)*	High (1.5)
		Before	1992	After 1992
(1)	Organisational Design	(Q.6.1.1)		

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strateg:	ic<			-Tight	Financial
Control				Contro	01

Tight Financial	(0.0 - 1.0)
Financial	(1.1 - 1.5)
Moderate Financial	(1.6 - 2.0)
Moderate Strategic	(2.1 - 2.5)
Strategic	(2.6 - 3.0)
Tight Strategic	(3.1 - 4.0)

(2) Personnel# (Q.6.1.1)

		Before	1992	After 1992
2.1	Recruitment	VH-H	(1.0)	High (1.5)
2.2	Assignment	High	(1.5)	Medium (2.5)
2.3	Training	High	(1.5)	Medium (2.5)
2.4	Evaluation	High	(1.5)	Medium (2.5)
2.5	Remuneration	High	(1.5)	Medium (2.5)
2.6	Termination	VH-H	(1.0)	High (1.5)
		High	(1.3)	Medium (2.2)
		======	=====	=========

# Mr Sun said that since 1992, more delegation has been given to the general managers in the personnel functions such as recruitment, assignment, training, evaluation and remuneration. But termination of employment with any employee has always been a difficult task which needs approvals from the general manager and the party secretary.

		=====	======	======	======
		High	(1.1)	H-M	(1.7)
3.6	Communication*	VH-H	(1.0)	H-M	(2.0)
3.5	Qualitative targets	High	(1.5)	H-M	(2.0)
3.4	Quantitative targets	VH-H	(1.0)	High	(1.5)
3.3	Financial targets	VH-H	(1.0)	High	(1.5)
3.2	IRC	VH-H	(1.0)	High	(1.5)
3.1	Budget	VH-H	(1.0)	High	(1.5)
	•	Before	1992	After	1992
(3)	Control Mechanisms (	2.6.1.2-3,	Q.6.4.8)		

\* The control mechanisms are clearly communicated to the departments through the annual plan, IRC and other enterprise policies, rules and regulations.

Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.4) High (1.3) High (1.1)	Medium (2.1) Medium (2.2) H-M (1.7)
Overall Control Influence	High (1.3)	H-M (2.0)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Tight Financial (1)" before 1992 to "Moderate Financial (2)" after 1992]

Fact	ors affecting the types a	nd styles Before 1		mechani After 1	
(1)	Precision & detail of	1777 II	(1 0)	TT M	(2.0)
(2)	targets Objective vs subjective	VH-H	(1.0)	H-M	(2.0)
(2)	targets	VH-H	(1.0)	H-M	(2.0)
(3)	Achieving targets Timeframe	VH-H	(1.0)	H-M	(2.0)
(4)	Stretch built into	· · · · · · · · · · · · · · · · · · ·		77 34	(2.0)
(5)	the targets Financial vs non-	VH-H	(1.0)	H-M	(2.0)
	financial targets	High	(1.5)	H-M	(2.0)
(6)	Manangement influence				
	on setting targets	VH	(0.5)	M-M	(2.0)
		VH-H	(1.0)	H-M	(2.0)
		======	=====	======	=====

# 6.3 Monitoring Results [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.7)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

Refore 1992
After 1992

		Belore	1992	Aiter 1	.992
1.1	Policy	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	High	(1.5)	Medium	(2.5)
		High	(1.1)	H-M	(1.7)
		======	=====	======	=====

# Mr Sun has mentioned that the monthly condensed report format is unique for each department. The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the general manager. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective department manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

- (2) Performance Measurement (Q.6.4.1-2)
- Before 1992: the key financial results such as sales and expenditures are the major concern of the top management. The non-financial measurement yardsticks are assessed by the top management and department through daily inspections. The comments and ratings of the service evaluation are written on the same monthly reports.
- After 1992: apart from the monthly reporting system, daily performance or control reports are required for the profit centres since they receive cash around the clocak everyday. Examples of these daily reports are shown in section 6.3 of Data Analysis 19.

Corporate Control Influence: "High (1.5)" to "High (1.5)"

- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly but not as formal and rigorous as the practices adopted after 1992. Assessed financial and qualitative results were notified to each department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the department managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual department or departmental meetings.

Corproate Control Influence: "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992	
Reporting Requirements Performance Measurement Review & Communication	High High VH-H	(1.1) (1.5) (1.0)	H-M High H-M	(1.7) (1.5) (2.0)	
Overall Control Influence	High	(1.2)	H-M =====	(1.7)	
				•	

#### 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.9)" after 1992]

		======	======	======	=====
		H-M	(1.6)	H-M	(1.9)
1.8	Redundancy	Low	(3.5)	Medium	(2.5)
1.7	Recognition (intangible)	VH-H	(1.0)	H-M	(2.0)
	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	(2.5)
1.3	Bonuses - monthly	VH-H	(1.0)	High	(1.5)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
		_	•		•
1.1	Basic wages	High	(1.5)	H-M	(2.0)
		Before		After 1	992
(1)	Incentives* (Q.6.5.1-7,19	5-16,22-	23)		

\* The "basic wages" is reviewed every year depending on seniority, knowledge of work, technical skill and training. The increments from year to year are not substantial i.e. RMB20-30.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Beijing municipal government at least once in each year to combat inflation. The second part is decided by the BFSH which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the department manager decides what level of group bonus will be given to the department. It is up to a department manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, entertainment, servicing, trading etc. and unrelated to the BFSH's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and accounted for 30-50% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992: bonus is mainly determined according to IRCs and accounts for less than 20-30% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees but subject to the approval of the general manager and party secretary.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : department managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided

by the headquarters and government.

After 1992: department managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

### (4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the department managers.

After 1992 : IRC's targets are subject to situation and negotiation every year. Top management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the department managers.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

#### Summary of Corporate Control Influence :

Factors	Before	1992	After :	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.6) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.9) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2) =====	H-M ======	(1.9) =====

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Friendship Hotel (BFSH) belonged to before and after 1992.

Planning Influences	Before 1992	After 1992
Organisation Structure*	High (1.1)	Medium (2.1)
Review Process*	High (1.4)	Medium (2.4)
Strategic Themes, Thursts and Suggestions*	High (1.3)	Medium (2.2)
Long-Term Plans* (Resource Allocation)	High (1.4)	Medium (2.4)
Short-Term Planning/ Budgeting* (Resource Allocation)	High to Medium (2.0)	Medium to Low (3.0)
Internal Responsibility Contracts#	High (1.5)	Medium (2.5)
Management of Inter- dependencies*	N/A	N/A
Overall Planning Influence	=======================================	=======================================
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.3)	Moderate
Agreeing Objectives*	Tight Financial (1.0)	Moderate Financial (2.0)
Monitoring Results*	Financial (1.2)	Moderate Financial (1.7)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.9)
Overall Control Influence	Financial (1.2)	Moderate Financial (1.9)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning   Influence	Control Influence				
	Strategic	Financial			
High 0	Strategic Programmin	ng O Financial Programming (			
TT /N		x x			
H/M					
Medium2					
M/L		0 .			
3		] 3			
Low 4	Strategic Control	4 Financial Control			

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Friendship Hotel (BFSH) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

#### 1 September 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting in China

- Towards An Exploratory Framework"

Report Title : Case Analysis 20
Report Date : 5 September 1996

Based on the case writing (data transcription) of each stateowned enterprise investigated during the period from 1992 to 1995, the following description is to:

(1) trace each planning and control parameter to the respective questions in the semi-structured questionnaire (Appendix 1);

(2) identify the **factors** affecting each planning and control parameter;

(3) quantify as objective as possible the degree of planning or control influence on each factor and parameter;

(4) summarise all the planning and control parameters and represent the final result into the responsibility accounting style grid.

For further details, please refer to the case writing of "Data Analysis 20" (30 January 1996).

Name of SOE: Beiren Printing Machinery Holdings Ltd. (BPMH)

Staff Interviewed: Miss Zhang Weifen/Finance Manager

(No. of years in this enterprise : 15 years)

Dates of Visits : First Visit - 2 September 1993

Second Visit - 30 August 1994 Third Visit - 15 September 1995

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#### Section 1: History & Background (Q.1.1-5)

1.1 BPMH is a core member of Beiren Group Corporation (BGC) which specialises in the design, development, production and sale of various types of sheet-fed offset presses in China. BGC (formerly known as Beijing Renmin Machinery Factory) was established in 1952 through the merger of 21 small iron factories and machinery factories. (Q.1.1)

1.2 BGC (including BPMH) is the largest manufacturer of offset presses in the PRC and was accredited as a "Category 1" enterprise in 1990. "Category 1" enterprise is a national award given by the State to enterpries which have attained certain standards of management, product quality and profitability.

BPMH's head office and production facilities are located adjacent to the Beijing-Tianjin Express Highway in Beijing city. BPMH uses computers in the production and testing of key parts, components and fittings and has entered into an agreement with BGC whereby BPMH will undertaken research and development of new products using the research facilities of BGC. (0.1.2)

- 1.3 The major business operations of BPMH are development, design, manufacturing and sales of printing machines, pressing machines, packing machines and parts and component of such machines. The other operations include technology consultancy and technical support services related to the above business. BPMH produces 61 different models of offset presses, which include single/double colour, multi-colour and multi-function sheet-fed offset presses. BGC has obtained the two Gold Quality Awards and two of the three Silver Quality Awards that have ever been given to the printing machinery industry by the State during the past decade. (Q.1.3)
- 1.4 BPMH is principally engaged in the production and sale of various types of sheet-fed offset presses in China. BPMH currently has more than 300 regular customers located throughout China, including printers of books, magazines, newspapers, notes, certificates and packaging materials. BPMH's products are principally sold to customers in the PRC. In addition, a small proportion of its products (less than 10%) are exported to a number of developing countries and regions including Southeast Asia and the Middle East. (Q.1.4)
- 1.5 BPMH's board of directors believe that BPMH has been able to maintain consistent profitability as a result of continuous improvement to existing models and introduction of new and improved models in accordance with market demand. Prices of most raw materials and components used by BPMH and its products were previously subject to state control, and most adjustments to prices had to be approved by the relevant authorities. However, since the latter part of 1992, such price control has been eliminated and currently, the prices of raw materials and components used by BPMH and its products are not subject to any form of state control.

During this period, which was also a period of rapid economic growth in the PRC, BPMH's production costs have increased significantly, as a result of increases in material costs as well as labour costs. Nevertheless, throughout the period, BPMH has been able to adjust its sales prices in response to increases in such costs, and overall profit margins have been maintained. With its establised market position and competitive pricing policy, as against both domestic and imported products, and the strong market demand, the BOD expect that BPMH will be able to sustain its profit margins in the 1990s. (Q.1.5)

#### Section 2 : Legal Form & Organisation Structure (Q.2.1-11#)

.1 BPMH was established in Beijing, the PRC on 13 July 1993 as a joint stock limited company in accordance with the provisions set out in the Standard Opinion on Joint Stock Limited Companies issued as of 15 May 1992 by the State Commission for Restructuring the Economic System of the PRC. BPMH is registered as an overseas company in Hong Kong under Part XI of the Hong Kong Companies Ordinance. Its ultimate holding company is Beiren Groyp Corporation (BGC), a legal entity owned by the PRC government (state-owned enterprise).

Pursuant to the approval of the China Securities Regulatory Commission of the State Council and other relevant authorities, BPMH issued H shares in Hong Kong in July 1993 and A shares in Shanghai in April 1994. The H shares were listed on the Hong Kong Stock Exchange on 6 August 1993 and the A shares (public shares) were listed on the Shanghai Stock Exchange on 6 May 1994. Additional A shares (employee shares) were listed on the Shanghai Stock Exchange on 29 November 1994.

As at 31 December 1994, the share capital structure of BPMH was as follow:

Million shares
Nominal value
RMB1 each

Shares not yet listed
State-owned legal person shares (A Shares)\* 250 (62.5%)

Listed shares
PRC public shares (A Shares)
Hong Kong public shares (H Shares)

400 (100.0%)

\* Represented by the Beiren Group Corporation (BGC) (Q.2.1 & 4)

- 2.2 Under the BPMH, the company structure is shown as follow: (0.2.3, 5 & 9)
  - (1) Production Factories & Workshops\*
    - 1.1 Multi-colour Offset Press Factory
    - 1.2 Single/Double Colour Offset Press Factory
    - 1.3 Sheet-Fed Machine Factory
    - 1.4 Gear Workshop
    - 1.5 Foundry (casting)
  - \* Each factory or workshop is an independent profit centre, having signed IRC with the General Manager, and has its own manager, deputy managers, foremen and other supporting staff, such as accounting and personnel. Therefore, a kind of matrix management exist with various reporting relationships with the respective departments in the headquarters.
  - (2) Headquarters
    - 2.1 Enterprise Management Office (GM)
    - 2.2 Internal Audit & Law Office (Deputy-GM)
    - 2.3 Production Planning & Control Department (Chief
    - 2.4 Technical & Quality Assurance Department Engineer)
    - 2.5 Investment & Development Department (Chief
    - 2.6 Sales & Marketing Department Economist)
    - 2.7 Accounting & Finance Department (Chief
    - 2.8 Computer Department Accountant)
    - 2.9 Purchasing & Supply Department (Deputy-GM)
    - 2.10 Personnel & Manpower Department (same Deputy-GM)
  - (3) Board of Directors
    - 3.1 General Manager (Chairman)
    - 3.2 Deputy General Manager (Deputy Chairman)
    - 3.3 Deputy General Manager (Director)
    - 3.4 Chief Engineer (Director)
    - 3.5 Chief Economist (Director)
    - 3.6 Assistant to General Manager (Director)
    - 3.7 Deputy GM of BGC (Director)
    - 3.8 Deputy GM of BGC (Director)
    - 3.9 Senior Assistant to GM of BGC (Director)
    - 3.10 Two Government Officials (Non-executive Directors)
  - (4) Supervisory Committee
    - 4.1 Chairman (Chairman of BGC's Labour Union)
    - 4.2 Supervisor (Supervisor of BGC's Supervisory Comm.)
    - 4.3 Supervisor (Representative of BPMH Labour Union)

- 2.3 BGC is an independent legal entity owned by the State. The supervisory authority of BPMH and BGC is Beijing Industrial Machinery Bureau. BPMH and BGC are independent of such authority in respect of management decision relating to policy setting, strategy, planning and operations. As far as BGC is concerned, the major roles played by the Beijing Industrial Machinery Bureau before 1993 are to:
  - (a) appoint the factory manager (or general manager) and the communist party secretary;
  - (b) maintain macroeconomics control on the 5-year's plans suggested by its enterprises;
  - (c) provide guidance on product development, technology improvement and market information; and
  - (d) act as a bridge or facilitator between the government and its enterprises in policy matters such as capital investment, import and export autonomy, taxation, legal form transformation i.e. shareholding, etc. (Q.2.6 & 7)
- 2.4 At the end of 1994, BPMH had a workforce of 3,650 people, including 2,800 workers, 290 engineering and technical personnel, 450 administration staff and 110 responsible in servicing and other duties. It is classified as a "large-size SOE" in China. (Q2.10)

# Although BPMH is a subsidiary enterprise, insufficient information has been obtained for questions Q.2.2, Q.2.8 and Q.2.11.

Section 3: Financial Indicators (Q.3.1-8)

3.1 Total assets : RMB1,027M (1994) (Q.3.1)

\* BPMH generally commences production upon confirmation of orders. As a result of the recent rapid growth of printing industry, demand for BPMH's printing machines has significantly exceeded supply. Therefore, the customers are generally required to pay a cash deposit of 10%-20% of the purchase price at the time of order. The balance will be payable immediately prior to delivery or upon delivery. Coupled with the shares issued in 1993 and 1994, BPMH had a total of cash and bank balance of RMB220M against a total of long term and short term borrowings balance of RMB83M at the end of 1994. Bad debt was quite minimal.

- 3.3 Income before tax: RMB 52M (1992) 19.6% of sales (Q.3.5, 6, 7 & 8) RMB 111M (1993) 28.0% of sales RMB 122M (1994) 28.6% of sales RMB 107M (1995) 29.6% of sales
- 3.4 Income tax rate : 15% (Q.3.6)
- + Since BPMH is not a holding enterprise, Q.3.4 is not applicable.

### Section 4: Econmic Responsibility Contract System (ERCS) (Q.4.1-13)

BGC, the holding enterprise of BPMH, has entered into ERC with the municipal government since 1988. The inception of BPMH in 1993 did not affect the ERC of BGC because BPMH is a public limited company which is not required to entered into any ERC with the government, but instead income and relevant taxes are the sources of revenue paid by BPMH to the government.

#### Section 5 : Planning System

- 5.1 Organisation Structure
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium Corporate (2.5)" after 1992]
- (1) Responsibility Centre (Q.5.1.1 & 5)
- Before 1992: before transferring the 5 factories to BPMH in July 1993, these production factories were treated as cost centres in the parent enterprise BGC.
- After 1992: upon inception of BPMH, the 5 production factories have been established as independent profit centres that are controlled by individual factory managers with clear lines of authority and responsibility.

Corporate Planning Influence\*: "High (1.5)" to "Medium (2.5)"

Greatest Influence Very High (0) \* By using a 5-point scale -(consistent with the scale (1) High (2) used in the questionnaire Medium (3) e.g. 5.4.4 to quantify Low (4) Least Influence some of the parameters or Very Low variables)

Very High	[VH]	(0.0 - 0.5)
Very High-High	[VH-H]	(0.6 - 1.0)
High	[H]	(1.1 - 1.5)
High-Medium	[H-M]	(1.6 - 2.0)
Medium	[M]	(2.1 - 2.5)
Medium-Low	[M-L]	(2.6 - 3.0)
Low	[L]	(3.1 - 3.5)
Very Low	[VL]	(3.6 - 4.0)

#### (2) Decentralization (Q.5.1.2)

Before 1992: the factory managers were responsible for the production volumes and costs as agreed in the annual budgets and internal responsibility contracts (IRCs) with the top management.

Therefore, classifying the factories into cost centres were appropriate.

After 1992: the top management has been decentralizing more planning responsibility to each production factory and department such as participation in formulating the annual plan and the IRC. Based on the IRC, they

are accounted for the production quantities and costs, as well as the fixed and working capital.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

#### (3) Appointment (Q.5.1.3)

Before 1992: the general manager and party secretary were appointed by the Bureau, and some senior appointments and major organisational changes required Council's approval.

After 1992: the appointments of chairman and party secretary are decided by the BGC or Bureau. The board of directors has full autonomy to appoint all the senior management staff in the headquarters and the managers of the 5 production factories.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

#### (4) Interdependencies (Q.5.1.4)

Before 1992: the transfer quantities and prices of internal cross-supplies were determined by the headquarters by using standard cost plus various mark-ups.

After 1993: the internal components and services transfer are fairly complex which are described in section 5.7 of Data Analysis 20. Basically, standard cost plus is the common method for transfer pricing. Higher autonomy is allowed for negotiation among the production and service departments, and also between BPMH and BGC.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

#### Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Responsibility Centre Decentralization Appointment Interdependencies	High (1.5) High (1.5) High (1.5) High (1.5)	Medium (2.5) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.5)	Medium (2.5)

- 5.2 Review Process (Planning & Budgeting)
  [Planning Influence changed from "High-Medium Corporate (2)"
  before 1992 to "Low Corporate (3.1)" after 1992]
- (1) Central Planning (Q.5.4.1 & 8, Q.5.5.7, Q.5.8.9)
- Before 1992 : long term planning was initiated, monitored, reviewed and modified by the top management after discussion and agreement with Bureau. The annual budgeting process was initiated by the top management but major financial targets i.e. sales, profit should be agreed with the Bureau.
- After 1992: the board of directors is fully responsible for the long term and annual planning. Some huge capital investment projects may require BGC's or Bureau's support in terms of government's approval.

Corporate Planning Influence: "High-Medium (2)" to "Low (3.5)"

- (2) Operation (Q.5.7.1-5)
- Before 1992 : formal planning meetings were held between the Bureau and top management to formulate, evaluate, approve and review the long term plans. As long as the key financial targets could be achieved, the Bureau seldom influenced the annual budgets.
- After 1992 : long term plans decided by the board of directors are submitted to the BGC and Bureau for endorsement and assistance when necessary. Summary of annual budgets is submitted to the Bureau for information.
- Corporate Planning Influence : "Medium (2.5)" to "Low (3.5)"
- (3) Participation (Q.5.7.6-8)
- Before 1992: long term planning was top-down process but middle management (i.e factory managers) did participate in the annual planning and budgeting processes but initiation was constrained.
- After 1992: middle management is being consulted on the long term planning. They have to discuss with the lower management in formulating their own annual budgets and IRCs although some specific suggestions and directions are given by the top management during the negotiations.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (4) Review & Communication (5.7.9-14, 5.8.8-11)
- Before 1992: the Bureau reviewed and amended the long term plans with the top management annually. Changes were notified to the employees during the AGM. The annual budgets were reviewed between the top and middle management in mid-year but amendments were made due to significant changes which were communicated to lower management through revised budgets.
- After 1992: long term plans are reviewed by the board twice every year and significant changes should be notified to the Bureau and informed to the employees during the AGM. The annual budgets are reviewed quarterly between the top and middle management and amendments can be made and notified to the lower management immediately.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	H-M (2.0) Medium (2.5) High (1.5) H-M (2.0)	Low (3.5) Low (3.5) Medium (2.5) M-L (3.0)
Overall Planning Influence	H-M (2.0)	Low (3.1)

- 5.3 Strategic Themes, Thrusts & Suggestions
  [Planning Influence changed from "High Corporate (1.3)"
  before 1992 to "Medium Corporate (2.3)" after 1992]
- (1) Themes (Q.5.2.4-7\*)
- Before 1992: "improve efficiency" and "increase profit or cost control" were the major strategic themes given to and imbedded into the planning and control system.
- After 1992 : the board of directors believe that the success of the company is attributable to the following strategic themes :
  - the growth of China's printing industry leading to increasing demand for advanced printing machines;
  - 2. its association with BGC which is one of the market leaders;
  - its experienced management team and workers who have extensive experience and expertise in the printing machinery industry;
  - its continuous efforts in research and development to improve the quality of the existing products and on the development of offset press;
  - 5. its extensive product range of high-quality and competitively priced offset presses; and
  - 6. the use of computer controlled facilities in the processing of key parts and components which enable the company to maintain its control over product quality and production schedules.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- \* Q.5.2.1-3 are related to the life-long employment situation which has been a common strategic theme in the state-owned enterprises during the 1990s. This issue is presented in section 6.4 below.
- (2) Thrusts (Q.5.3.1 & 4)
- Before 1992: "quality" has been the major strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas market on the other hand.
- After 1992: in order to establish the quality assurance system for the full size paper offset presses, BPMH has adopted the ISO9000 quality management and quality assurance standard since 1995. It is expected that the system will obtain the certification from the relevant PRC authorities of the State in 1996.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

- (3) Suggestions (Q.5.3.2 & 3)
- Before 1992: top management always made suggestions on the planning and review process such as production quantity and mix, selling price, personnel, incentive scheme, sales and marketing etc.
- After 1992: to facilitate the implementation of the legislation in 1992, the top management is leaving more freedom to the factory managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the ultimate annual sales and profit targets.

Corporate Planning Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Theme Thrust Suggestions	High (1.5) High (1.5) VH-H (1.0)	Medium (2.5) Medium (2.5) H-M (2.0)
Overall Planning Influence	High (1.3)	Medium (2.3)

- 5.4 Long-Term Plans
  [Planning Influence changed from "High Corporate (1.5)"
  before 1992 to "Medium-Low Corporate (2.6)" after 1992]
- (1) Central Planning (Q.5.4.2,4 & 8)
- Before 1992: before the economic reform started in 1979, the 5-year long term plans focused on the production capacity and volumes dictated by the government. Since the 1980s, top management participated in the long term planning discussions with the Bureau in terms of production facilities, volume and mix, product and market development.
- After 1992: both the Bureau and BGC have delegated the long term planning autonomy to the board of directors who focus on the following long term objectives:

  1 improving the quality and performance level of
  - improving the quality and performance level of its offset presses;
  - 2. expanding the range of offset presses produced;
  - increasing its production capacity and improving its productivity.
- Corporate Planning Influence: "High (1.5)" to "Medium-Low (3)"
- (2) Operation (Q.5.4.3 & 5)
- Before 1992: the top management was involved with the Bureau to formulate, evaluate, implement, monitor and review the long term plans. Negotiations and compromises had to be made in order to determine feasible long term plans acceptable to both sides.
- After 1992: formal planning meetings and procedures are in existence to get middle management (i.e. factory managers) involved whose planning, control and evaluation aspects are affected. The current 5-year planning (1996-2000), long term investments, research and development, equipment and technology transfer, innovation, turnover/profit growth, product and market development and joint ventures.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Participation (Q.5.4.4 & 6)
- Before 1992: the commencement of the economic reforms in 1979 started to allow BGC to participate in the 5-year's planning with the Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse.

After 1992: has to formulate their own long term strategic plans which are submitted to the Bureau and AGM for review and approval. Some projects involved significant capital investment require financial arrangement by the Bureau.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

(4) Review & Communication (Q.5.4.7 & 9)

Before 1992 : 5-year long term plan was reviewed annually by the Bureau with the top management and changes made were notified to the employee's representatives during the annual general meeting.

After 1992: the top management reviews the 5-year plan twice every year before the annual planning cycle and significant changes are reported to the Bureau for endorsement and sometimes assistance such as seeking long term bank loan.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	High (1.5) High (1.5) High (1.5) High (1.5)	M-L (3.0) Medium (2.5) Medium (2.5) Medium (2.5)
Overall Planning Influence	High (1.5)	M-L (2.6)

\* The questions in Section 5.8 : Capital Budgeting are incorporated into the above long term plans because BCM3 caters for the capital budgets during the long term planning exercise.

5.5 Short-Term Plans/Budgets
[Planning Influence changed from "Medium Corporate (2.3)"
before 1992 to "Low Corporate (3.3)" after 1992]

(1) Central Planning (Q.5.5.1)

Before 1992: government had devolved the short term planning autonomy to the top management but specific suggestions were provided i.e. production volume and mix, sales and profit level.

After 1992: board of directors have full autonomy in the annual planning and budgeting processes although the financial expectation of the BGC and Bureau have to be considered.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (2) Operation (Q.5.5.2 & 4)
- Before 1992: production budgets were initiated by the factory managers and then discussed and compromised with the top management. Expense budgets were suggested to the service departments for negotiation and agreement. Annual planning was a means for the top management to allocate resources i.e. working capital and expenses to different cost and expense expense centres.
- After 1992: top managers provided major guidelines (see section 5.5 of Data Analysis 20) to the factory managers for intitiating their own budgets before submission and then iterative negotiation begins until agreements are made. Service departments have to formulate their own expense budgets as well.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (3) Participation (Q.5.5.3 & 5)
- Before 1992: the production managers had to formulate, evaluate, approve and review the annual budgets with the top management. The service departments were consulted in identifying the expense budgets.
- After 1992: more formal and rigorous meetings and processes are used for reviewing, discussing and sanctioning the annual plans and IRCs between the top and middle management. The lower management is being consulted in the short term planning as well.

Corporate Planning Influence: "Medium (2.5)" to "Low (3.5)"

- (4) Review & Communication (Q.5.5.6 & 8)
- Before 1992: annual plans and budgets were reviewed quarterly and amendments were seldom made except under significant environmental changes. Annual plans were communicated to middle and lower management in written forms.

After 1992: top and middle management review the annual plans and budgets monthly and amendments are made due to unavoidable internal and external factors.

A flexible budget concept is started to use. Other than documentations, the budget information is further communicated between the top and middle management during the monthly performance evaluation meeting.

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992
Central Planning Operation Participation Review & Communication	Medium (2.5) H-M (2.0) Medium (2.5) H-M (2.0)	Low (3.5) M-L (3.0) Low (3.5) M-L (3.0)
Overall Planning Influence	Medium (2.3)	Low (3.3)

- 5.6 Internal Responsibility Contracts (IRC)
  [Planning Influence changed from "High-Medium Corporate
  (1.6)" before 1992 to "Medium-Low Corporate (2.6)" after
  1992]
- (1) Target Bias (Q.5.6.1-6\*)
- Before 1992: the previous BGC's production factories were using IRCs which targets focused on production quantity and cost.
- After 1992: BPMH has been adotping IRC since its inception in 1993. The IRCs emphasized on the internal profit for the 3 production factories and cost of production for the gearing and foundry workshops.

  (foundry workshop's IRC in 1994 is shown in section 5.6 of Data Analysis 20)

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

\* The procedures in setting the IRC (Q.5.6.7) are very similar to the annual planning or short term planning cycle.

- (2) Participation (Q.5.6.8)
- Before 1992 : factory managers had to discuss and compromise the production quantity and cost targets with the top management.
- After 1992: factory managers negotiate and agree the IRC targets with the general manager during the annual planning cycle.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (3) Review & Communication (Q.5.6.9-15)
- Before 1992: targets agreed by the production managers were reviewed in the middle of the year and amendments could be made when mutually agreed with the top management.
- After 1992: IRCs are reviewed quarterly and amendments can be made in order to reflect the rapid changing external factors such as inflation and maintain attainable targets. IRCs are documented and informed to the respective factory managers and their employees.
- Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"
- (4) Incentive (Q.5.6.16)
- Before 1992: the bonus was determined by the accomplishment of the production and cost targets and qualitative factors such as quality and safety had veto effect on the bonus to be awarded.
- After 1992: both the economic and qualitative targets are linked up with the bonus determination, so the factory managers are eager to initiate the IRC targets in order to increase the bonus under attainable standards.

Corporate Planning Influence: "High (1.5)" to "Medium-Low (2.5)" Summary of Corporate Planning Influence:

	=======	=====	======	=====
Overall Planning Influence	H-M	(1.6)	M-L	(2.6)
Target Bias Participation Review & Communication Incentive	High High	(2.0) (1.5) (1.5) (1.5)	M-L Medium Medium Medium	(2.5) (2.5)
Factors	Before 1992		After 1992	

- 5.7 Management of Interdependencies (Transfer Pricing)
  [Planning Influence changed from "High-Medium Corporate
  (1.8)" before 1992 to "Medium-Low Corporate (2.8)" after
  1992]
- (1) Characteristics (Q.5.9.1-7)
  Refore 1992

		Derore 1992	MICEL
1.1	Interdepen-	Production & service	Produc
	dencies	departments involved	BGC (pa
1.2	Transfer	standard cost	standa
	Price Basis	plus	% of s
	m		7

- 1.3 Transfer Price mainly determined
  Negotiation by top management
  1.4 Intermediate Some buy & sell are
- Product available in market

  1.5 Transfer Mainly determined by
- Quantity the top management

  1.6 Arbitration Prices and quantities
  mainly determined by
- top management

  1.7 Government No, only suggest outInterference put volumes & selling
  prices of products

After 1992 ction/service & arent) involved ard cost plus & sales/profit largely between buyer and seller Some buy & sell are available in market Majority determined by top management top management made decisions on unresolved negotiations Not at all. Concern overall profit of the whole enterprise

Corporate Planning Influence : "High-Medium (2)" to "Medium-Low (3)"

- (2) Participation (Q.5.9.8)
- Before 1992: production factories and service departments were allowed to negotiate the internal transfer prices and quantities although influences inserted and arbitration required.
- After 1992: products and services transfer between BGC and BPMH are arm's-length transactions which quantities and prices have to be agreed between both parties at least on an annual basis. Internal transfers within BPMH's factories and departments are allowed to negotiate both the prices and quantities but sometimes influences come from the top management.

Corporate Planning Influence: "High-Medium (2)" to "Medium-Low (3)"

- (3) Review (Q.5.9.9-12)
- Before 1992: the standard costs used to set the transfer prices were determined during the annual planning exercise after consultation with the middle management i.e. factory managers. The transfer prices were reviewed half-yearly and some amendments were allowed.

After 1992: the transfer prices between BGC and BPMH are reviewed either annually (i.e. service charges) or quarterly (i.e. immediate products), and amendments can be made upon mutual agreement. Internal transfer prices among BPMH's production and service departments are reviewed quarterly and amendments can be made if the conditions warrant.

Corporate Planning Influence: "High (1.5)" to "Medium (2.5)"

Summary of Corporate Planning Influence :

Factors	Before 1992	After 1992	
Characteristics Participation Review	H-M (2.0) H-M (2.0) High (1.5)	M-L (3.0) M-L (3.0) Medium (2.5)	
Overall Planning Influence	H-M (1.8)	M-L (2.8)	

#### Section 6 : Control System

6.1 Decentralisation & Control [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Strategic (2.3)" after 1992]

(1) Organisational Design (Q.6.1.1)

	High (1.5)	Medium (2.4)
1.1 Structure 1.2 Staffing 1.3 Roles & functions 1.4 Interactions	Before 1992 High (1.5)* High (1.5) High (1.5) High (1.5)	After 1992 H-M (2.0) Medium (2.5) Medium (2.5) Medium (2.5)

\* By using a 5-point scale which is exactly the same used in the questionnaire:

Very Low(4)	Low(3)	Medium(2)	High(1)	Very	High(0)
Tight Strateg	ic<- <b></b> -			-Tight	Financial
Control				Contro	ol

Tight Financial	(0.0	-	1.0)
Financial	(1.1	-	1.5)
Moderate Financial	(1.6	-	2.0)
Moderate Strategic	(2.1	-	2.5)
Strategic	(2.6	-	3.0)
Tight Strategic	(3.1	_	4.0)

		======	======	=========
		High	(1.3)	Medium (2.3)
2.6	Termination	· vh-h	(1.0)	H-M (2.0)
2.5	Remuneration	High	(1.5)	Medium (2.5)
2.4	Evaluation	High	(1.5)	Medium (2.5)
2.3	Training	High	(1.5)	Medium (2.5)
2.2	Assignment	High	(1.5)	Medium (2.5)
2.1	Recruitment	VH-H	(1.0)	High (1.5)
		Before	1992	After 1992
(2)	Personnel# (Q.6.1.1)	•		

# Miss Zhang said that the deputy-general managers, factory managers and the three chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (workshops or sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration.

		=======	======	======	=====
		High	(1.4)	Medium	(2.1)
5.0	Communicación		(1.5)	ricaram	(2.5)
3.6	Communication*	High	(1.5)	Medium	(2.5)
3.5	Qualitative targets	High	(1.5)	H-M	(2.0)
3.4	Quantitative target:	s High	(1.5)	H-M	(2.0)
3.3	Financial targets	High	(1.5)	H-M	(2.0)
3.2	IRC	High	(1.5)	H-M	(2.0)
3.1	Budget	High	(1.5)	H-M	(2.0)
	_	Before		After 1	
(3)	Control Mechanisms				

\* Since BPMH is a listing enterprise with higher management autonomy delegated by the government authorities and is responsible to more stakeholders, including the shareholders as the general public, the board of directors and top management are compelled to focus on more strategic plans and tactical moves in order to maintain a balance of the different requirements. Therefore, the decentralisation and control in the context of organisation structure are more dynamic and flexible compared with the other wholly state-owned enterprises.

#### Summary of Corporate Control Influence :

Factors	Before 1992	After 1992
Organisational Design Personnel Control Mechanisms	High (1.5) High (1.3) High (1.4)	Medium (2.4) Medium (2.3) Medium (2.1)
Overall Control Influence	High (1.4)	Medium (2.3)

# 6.2 Agreeing Objectives (Q.6.2.1-2) [Control Influence changed from "Financial (1.1)" before 1992 to "Moderate Financial (2)" after 1992]

Facto	ors affecting the types a	nd styles Before 1		mechani After 1	
(1)	Precision & detail of targets	VH-H	(1.0)	H-M	(2.0)
(2)	Objective vs subjective targets	VH-H	(1.0)	H-M	(2.0)
(3)	Achieving targets Timeframe	VH-H	(1.0)	H-M	(2.0)
(4)	Stretch built into the targets	VH-H	(1.0)	H-M	(2.0)
(5)	Financial vs non- financial targets	High	(1.5)	H-M	(2.0)
(6)	Manangement influence on setting targets	VH-H	(1.0)	M-M	(2.0)
		High	(1.1)	H-M	(2.0)

# 6.3 Monitoring Results [Control Influence changed from "Financial (1.4)" before 1992 to "Moderate Strategic (2.1)" after 1992]

(1) Reporting Requirements# (Q.6.3.1-3)
Factors considered by the headquarters in management control

		Before	1992	After 1	.992
1.1	Policy	VH-H	(1.0)	High	(1.5)
1.2	Frequency	VH-H	(1.0)	High	(1.5)
1.3	Contents	VH-H	(1.0)	High	(1.5)
1.4	Compilation	VH-H	(1.0)	High	(1.5)
1.5	Review	VH-H	(1.0)	High	(1.5)
1.6	Evaluation	VH-H	(1.0)	High	(1.5)
1.7	Authorization	VH-H	(1.0)	High	(1.5)
1.8	Feedback	VH-H	(1.0)	H-M	(2.0)
1.9	Follow-up	VH-H	(1.0)	H-M	(2.0)
1.10	Computerization	High	(1.5)	Medium	(2.5)
		High	(1.1)	H-M	(1.7)
		======	=====	======	=====

# Miss Zhang has mentione'd that the quarterly and monthly condensed report format is unique for each factory (see examples shown in section 6.3 of Data Analysis 20). The actuals are compared with the budgets or IRCs. Any significant variances will be highlighted in order to bring the attention to the general manager. For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager and his subordinates to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

#### (2) Performance Measurement (Q.6.4.1-2)

- Before 1992: production factories were mainly measured on production volume and cost of production, but other non-financial targets such as quality and safety were accounted for less weightings.
- After 1992: internal profit is the major financial target used to measure against the production factories.

  Working capital and expense control are other economic targets measured against the budgets or IRCs.
- Corporate Control Influence: "High (1.5)" to "Medium (2.5)"
- (3) Review & Communication (Q.6.4.3-7, Q.6.4.9-12)
- Before 1992: the top management reviewed the performance reports monthly and discussed significant inefficiency and problems with the factory and department managers. Assessed financial and qualitative results were notified to each factory or department manager. Corrective actions might be initiated by the top management but the measurement criteria were seldom changed.
- After 1992: the top and middle management hold a monthly meeting to review the performance reports, to ask the factory managers for explanations, to decide corrective actions, and to determine penalties and incentives. Evaluation results are informed to the lower management via individual factory or departmental meetings.

Corproate Control Influence: "High (1.5)" to "High-Medium (2)"

Summary of Corporate Control 'Influence :

Factors	Before 1992	After 1992
Reporting Requirements Performance Measurement Review & Communication	High (1.1) High (1.5) High (1.5)	H-M (1.7) Medium (2.5) H-M (2.0)
Overall Control Influence	High (1.4)	Medium (2.1)

## 6.4 Rewards & Incentives [Control Influence changed from "Financial (1.2)" before 1992 to "Moderate Financial (1.8)" after 1992]

		======:	=====	======	=====
		H-M	(1.7)	H-M	(1.8)
1.8	Redundancy	Low	(3.5)	H-M	(2.0)
1.7	Recognition (intangible)	High	(1.5)	Medium	(2.5)
1.6	Pension	VH	(0.5)	VH-H	(1.0)
1.5	Other benefits	VH-H	(1.0)	H-M	(2.0)
1.4	Bonuses - annual	H-M	(2.0)	Medium	
1.3	Bonuses - monthly	VH-H	(1.0)	High	(1.5)
1.2	Allowances	H-M	(2.0)	H-M	(2.0)
	Basic wages	H-M	(2.0)	VH-H	(1.0)
		Before :		After 1	
(1)	Incentives* (Q.6.5.1-7,1	•			

<sup>\*</sup> The absic wages are divided into 21 grades which entry point or promotion depends of post, skills, seniority and experience.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Beijing municipal government at least once in each year to combat inflation. The second part is decided by the BPMH which may include housing, meals, travel, child care, attendance, overtime, hair-dressing, festival gift etc.

The calculation of "bonus" is based on the accomplishment of the targets in the IRC. The IRC signed between the general manager and the factory manager decides what level of group bonus will be given to the factory. It is up to a factory manager to award that lump sum of group bonus to his or her individual subordinates.

The "bonus" for the management and servicing staff is linked with the average bonus of the production workers, and is based on their performance and grades as well. One way to alleviate the redundant employees is to transfer a small portion of these employees to the self-financed "tertiary enterprises" which are mainly service businesses such as retailing, restaurant, transportation, trading etc. and unrelated to the BPMH's core business. Another way is to send some of employees home without giving them a job or post but still provide them the basic wages of RMB200-300.

Pursuant to the relevant provisions of the "Decision on the Reformation of Pension Scheme of Retired Employees of the Enterprises" of the State Council, BPMH contributes 19% of the total payroll of its employees as basic employee's pension expense.

- (2) Performance Orientation (Q.6.5.9-12,17-19)
- Before 1992: bonus relied on IRC's accomplishment and contributed to 30-40% of total wages. Basic wages were low and depend on seniority. There were many types of allowances which were all unrelated to performance but to combat inflation. Pension was totally borne by the enterprise. Laying off redundant employees was difficult.
- After 1992 : bonus is mainly determined according to IRCs and accounts for less than 20-30% of total wages.

  Basic wages has been increased and increments take

skills, knowledge, competance into account instead of seniority only. Some allowances and benefits are merged with the basic wages. The middle management can lay off the redundant employees.

Corporate Control Influence : "Very High-High (1)" to "High (1.5)"

- (3) Participation (Q.6.5.16-17)
- Before 1992 : factory managers were involved in formulating IRC's targets to be measured on. Basic wages, allowances, pension and other benefits were decided

by the headquarters and government.

After 1992: factory managers have to initiate the IRC's targets and negotiate with top management. The policies for basic wages, allowances and other benefits have involved the labour union and management. A nationwise pension policy is still undergoing with enterprise's contribution and then underwritten by the government.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

(4) Review & Communication (Q.6.5.8,13-14,20-21)

Before 1992: targets set in IRC were reviewed annually but basic wages and allowances only changed with inflation.

Pension and other benefits were seldom changed.

Performance and reward were made known to employees every month via the factory or department managers.

After 1992 : IRC's targets are subject to situation and negotiation very year. Top Management reviews the basic wages, allowances and other benefits during the annual planning cycle and employees are informed of these decisions and policies.

Performance and reward are made known to employees every month via the factory or department managers.

Corporate Control Influence : "Very High-High (1)" to "High-Medium (2)"

Summary of Corporate Control Influence :

Factors	Before	1992	After	1992
Incentives Performance Orientation Participation Review & Communication	H-M VH-H VH-H VH-H	(1.7) (1.0) (1.0) (1.0)	H-M High H-M H-M	(1.8) (1.5) (2.0) (2.0)
Overall Control Influence	High	(1.2)	H-M =====	(1.8)

#### Section 7 : Summary

The above planning and control influence are summarised in the following table in order to assess what are the responsibility accounting styles that Beiren Printing Machinery Holding Ltd. (BPMH) belonged to before and after 1992.

Planning Influences	Before 1992	After 1992
Organisation Structure*	High (1.5)	Medium (2.5)
Review Process*	High to Medium (2.0)	Low (3.1)
Strategic Themes, Thursts and Suggestions*	High (1.3)	Medium (2.3)
Long-Term Plans* (Resource Allocation)	High (1.5)	Medium to Low (2.6)
Short-Term Planning/ Budgeting* (Resource Allocation)	Medium (2.3)	Low (3.3)
Internal Responsibility Contracts#	High to Medium (1.6)	Medium to Low (2.6)
Management of Inter- dependencies*	High to Medium (1.8)	Medium to Low (2.8)
Overall Planning Influence	High to Medium (1.7)	Medium to Low (2.7)
Control Influence	Before 1992	After 1992
Decentralisation & Control#	Financial (1.4)	Moderate Strategic (2.3)
Agreeing Objectives*	Financial (1.1)	Moderate Financial (2.0)
Monitoring Results*	Financial (1.4)	Moderate Strategic (2.1)
Rewards & Incentives*	Financial (1.2)	Moderate Financial (1.8)
Overall Control Influence	Financial (1.3)	Moderate Strategic (2.1)

- \* All the planning and control influences (parameters) used by Goold and Campbell have been employed in this study.
- # Additional parameters used to measure the planning and control influences specifically in the China scenario.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Contro	l Inf	luence	
Initidence	Strategic		Financia	al
High C	Strategic Programming	g 0	Financial Programming	
H/M Medium2	· ·	2-	X	;
M/L		0		
Low 4	Strategic Control	3	Financial Control	3
шоw 4	3	2-		- ) – -

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beiren Printing Machinery Holdings Ltd. (BPMH) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Strategic Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of strategic control style as described by Goold's and Campbell's Strategic Style.

#### 5 September 1996

### QUESTIONNAIRE FOR INTERVIEWS THE MANAGEMENT IN SOES

Address:  Tel.  Staff Interviewed:  (1) Name:  Position:  No. of years - in enterprise:  - in this position:  Position:
Staff Interviewed:  (1) Name:  Position:  No. of years - in enterprise:  - in this position:  (2) Name:
Staff Interviewed:  (1) Name:  Position:  No. of years - in enterprise:  - in this position:  (2) Name:
(1) Name:  Position:  No. of years - in enterprise :  - in this position:  (2) Name:
Position:  No. of years - in enterprise :  - in this position :  (2) Name:
No. of years - in enterprise : in this position :  (2) Name :
No. of years - in enterprise : in this position :  (2) Name :
(2) Name:
Position:
No. of years - in enterprise :
- in this position :
(3) Name:
Position :
No. of years - in enterprise :
- in this position :
Date : Remarks :

### Section 1 : History and Background

- 1.1 When was this enterprise formed or established?
- 1.2 Which manufacturing or service industry does the enterprise belong to?

- 1.3 What were/are the major product (service) lines manufactured (provided) before and after 1992?
- 1.4 What were/are the major markets (local and overseas) for selling (rendering) the products (service) before or after 1992?
- 1.5 What will be the future product/market development in the next five years?

#### Section 2: Legal Form and Organisation Structure

2.1 What was/is/will be the enterprise legal form in the past, present and future? (please tick)

Wholly SOE Shareholding SOE Other

Before 1992

In 1992

After 1992

2.2 If the legal form was/is/will be a shareholding SOE, what percentages of share were/are/will be held by the respective parties?

	Before 1992	In 199	2 After 1992
Government	8	*	ફ
Other SOEs	8	*	*
Management	8	*	*
Employees	8	8	*
Individuals (Outsiders)	8	8	१
Others : please	specify		
_	- %	8	*
			1000
	100%	100%	100%

2.3 Is it possible to have a copy (copies) of the enterprise's
 organisational chart(s)?

2.4	What is the position of this enterprise in the whole organization? (please tick)
	(a) the holding enterprise
	(b) a subsidiary enterprise
	(c) an individual enterprise (neither holding nor subsidiary
	(d) Other (please explain):
2.5	Do you have the following posts in the top management elite? (If there are any, please indicate the numbers of people)
	Board of Directors (BOD)
	Executive Directors in BOD
	/ Chairman/Vice Chairman(s) in BOD
	Chief Executive Officer/Enterprise General Manager
	Deputy CEO(s)/Deputy Enterprise General Manager
	Chief Accountant
	Chief Economist
	Chief Engineering
	Other (please specify)
2.6	Who has ultimate responsibility for determination of the enterprise's long-term plans or corporate mission before and after 1992?
2.7	In practice, are other management levels involved in the setting of enterprise long-term plans or corporate mission? If yes, please specify.
2.8	Can you briefly mention each of your subsidiary enterprises in terms of : (this question is for holding enterprises)
	<ul> <li>(a) name and year of establishment;</li> <li>(b) manufacturing or service industry;</li> <li>(c) major product or service lines;</li> <li>(d) major markets (local and foreign);</li> <li>(e) wholly state-owned or shareholding;</li> <li>(f) total number of employees; and</li> </ul>

- (q) total turnover (sales) in last year;
- (h) total income before tax in last year; and
- (i) total income after tax in last year?
- 2.9 Can you briefly mention each of your major divisions or departments in terms of:
  - (a) number of employees (including workers);
  - (b) management structure (middle or lower management);
  - (c) major functions; and
  - (d) interactions with other divisions or departements?
- 2.10 What is the total number of employees in your enterprise overall at present?
- 2.11 What is the total number of employees in your part of the enterprise?

# (3) Financial Indicators (this part of the enterprise)

- 3.1 What was the total assets in this enterprise last year?
- 3.2 What was the total turnover (sales) in last year?
- 3.3 What was the split of domestic and export turnover (sales) in last year?
- 3.4 Do you have inter-transfer or internal sales to the holding or other subsidiary enterprises? If yes, what was/were the proportion(s) to total turnover (sales) in last year? (This question applies to group enterprise.)
- 3.5 What was the net income before tax in last year?
- 3.6 What was the net income after tax in last year?
- 3.7 Can estimates or forecasts on any of the the above figures (3.1 3.6) for this year be made now? If yes, please provide the details.
- 3.8 Are there any long-term (say within 5 years) plans for the above key financial indicators (3.1 3.6) at this moment?

## Section 4: Economic Responsibility Contract System (ERCS)

- 4.1 Has your enterprise ever signed a "Economic Responsibility Contract" (ERC) with the government (central or local)? If yes, when?
- 4.2 What were the basic amounts of "gross turnover (sales)" and "income after tax" agreed upon when signing such an ERC in the first year?
- 4.3 On what "bases" were the two figures arrived at in the above question (4.2)?
- 4.4 How have the "growth factors" on the above two contracted financial targets been determined year by year since after the first year?
- 4.5 Do you think the "bases" (4.3) and "growth factors" (4.4) described above have been fairly and realistically set? Why?
- 4.6 What other important targets, other than the above mentioned two financial targets, have been set in the ERC?
- 4.7 Did you participate in determining the two financial targets (4.2) and other targets (4.6)?
- 4.8 Did you participate in determining the level at which the performance measures (i.e. "bases", "growth factors", etc.) are set?
- 4.9 What have been the actual performances achieved by your enterprises compared against the above pre-determined financial and non-finanicaal targets since the first year signing up the ERC?
- 4.10 If the actual performances have not been satisfactory in the past years, what were the major reasons, other than the possibilities raised in 4.5 above, for the real situations?
- 4.11 Has your enterprise withdrawn from the ERCS already? If yes, why?
- 4.12 Are you anticipating to withdraw from the ERCS in the near future? If yes, why?
- 4.13 What is or will be the alternative system to enhance the productivity and efficiency in your enterprise instead of using the ERCS?

Section 5 : Planning System 5.1 Organisation Structure 5.1.1 How many in each type of the following responsibility centres (RCs) have been set up in your enterprises? Investment Centres Profit Centres \_\_\_\_ Cost Centres Expense Centres \_ Others, please specify : \_\_\_\_ 5.1.2 What are the major criteria (e.g. products, markets, geographic, clients, etc. ) in setting the Investment Centres; Profit Centres; Cost Centres; Expense Centres; and Other Centres? Are there any major problems encountered in setting the 5.1.3 above RCs? 5.1.4 What are major relationships and interdependencies among the RCs? Are any of them involved in the internal transfer of goods or services? Are central services provided for all the RCs? 5.1.5 Will there be any changes in setting and defining the

## 5.2 Strategic Themes

5.2.1 How is/was the abolishment of the "three iron bowls" (i.e. iron employment, iron position and iron wages) implemented?

RCs in the next two years?

5.2.2 What are the difficulties encountered in abolishing the "three iron bowls"? How can these difficulties be solved?

- 5.2.3 What are the results (i.e. employees' motivation and incentives) in abolishing the "three iron bowls so far?
- 5.2.4 Are there any other strategic themes (e.g. quality control) or distinctive competences (e.g. industrial safety) explicitly stated by the top management?
- 5.2.5 Are these strategic themes or distinctive competences helpful in planning and actual implementation?
- 5.2.6 When and under what circumstances will these themes and competences be changed? Do you participate in the change process?
- 5.2.7 How are these themes and competences communicated to every level of management and employees within the enterprise?

#### 5.3 Broad Strategic Thrusts

- 5.3.1 Are there any strategic thrusts or guidelines (e.g. productivity, profitability, assets turnover, product or market diversification etc.) laid down by the top management?
- 5.3.2 How do these strategic thrusts or guidelines affect the strategic planning and setting targets or budgets in different levels of management?
- 5.3.3 When and under what circumstances will these strategic thrusts or guidelines be changed?
- 5.3.4 How are these strategic thrusts or guidelines communicated to every level of management within the enterprise?

# 5.4 Long-Term Plans (Management's Participation, Review and Modification)

- 5.4.1 Do the top management set long-term (within 5 years) strategic plans? If yes, how long is the time-frame?
- 5.4.2 What are major context of the strategic plans? (please tick and describe briefly)

 Product development	:
diversificati	on

	differentiation
	Market development:
	diversification
	penetration
	Organisation Structure :
	merger and takeover
	shareholding
	joint-venture
	divestment
	others, please specify -
	Others, please specify:
5.4.3	Is there any formal planning committee or equivalent existed? If yes, how is it operating in terms or membership composition, strategic plans formulation evaluation and determination?
5.4.4	How far the different levels of management participate in formulating the above strategic plans? (please rank from 0 - 4, i.e. 0 = no participation at all 1 = consult for ideas only 2 = attend planning committee meeting and give suggestions only 3 = initiate proposals/plans and discuss in planning committee 4 = make final decision)
	Levels of Management: Top (a) Middle (b) Lower (c)
Produ	ct Development : Diversification Differentiation
Marke	t Development : Diversification Penetration
Orgai	isation Structure : Merger & takeover Shareholding Joint-venture

١,

Divestment
Others (please specify)
Others (please specify):

(a)	Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief Economist and Chief Engineering (assume the final decisions are made either by the government or the board of directors if ranking is not 4).							
(b)	Middle management is defined as the divisional or departmental managers.							
(c)	Lower management is defined as the departmental or sectional supervisors or foremen.							
5.4.5	Is formulating strategic plans a way for the top management to allocate the resources to different business units according to (please tick):							
	long term business plan;							
	project-by-project approach;							
	relative importance of units;							
	power of unit managers;							
	other external factors;							
	earning or profitability potentials; or							
	other (please specify)?							
5.4.6	How far can the participation in formulating the strategic plans enhance the communication between different levels of management?							
5.4.7	How frequent are the strategic plans reviewed either formally by the planning committee or infromally by the top management?							
	yearly							
	half-yearly							
	quarterly							

\_\_\_\_ monthly

	£				
5.4.8	What are the major factors for justifying the modification of those strategic plans? (please tick):				
	central government plan				
	local government plan				
	long-term enterprise's benefit				
	short-term enterprise's benefit				
	management's knowledge and experience				
	management's personal belief or bias				
	other (please specify)?				
5.4.9	How are the determined strategic plans be communicated to the various levels of management?				
	meetings				
	written report				
	notice board				
	Others (please specify) :				
	t-Term Plan (Management's Participation, Review and fication)				
5.5.1	What is the extent of autonomy can the *top management exercise in each of the following short-term (within one year) plans? (please rank from 0-4, i.e.  0 = no autonomy at all 1 = consult for ideas only				

Other (please specify) : \_\_\_\_\_

\*Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief Economist and Chief Engineering.

2 = make suggestions and discuss
3 = initiate plans and negotiate
4 = have full autonomy subject to
 macro-economical adjustments)

1 Ranking 0 2 3 4 Reason Short-term Plan: Sales -Price Volume Mix Production -Capacity Quantity Mix Material -Price Quantity Mix Labour -Rates Bonus Number In-take Lay-off Inventory -Level Valuation EOQ Ordering time Servicing Depts. -Headcount In-take Lay-off Salaries Expenses Income Before Tax Others (please specify) -5.5.2 How the above short-term plans are developed? Is there any formal planning committee or equivalent existed?

and determination?

If yes, how it is operating in terms of membership composition, short-term plans formulation, evaluation

How far the middle and lower management participate in determining the above (5.5.1) short-term plans? (please 5.5.3 rank from 0 - 4, i.e. 0 = no participation at all 1 = consultation for ideas only 2 = attend planning committee meeting and give suggestions only 3 = initiate proposals/plans and discuss in planning committee 4 = make final decision) Name of Department: Middle (a) Lower (b) Levels of Management: Short-term Plan: Sales -Price Volume Mix Production -Capacity Quantity Mix Material -Price Quantity Mix Labour -Rates Bonus Number In-take Lay-off Inventory -Level Valuation EOO

Ordering time

Servicing Depts. Headcount
In-take
Lay-off
Salaries
Expenses

	Levels of Management: Middle (a) Lower (b)
Income Be	fore Tax
Transfer	Pricing
Others (p	lease specify) -
(a)	Middle management is defined as the divisional or departmental managers.
(b)	Lower management is defined as the departmental or sectional supervisors or foremen.
5.5.4	Is formulating short-term plans a way for the top management to allocate the resources to different business units according to (please tick):
	long term business plan;
	project-by-project approach;
	relative importance of units;
	power of unit managers;
	other external factors;
	earning or profitability potentials; or
	other (please specify)?
5.5.5	How far can the participation in formulating the short-term plans enhance the communication between different levels of management?
5.5.6	How frequent are the short-plans reviewed either formally by the planning committee or infromally by the top and middle management?
5.5.7	What are the major factors for justifying the modification of these short-term plans? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit

	management's knowledge and experience
	management's personal belief or bias
	other (please specify)?
5.5.8	How the determined short-term plans be communicated to the various levels of management?
	ing Targets Through Internal Responsibility Contracts ] (Management's Participation, Review and Modification)
5.6.1	When was the IRC system started to be employed in this enterprise?
5.6.2	How are the IRCs correlated to the Economic Responsibility Contract signed with the government?
5.6.3	What is the duration of each IRC?
5.6.4	Which responsibility centres in this enterprise have signed the IRCs with the top management?
5.6.5	Can you provide me with a few samples of the IRCs (before and after 1992) for reference?
5.6.6	What are the major "targets" (both financial and non-financial) set in these few IRCs? (take a few responsibility centres, i.e. production, purchasing, sales etc., as examples)
5.6.7	What are the formal procedures (i.e. planning committee or equivalent) in setting these targets?
5.6.8	How far the middle and lower management participate in setting the various targets in their IRCs? (please rank from 0 - 4, i.e. 0 = no participation at all  1 = consultation for ideas only 2 = attend planning committee meeting and give suggestions only 3 = initiate targets and negotiate in planning committee 4 = make final decision)
	Name of Department :

	Levels of Management: Middle (a) Lower (b)			
	Targets:			
	(1)			
	(2)			
	(3)			
	(4)			
	(5)			
(a)	Middle management is defined as the divisional or departmental managers.			
(b)	Lower management is defined as the departmental or sectional supervisors or foremen.			
5.6.9 Are the above targets related (or respondelegated) to the levels of management wiresponsibility centre (or department)? How? tick and explain)				
	Name of Department :			
	*Section *Sub-section Individual			
	Targets:			
	(1)			
	(2)			
	(3)			
	(4)			
	(5)			
,	* Please define these levels of management.			
5.6.10	Is formulating targets in the IRCs a way for the top management to allocate the resources to different			
	business units according to (please tick):			
	business units according to (please tick):long term business plan;			
	•			

	power of unit managers;
	other external factors;
	earning or profitability potentials; or
	other (please specify)?
5.6.11	How far can the participation in formulating the targets in the IRCs enhance the communication between different levels of management?
5.6.12	How frequently are the targets in the IRCs reviewed either formally by the planning committee or informally by the top and middle management?
5.6.13	What are the major factors for justifying the modification of these targets? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief or bias
	other (please specify)?
5.6.14	Are these targets modified in a way similar to the "flexible budget" concept (i.e. according to actual or current performance/condition)?
5.6.15	How the determined or agreed targets be communicated to the various levels of management?
5.6.16	What have been the results (i.e. turnover, profitability, labour productivity or efficiency, etc.) since the employment of the IRC system? How were they compared with the performance before using this system?

Revi	ew and Modification)								
5.7.1	When was the budgeting system started to be employed in this enterprise?								
5.7.2	Can you outline the budgeting structure or hierarchy and indicate which responsibility centres (RCs) are involved?								
5.7.3	What is the duration of each budget? What is the time-schedule of the budgeting cycle?								
5.7.4	Can you provide me a few samples of proforma budgets for reference?								
5.7.5	What are the formal procedures (i.e. budget committee or equivalent) in setting these budgets?								
5.7.6	How far the middle and lower management participate in setting the various budgets in their RCs? (please rank from 0 - 4, i.e. 0 = no participation at all 1 = consult for ideas only 2 = attend planning committee meeting and give suggestions only 3 = initiate budgets and negotiate in planning committee 4 = make final decisions)								
	Name of Department :								
	Levels of Management: Middle (a) Lower (b)								
	budgeted items :								
	(1)								
	(2)								
	(3)								
•	(4)								
	(5)								
(a)	Middle management is defined as the divisional or								

5.7 Setting Targets Through Budgets (Management's Participation,

Lower management is defined as the departmental or sectional supervisors or foremen.

departmental managers.

(b)

5.7.7	Are the above budgets related (or responsibility delegated) to the levels of management within the responsibility centre (or department)? How? (please tick and explain)
	Name of Department :
	*Section *Sub-section Individual
	budgeted items :
	(1)
	(2)
	(3)
	(4)
	(5)
	* Please define these levels of management.
5.7.8	Is formulating the budgets a way for the top management to allocate resources to different business units according to (please tick):
	long-term business plan;
	project-by-project approach;
	relative importance of units;
	power of unit managers;
	other external factors;
	earning or profitability potentials; or
•	others (please specify)?
5.7.9	How far the process of budgettng can enhance the communication in the various levels of management?
5.7.10	How frequent the budgets in the RCs are reviewed either formally by the planning committee or informally by the top and middle management?

5.7.11	What are the major factors for justifying the modification of these budgets? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief and bias
	others (please specify)?
5.7.12	Are "flexible budgets" used? If yes, how?
5.7.13	How the determined or agreed budgets be communicated to the various levels of management?
5.7.14	What have been the results since the employment of the budgeting system? How were they compared with the performance before using this system?
	ital Budgeting (Management's Participation, Review and ification)
5.8.1	When was the capital buegeting system started to be employed in this enterprise?
5.8.2	How long is the coverage of the capital budgets?
5.8.3	What are the formal procedures (i.e. budget committee or equivalent) in setting these capital budgets?
5.8.4	Can you provide me a few samples of capital budget forms for reference?

- 5.8.5 How far the various levels of management participate in setting the capital budgets in their RCs? (please rank from 0-4, i.e. 0= no participation at all
  - 1 = consult for ideas only
  - 2 = attend planning committee meeting and give suggestions only
  - 3 = initiate budgets and negotiate
    in planning committee
  - 4 = make final decisions)

Name o	f D	epartment	: .			· · · · · · · · · · · · · · · · · · ·	
Levels	of	Managemen	t	:	Top(a)	Middle(b)	Lower(c)

capital budgeted items :

- (1) Land & Building
- (2) Plant & Machinery
- (3) Motor Vehicles
- (4) Fixtures & Fittings
- (5) Research & Development
- (6) Advertising
- (7) Others (please specify):

<sup>(</sup>a) Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountant, Chief Economists and Chief Engineer. (Assume the final decisions are made by either the government or the board of directors if ranking is not 4).

<sup>(</sup>b) Middle management is defined as the divisional or departmental managers.

<sup>(</sup>c) Lower management is defined as the departmental or sectional supervisors or foremen.

<sup>5.8.6</sup> What kinds of techniques (i.e. DCF, Pay-back, ROI, RI etc.) have been used for evaluating the capital budgets at the planning stage?

5.8.7	Is formulating the capital budgets a way for the top management to allocate resources according to (please tick):
	long-term business plan;
	project-by-project approach;
	relative importance of units;
	power of unit managers;
	other external factors;
	earning or profitability potentials; or
	others (please specify)?
5.8.8	How frequent the capital budgets are reviewed either formally by the planning committee or informally by the top and middle management?
5.8.9	What are the major factors for justifying the modification of these capital budgets? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief and bias
	others (please specify)?
5.8.10	How the capital budgets be communicated to the various levels of management?
5.8.11	What have been the results since the employment of the capital budgeting system? How were they compared with the performance before using this system?

- 5.9 Transfer Pricing (Management's Participation, Review and Modification)
- 5.9.1 What kinds of transactions within your enterprise (or group of enterprises) involve the setting of transfer prices? (Please describe the divisions or departments involved, the nature of transfers and the purposes of setting transfer prices.)
- 5.9.2 On what bases are the transfer prices determined? Are negotiations allowed by the selling and buying divisions?
- 5.9.3 Are there any outside markets to sell the intermediate products instead of transfer internally? Are the market prices higher or lower than the internal transfer prices?
- 5.9.4 Are the intermediate products available from external suppliers instead of purchasing internally? Are the market prices for these external supplies higher or lower than the internal transfer prices?
- 5.9.5 On what bases are the transfer quantities determined?
  Are negotiations allowed by the selling and buying divisions?
- 5.9.6 Do the top management interfere with the setting of transfer prices and/or quantities? How?
- 5.9.7 Does the government determine or the economic responsibility contract stipulate the transfer prices and/or or quantities? How?
- 5.9.8 What is the extent of participation by the divisional managers in determining each transfer price in general? (Please rank from 0 4, i.e.
  - 0 = no participation at all
  - 1 = consult of ideas only
  - 2 = suggest and discuss
  - 3 = propose and negotiate
  - 4 = determine on their own)

TP No.	Nature of Transfer	Rank	Remarks

1

2

3

4 etc.

5.9.9	How frequent the transfer prices are reviewed either formally in the meetings or informally by the
	<ul><li>(1) top management;</li><li>(2) middle management;</li><li>(3) top &amp; middle management; and</li><li>(4) other (please specify)?</li></ul>
5.9.10	What are the major factors for justifying the modification of these transfer prices? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief and bias
	others (please specify)?
5.9.11	Is internal and external information available for negotiating and determining the transfer prices? Why?
5.9.12	Is internal and external information sufficient for negotiating and determining the transfer prices? Why?
SECTION 6	: CONTROL SYSTEM
6.1 Dece	ntralisation and Control
6.1.1	In gneral, how far the decentralisation in the following few managerial aspects is delegated to the different levels of management? (please rank from 0 - 4 and describe briefly, i.e. 0 = no autonomy is given  1 = low autonomy 2 = moderate autonomy 3 = high autonomy 4 = full autonomy
	Major Division:

Levels of Management: Top(a) Middle(b) Lower(c)

Managerial Aspects:

Organisational design Structure
Staffing
Roles & functions
Interactions

Employees/Workers Recruitment
Assignment
Training
Evaluation
Remmuneration
Termination

Operations Getting resources
Using resources
Disposing resources

Others (please sepcify):

<sup>(</sup>a) General Manager (EGM), Deputy EGMs, Chief Accountant, Chief Economists and Chief Engineer. (Assume the final decisions are made by either the government or the board of directors if ranking is not 4).

<sup>(</sup>b) Middle management is defined as the divisional or departmental managers.

<sup>(</sup>c) Lower management is defined as the departmental or sectional supervisors or foremen.

<sup>6.1.2</sup> What type(s) of control mechanism, both financial and non-financial, is(are) used to ensure the effective performance of the following functions under certain degree of decentralisation?

<sup>(</sup>a) Personnel

<sup>(</sup>b) Production

<sup>(</sup>c) Purchasing and supplies

<sup>(</sup>d) Sales and distribution

<sup>(</sup>e) Finance and administration

- (f) Others (please specify)
- 6.1.3 What kinds of communication channels or information systems (both formal or informal) are employed to make the above managerial aspects (6.1.1) and the associated control mechanisms (6.1.2) known to the various levels of management?

#### 6.2 Agreeing Targets

6.2.1 How the following factors affect the types and styles of control mechanisms employed by the different levels of management? i.e. 0 = no influence

1 = little influence

2 = moderate influence

Middle(b)

Lower(c)

3 = high influence

Major Division :	
Control mechanisms employed:	

Top(a)

Factors or Variables:

\*Precision and detail of targets

Levels of Management:

- \*Balance between objective and subjective target measurement
- \*Timeframe for achieving the targets
- \*Degree of "stretch" built into the targets
- \*Emphasis on financial vs non-financial targets
- \*Management inluence on setting targets

- (a) Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountant, Chief Economist and Chief Engineer.
- (b) Middle management is defined as the divisional or departmental managers.
- (c) Lower management is defined as the departmental or sectional supervisors or foremen.
- 6.2.2 What kinds of communication channels or information systems (both formal or informal) are employed to make the above control mechanisms (6.2.1) known to the various levels of management?

## 6.3 Reporting Requirements

- 6.3.1 What are the requirements for the \*control reports to be submitted to the top management? Please answer (with brief descriptions) the following checklist for the control report(s) which reflect the responsibility in each major division or department. Please also provide a sample (perhaps a blank one) of each control report if possible.
  - \* This question refers to the control reports submitted by the middle management (i.e. divisional or departmental managers) to the top management.

Division/Department	:	

Control Report No. : \_\_\_\_\_

- (1) What is the title of the report?
- (2) What is the purpose of the report?
- (3) What is the frequency of the report?
- (4) Is this a financial or a non-financial or a combined control report?
- (5) What are the major contains of the report?
- (6) Who prepare the report?
- (7) Who check the report?
- (8) Who sumit the report?
- (9) Who receive the report?
- (10) Who review the report?
- (11) Who evaluate the report?
- (12) Will feedback be given by (9)-(11)?
- (13) Will discussion held between sender and (9)-(11)?
- (14) What follow-up actions will be taken?
- (15) Will the report affect performance evaluation and remuneration or incentive? How?
- (16) Can computer aid in compiling this report?
- (17) Is this report relate to, link up or integrate with other reports?
- (18) What changes will be made in this report (1)-(17) in the next 12 months? Why?
- 6.3.2 What are the requirements for the \*control reports to be submitted to the middle management? Please answer (with brief descriptions) the following checklist for the control report(s) which reflect the responsibility in each major division or department. Please also provide a sample (perhaps a blank one) of each control report if possible.

\* This question refers to the control reports submitted by the lower management (i.e. departmental or sectional supervisors or foremen) to the middle management (i.e. divisional or departmental managers).

Department/Section	:
Control Report No.	<b>:</b>

- (1) What is the title of the report?
- (2) What is the purpose of the report?
- (3) What is the frequency of the report?
- (4) Is this a financial or a non-financial or a combined control report?
- (5) What are the major contains of the report?
- (6) Who prepare the report?
- (7) Who check the report?
- (8) Who sumit the report?
- (9) Who receive the report?
- (10) Who review the report?
- (11) Who evaluate the report?
- (12) Will feedback be given by (9)-(11)?
- (13) Will discussion held between sender and (9)-(11)?
- (14) What follow-up actions will be taken?
- (15) Will the report affect performance evaluation and remuneration or incentive? How?
- (16) Can computer aid in compiling this report?
- (17) Is this report relate to, link up or integrate with other reports?
- (18) What changes will be made in this report (1)-(17) in the next 12 months? Why?
- 6.3.3 Is there (Will there be) any integrated (i.e. covered most of the key functions) "Accounting Information System (AIS)" or "Management Information System (MIS)" for overall managerial control purposes? If yes, how far it has been (will be) computerized? If no, what are the constraints in designing and implementing such a system?

#### 6.4 Performance Measurement Criteria

- 6.4.1 What are the importance (or weightings) the following "financial" criteria or indicators have been used to measure the performance of different divisions or departments? (please give reasons and rank from 0-4, i.e. 0 = do not use at all
  - 1 = low weighting
  - 2 = moderate weighting

3 = high weighting

4 = the only criterion)

Name of Department : \_

Ranking: 0 1 2 3 4 Reason

Residual income\*

Return on investment

Profit before tax

Profit after tax

Profit % sales

Profit growth %

Profit per employee

Sales growth %

Sales per employee

Cash flow

Added value#

Others: (please specify)

<sup>\*</sup> Residual income = Income after tax - (notional interest rate x capital employed)

<sup>#</sup> Added value = Sales - Outside purchased materials and services costs

What are the importance (or weightings) the following "financial" criteria or indicators have been used to measure the performance of different levels of management? (please give reasons and rank from 0-4,

i.e. 0 = do not use at all

<sup>1 =</sup> low weighting

<sup>2 =</sup> moderate weighting

<sup>3 =</sup> high weighting

<sup>4 =</sup> the only criterion)

Levels	of	Management	:	Top(a)	Middle	(b)	Lower(c)

Residual Income

Return on Investment

Name of Department :

Profit before tax

Profit after tax

Profit % sales

Profit growth %

Profit per employee

Sales growth %

Sales per employee

Others: (please specify)

<sup>(</sup>a) Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief Economist and Chief Engineer.

<sup>(</sup>b) Middle management is defined as the divisional or departmental managers.

<sup>(</sup>c) Lower management is defined as the departmental or sectional supervisors or foremen.

<sup>6.4.3</sup> When the actual results of the above "financial" criteria or indicators be communicated to the various levels of management and employees?

<sup>6.4.4</sup> How the actual results of the above "financial" criteria or indicators be communicated to the various levels of management and employees?

<sup>6.4.5</sup> What happens when the actual results of the above "financial" criteria or indicators are received by the top or middle management?

- 6.4.6 How frequent the above "financial" criteria or indicators be reviewed by the top and middle management?
- 6.4.7 What are the factors affecting the mondification or changes of the above "financial" criteria or indicators?
- What are the importance (or weightings) the following "non-financial" criteria or indicators have been used to measure the performance of different divisions or departments? (please give reasons and rank from 0-4,
  - i.e. 0 = do not use at all
    - 1 = low weighting
    - 2 = moderate weighting
    - 3 = high weighting
    - 4 = the only criterion)

Name	of	Depart	ment	: _					
	Rar	nking	:	0	1	2	3	4	Reason

Production quality

Production capacity

Production volume

Product development

Product quality

Product mix

Material consumptions

Inventory levels

Labour efficiency

Labour cost

Labour turnover

Expenses levels

Safety records

Birth control

Others: (please specify)

What are the importance (or weightings) the following "non-financial" criteria or indicators have been used 6.4.7 to measure the performance of different levels of management? (please give reasons and rank from 0-4, i.e. 0 = do not use at all 1 = low weighting

	2 = moderate weight 3 = high weighting 4 = the only criter	_			
ľ	Name of Department :				
I	Levels of Management :	Top(a)	Middle	(b)	Lower(c)
Produc	ction quality				
Produc	ction capacity				
Produc	ction volume				
Produc	ct development				
Produc	ct quality				
Produc	ct mix				
Materi	ial consumptions				
Invent	tory levels				
Labour	r efficiency				
Labour	r cost				
Labour	r turnover				
Expens	ses levels				
Safety	y records				
Birth	control				
Others	s : (please specify)				

Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief (a) Economist and Chief Engineer.

- (b) Middle management is defined as the divisional or departmental managers.
- (c) Lower management is defined as the departmental or sectional supervisors or foremen.
- 6.4.8 When the actual results of the above "non-financial" criteria or indicators be communicated to the various levels of management and employees?
- 6.4.9 How the actual results of the above "non-financial" criteria or indicators be communicated to the various levels of management and employees?
- 6.4.10 How frequent the above "non-financial" criteria or indicators be reviewed by the top and middle management?
- 6.4.11 What happens when the actual results of the above "non-financial" criteria or indicators are received by the top and middle management?
- 6.4.12 What are the factors affecting the mondification or changes of the above "non-financial" criteria or indicators?

## 6.5 Rewards and Incentives

- 6.5.1 What is (was) the average "basic wages" per worker in this (last) year?
- 6.5.2 What are the factors (i.e. performance, grade, seniority, inflation, qualification, experience etc.) in determining the "basic wages" of the workers?
- 6.5.3 How frequent the "basic wages" is reviewed?
- 6.5.4 What are the factors (i.e. performance, grade, seniority, inflation, qualification, experience etc.) in determining the "basic salaries" of the non-manufacturing staff?
- 6.5.5 How frequent the "basic salaries" is reviewed?
- 6.5.6 What are the types of "allowances" (i.e. housing, meals, travel, child, attendance, overtime, inflation, stoppage etc.) paid to the workers and staff?

- 6.5.7 What is (was) the average "total allowances" per worker in this (last) year?
- 6.5.8 How frequent these "allowances" are reviewed?
- 6.5.9 What are the weightings of the following measurement criteria used in the "incentive scheme" for workers in various divisions or departments? Are these criteria measured on "Group" (G) or "Individual" (I) basis?

measured on "Group" (G) or "Individual" (I) basis? Name of Department : \_\_\_\_\_ Weightings Basis (G)/(I) Measurement Criteria -----Production quality (1) (2) Production capacity (3) Production volume (4) Product development (5) Product quality Product mix (6) (7) Material consumptions Inventory levels (8) (9) Labour efficiency (10) Labour cost (11) Labour turnover (12) Expenses levels (13) Safety records (14) Birth control Others: (please specify) (15)(16)100%

- 6.5.10 How the above measurement criteria (6.5.9) is assessed i.e. actuals vs actuals, actuals vs budgets or targets etc.?
- 6.5.11 How frequent the bonus is calculated and distributed to workers in the various divisions or departments based on the criteria listed in 6.5.9 above?
- 6.5.12 Are there any ceilings for the bonus?
- 6.5.13 If the above incentive system is formal, how the criteria, weightings and bases (6.5.9), the calculation and distribution (6.5.10) of bonus be communicated to the workers? How frequent are these rules reviewed and under what circumstances will they be modified? Do the workers participate in designing and reviewing this incentive scheme?

- How and when the workers know the amounts of bonus that 6.5.14 they can get? In what forms the bonus are paid to the workers?
- Will there be any penalties if the workers can not 6.5.15 achieve any of the measurement criteria stated in 6.5.9 above?
- When was this "incentive scheme" for workers adopted? 6.5.16 How this scheme is improving the productivity, efficiency and profitability of the enterprise as a whole?
- What are the weightings of the following measurement 6.5.17 criiteria used in the "incentive scheme" for non-manufacturing staff in various divisions or departments? Are these criteria measured on "Group" (G) or "Individual" (I) basis?

Name of Department : \_\_\_\_\_ Weightings Basis (G)/(I) Measurement Criteria -----(1) Residual Income (2) Return on Investment

- (3) Profit before tax
- (4) Profit after tax
- (5) Profit % sales(6) Profit growth %
- (7) Profit per employee
- (8) Sales growth %
- (9) Sales per employee Others: (please specify)

10)		
11)		
	<del></del>	

100%

- How the above measurement criteria is assessed i.e. 6.5.18 actuals vs actuals, actuals vs budgets or targets etc.?
- 6.5.19 How frequent the bonus is calculated and distirbuted to non-manufacturing staff in the various divisions or departments based on the criteria listed in 6.5.17 above? Are there any ceilings for the bonus?

- 6.5.20 If the above incentive system is formal, how the criteria, weightings and bases (6.5.17), the calculation and distribution (6.5.19) of bonus be communicated to the non-manufacturing staff? How frequent are these rules reviewed and under what circumstances will they be modified? Do the staff participate in designing and reviewing this incentive scheme?
- 6.5.21 How and when the non-manufacturing staff know the amounts of bonus that they can get? In what forms the bonus are paid to the staff?
- 6.5.22 Will there be any penalties if the non-manufacturing staff can not achieve any of the measurement criteria stated in 6.5.17 above?
- 6.5.23 When was this "incentive scheme" for non-manufacturing staff adopted? How this scheme is improving the productivity, efficiency and profitability of the enterprise as a whole?

28 April 1993

# RESPONSIBILITY ACCOUNTING IN CHINA -TOWARDS AN EXPLORATORY FRAMEWORK

 $\mathbf{B}\mathbf{y}$ 

# YAU SHIU WING JOSEPH

The 20 Data Analyses Attached with

A Thesis Submitted in Fulfilment of the Requirements for the

Degree of Doctor of Philosophy

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(Volume 3)

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# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 1
Report Date : 28 January 1994

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate	Tight Strategic	Strategic Programming(1)
High Corporate	Tight Financial	Financial Programming(2)
Low Corporate	Tight Strategic	Strategic Control (3)
Low Corporate	Tight Financial	Financial Control (4)

Name of SOE: Shanghai No.5 Steel Works (SSW5)

Staff Interviewed: Mr Huang Han Bin, Chief Accountant
(No. of years in this enterprise: 13 years)

Dates of Visits: First Visit - 13 September 1991
Second Visit - 25 January 1992
Third Visit - 16 September 1992
Fourth Visit - 27 May 1993
Fifth Visit - 10 September 1993
Sixth Visit - 6 September 1994
Seventh Visit - 7 February 1995

#### Section 1 : History & Background

Shanghai No.5 Steel Works (SSW5) is a wholly state-owned enterprise (SOE) established in 1958 and is situated at the North-Eastern suburb (Baoshan District) of the Shanghai city. SSW5 has over 40 factories and buildings scattered in between the Sitang River stream and the busy Tongji Road. They have covered a big piece of land and actually formed a small town with its own. SSW5 has its own two railway lines connecting to the Therefore, SSW5 can make use of the Shanghai Central Station. river, main road and railway to transport raw materials in and finished goods out. SSW5 is one of the top five steel manufacturers in Shanghai municipal city in terms of output, turnover and number of employees.

The major products of SSW5 can be classified into the following 12 categories :

- (1) Carbon Construction Steel
- (2) Alloy Construction Steel
- Carbon Tool Steel
- Alloy Tool Steel (4)
- Anchor Chain Steel (5)
- Rearing Steel (6)

- (7) Spring Steel
- (8) High Speed Tool Steel
- (9) Stainless Steel
- (10) Heat Resisting Steel
- (11) Super Alloy(12) Titanium & Titanium Alloy

About 95% of its products are sold domestically and the rest are exported to the USA, Japan and some Southeast Asian countries. Under the "SOE Mechanism Transformation Regulations" and "Socialist Market Economy" promulgated by the central government in 1992, SSW5 was granted the "Free Import/Export Right" in 1993 so that it can further explore the overseas markets during the coming Ninth Five-Year Plan (1996-2000 inclusive).

To cater for the high demand of iron and steel products in this region, SSW5 increased its output volume from 1.3 million in 1993 to 1.9 million tonnes in 1994 (83% of the potential full production capacity). However, the booming demand was flattened by the over 20 million (20% of the total demands in China) tonnes imported iron and steel products (from the USA, Japan, Korea, etc.) which quality were higher and selling prices were cheaper (after adding the import duties) than the Chinese products because the latter's outdated production facilities and technologies, and in addition the rapid increasing cost of production due to inflation.

As a result, in 1995 stockpiling was very common in most of the iron and steel plants in China. They had to cut down the selling prices by 20% to 30% in order to reduce the inventory level even making losses. Another short term measure was to restrict the total quantity of imported iron and steel products by the government as actually happened in 1995. However, the long term solution should be to renovate the production hardware and technology and to enhance the manufacturing efficiency.

But in view of the bank's tight capital control after implementing the 16 macro economic control measures since late 1993, the metallurgical industry would find very difficult, if not possible, to obtain sufficient funds for capital investments. On the other hand, the iron and steel output per employee in China was 2 to 3 times less than the counterparts in the USA, Japan and Korea, which of course resulted in higher unit cost per output. These problems affect the future development of SSW5 during the 9th National Planning Cycle (1996-2000) in one way or another, although SSW5 is formulating strategic plans and undertaking possible tatics to alleviate these avderse situations and maintain a steady performance growth as highlighted in the section 5.4 below.

#### Section 2 : Legal Form & Organisation Structure

Shanghai No.5 Steel Works (SSW5) has been a wholly state-owned enterprise since its establishment in 1958 and there is no plan to transform into a shareholding enterprise in the next five years because it is a government policy to keep a macroeconomic control over the steel industry in China.

Since SSW5 is a wholly SOE, it is under the administration of the Shanghai Municipal Government and the Shanghai Metallurgical Bureau. Before the economic reforms started in 1979, the central planning system dictated all the planning and control (long-term and short-term) in the SOEs. Therefore, SSW5 was just acted as a vehicle (or cost centre) to carry out the activities according to the commands directed from the Municipal Government and the Metallurgical Bureau.

Since the economic reforms started in 1979, instead of dictatorship from the authorities, the top management of the SSW5 have been involved in the 5-year long range plan even though SSW5 for most of the time had to take the directives from and give in their negotiations to these two authorities.

The situation has been changing rapidly since 1992. Now the municipal government only oversees the major development and projects, mainly long term ones, recommended by the SSW5. On the other hand, the Metallurgical Bureau has resolved into Shanghai Metallurgical Corporation which is similar to a trade association and its objective is trying to maintain a balance of the overall steel production quantities and varieties produced by all the iron and steel plants located in Shanghai. In addition, it is providing marketing information for the steel industry in Shanghai in order to help those enterprises to sell their products to the right market at the right time.

Gradually, these authorities have been taking away their visible hands from and leaving more operating autonomy to the local steel industry since 1992 after the pronouncement of the legislative changes.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of SSW5 can be divided into three major parts, inter alia, Management, Production and Service functions.

The management function is represented by the "Headquarters" in which there are several departments (all cost centres) including:

- General Manager (GM) Office (1)
- (2) Accounting & Finance Department (headed by Chief-Accountant)
- Production Planning & Control (headed by Chief-Engineering)
  Production Technology Department (headed by one Deputy-GM)
  Personnel & Manpower Department (headed by one Deputy-GM) (3)
- (4)
- (5)
- (6) Sales & Marketing Department (headed by one Deputy-GM)
- Estate & Development Department (headed by one Deputy-GM) (7)
- Employees Welfare Department (headed by one Deputy-GM) (8) overseeing the following sections :
  - (a) Housing

(b) Medical (d) Training

- (c) Entertainment
- (e) Educations (kindergarten, primary, secondary & technical schools)

The production function is composed of 12 manufacturing factories and 4 supporting factories which are all treated as separate divisions or profit centres with some interdependencies due to the process production nature. These 16 factories are listed below:

## Manufacturing Factories,

\_\_\_\_\_

- (1)No.1 Melting & Casting Factory [output goto (3) & (4)] No.2 Melting & Casting Factory [output goto (3) & (4)] (2) [output goto (5), (6) & (7)] (3) Initial Rolling Factory [output goto (5), (6) & (7)]
  [output goto (8)] Forge Pressing Factory (4)No.1 Refine Rolling Factory (5) No.2 Refine Rolling Factory [output goto (9) & (10)] (6) [output goto (9),(10) & (11)] No.3 Refine Rolling Factory (7) [output for sales] (8) Steel Tube Factory Cold Drawing Factory [output for sales] (9) (10) Strip Drawing Factory
  (11) Wire Drawing Factory [output for sales]
  [output for sales] [output for sales] (12) Converter Factory
  - \* The outputs of (1) to (7) can also be sold externally, although it is not the general policy adopted.

## Supporting Factories

\_\_\_\_\_\_\_

- (13) Durable Materials Factory (i.e. bricks)
- (14) Coal Gas Factory (15) Electricity Factory
- (16) Oxygen Factory

# These supporting factories supply their outputs to the above 12 manufacturing factories and also to the other management and service departments.

Each manufacturing factory has its own functional staff like marketing and sales, purchasing and supply, repair and maintenance, transportation, accounting, personnel, etc. These functional staff have dotted line relationships with the corresponding departments in the headquarters.

The service function contains the following departments (cost centres) :

- Purchasing Department (1)
- (2)Inventory Control Department
- Transportation Department (3)
- (4)Repair & Maintenance Department
- (5) Quality Control Department
- (6) Computer Department

SSW5 is planning to transform the above service departments into independent and self-financed "Tertiary Enterprises" in 1995 or 1996. Furthermore, SSW5 owns a lot of tertiary enterprises (service enterprises) including restaurants, department stores, entertainments, retail shops, taxi fleets, motels, repair and maintenance centres, servicing and consulting companies, etc.

Furthermore, SSW5 owns an Import & Export Company after obtaining the import and export right granted by the government. The performance of these tertiary enterprises is mainly measured by return on investment.

SSW5 had a total of 21,500 employees at the end of 1994 including 1,500 employees working in the tertiary (service) enterprises. Furthermore, there were 9,000 retired employees at the end of 1994. It is classified as a "Large SOE" in China.

#### Section 3 : Financial Indicators

Total assets : RMB5,000M (1992 historical cost)

: RMB2,800M (1992) Turnover

RMB3,800M (1993) RMB4,500M\* (1994)

RMB4,800M (1995 forecast)

Income before tax : RMB 150M

RMB 150M (1992) - 5.4% of sales RMB 190M (1993) - 5.0% of sales 170M (1994) - 3.8% of sales# RMB

RMB 175M (1995 forecast)

: 33% Income tax rate

\* Including export sales of US\$13 million and expected to be US\$20 million at the end of 1995.

#The significant decrease of profit margin in 1994 was due to inflation on cost of production (i.e. electricity amounted to RMB380 million which was higher than gross wages of RMB250 million) and high interest payments.

At the end of 1994, both the accounts receivable and payable were over RMB300 million which obviously included certain significant amounts of bad and doubtful debts.

## Section 4: Economic Responsibility Contract System (ERCS)

Shanghai No.5 Steel Works (SSW5) signed its first 5-year Economic Responsibility Contract (ERC) with the Shanghai Municipal Government in 1983. The major targets set in the ERC were :

- "Income Before Tax" with 5% annual growth rate; and (1)
- "Total Tax" (sales tax, income tax & adjustment taxes (2) payable to the Municipal Government).

SSW5 was underwritten to hand over a fixed portion of the "Income Before Tax" per year to the Municipal Government irrespective of actual performance (profit or loss) achieved.

For example,

(RMB'000) Budget Income Before Tax (5% growth) Handover to Government (50%)	1983 10,000 5,000	1984 10,500 5,250	1985 11,025 5,513
	5,000	5,250	5,512
Income Tax (33% on IBT)	3,300	3,465	3,638
•			
Income After Tax left for SSW5	1,700	1,785	1,874
	======	=====	=====

Say for example, if the actual "Income Before Tax" in 1983 was less or greater than the annual agreed target, then the senario might have become as follow:

(RMB'000)	1983 (Budget)	1983 (Actual)	1983 (Actual)
Income Before Tax (a)	10,000	8,000	12,000
Handover to Government	5,000	5,000	5,000
(fixed at 50% of budget)			
	5,000	3,000	7,000
Income Tax (33% on actual IBT)	3,300	2,640	3,960
Income After Tax left for SSW5 (b)	1,700	360	3,040
	=====	=====	=====
IAT % of IBT (b)/(a)	17%	5%	25%

\* In this senario, the break-even point (no IAT left for SSW5) would be an Income Before Tax of RMB7,463,000.

The income after tax left for SSW5 could be transferred into the four reserves :

- (1) Production development
- (2) Employees bonus
- (3) Employees welfare
- (4) Special (Discretionary) i.e. new product development

For the actual income before tax increased by 20% of the budgeted IBT, the income after tax would be increased by 79%. Obviously, this system would encourage SSW5 to enhance its profitability in order to retain more income after tax for development, reserve, employee bonus and welfare purposes.

In the second 5-year ERC (1988-1992 inclusive), the "Income Before Tax" annual growth rate was increased to 7%. However, this second ERC was ceased in 1991 and was replaced by a "Profit-Reward Linked System" because the major drawback of the old system was "short-term behaviour" practised by many other Shanghai SOEs.

In order to meet the targeted profits within the contract period, the top management did not concern the long term investment in fixed assets, research and development, and human resources. This new system does not fix the annual "Income Before Tax" level but only leave the actual turnover and profit subject to sales, income and adjustment taxes. Furthermore, the annual gross wages (including bonus) growth rate cannot exceed either one of the following two limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the SSW5 is allowed to increase the wages and bonus payable to its employees. Obviously, this new system is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

The new SOE Mechanism Transformation legislation enacted in 1992 has been providing more flexibility to SSW5 in distributing the retained earnings in terms of employees benefit and welfare.

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#### Section 5 : Planning System

#### 5.1 Organisation Structure

The guiding theme of the structure of Shanghai No.5 Steel Works (SSW5) is simplicity and accountability. It goes to some length to create stand-alone business units e.g. the 16 factories as independent profit centres that are run by individual factory nanagers with clear lines of responsibility. In this sense the structure is similar to that of Strategic Control companies. But SSW5 goes further in decentralizing responsibility such as initiating the annual budget or internal responsibility contract and setting up of sections within individual factory. The profit responsibility lies with the factory managers. Section, group and sub-group leaders are seen as extensions of each individual factory.

The selections and appointments of the factory managers and a few key positions (e.g. senior engineers) are controlled by the headquarters' top management. Furthermore, any major changes of the organisation structure must seek approval from the headquarters. More autonomy of internal management and operation has been delegated to the factory managers since 1992.

(Please refer to Q5.1.1-4 on the questionnaire extracts in Appendix 1.)

In summary, SSW5 has decentralized structures in which the individual factories report directly to the headquarters, and the factory managers play a linking and surveillance role between the factories and the headquarters.

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

#### 5.2 Review Process

Sdince 1992, Shanghai No.5 Steel Works (SSW5) has implemented a more formal and rigorous planning process - for reviewing, discussing and sanctioning the annual plan and internal responsibility contract (IRC) of each factory. This process starts in September each year and ends in February the next year. After intensive internal and external environmental studies by the general manager with his deputy managers, chief accountant and chief engineer, a set of preliminary sales and production targets are determined. The general manager provides these guidelines to all the factory and department managers for them to initiate their own annual plans or budgets in which some key criteria will be used as the measurement yardsticks in the subsequent agreed internal responsibility contracts.

The accounting & finance department in the headquarters validates and consolidates all the factory, management and service budgets into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions are held between the headquarters and the factories and departments either collectively or individually. This iterative exercise is finished until all the plans, budgets and contracts are mutally agreed in late January and subimitted to the annual general meeting (attended by representatives from the headquarters, factories and departments of all levels) for approval after the Chinese New Year in February.

Before 1992, the sole purpose of this annual budget review process was to agree with what should be done over the next 12 months within the context of a few key indicators e.g. production volume and sales as agreed between the Shanghai Municipal Government and SSW5. Since 1992, under the legislative changes and market economy promulgation, SSW5 has been given higher automomy in formulating and reviewing its strategic directions. As a result, the 16 factories are encouraged to extend their planning horizon beyond one year but the contents are still mainly production and financial oriented. Therefore, the headquarters has less involvement in the factory level planning decisions, but without reducing their tight financial control.

(Please refer to Q5.5.2 , Q5.5,6 & 5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

#### 5.3 Strategic Themes, Thrusts and Suggestions

Shanghai No.5 Steel Works (SSW5) has been promulgating "Quality" as the most important strategic theme which can be easily seen from the banners written "Quality is Number 1" hanging on many walls around every factory and building. SSW5 is very proud of its quality products which include for example cannons and weapons manufactured for the People's Liberation Army before the 1980s. Also, SSW5 is ranked the top in Southern China in terms of its wide range (over 1,000 kinds) of product varieties. Quality is the most important guideline and element given to and imbedded into the planning and control system of SSW5. And there is no trade-off for any deterioration in quality in whatever aspects.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

Technological improvement (long and short term), efficiency enhancement and capacity expansion (described in next section) are the strategic thrusts that SSW5 always emphasizes in the planning process. There have been significant manufacturing technology and production efficiency advancement since the late 1980s by importing new plants and machines for the European countries and the USA. These production facility renovations have always been receiving top priorities in the capital appropriation budget which is formed an integral part of the annual budget.

The above strategic theme and thrusts are initiated by the headquarters which have positive roles to play in creating the strategic plans with the individual factories. However, since 1992, the factory managers have been encouraged to make strategic or tactical suggestions to realise these themes and thrusts in both short and medium term. One example is to suggest capital investment projects.

Before 1992, the top management in SSW5 from time to time made suggestions on specific issues relating to the planning review process such as production quantity and mix amendments and transfer price adjustments. The headquarters followed financial indicators and performance closely on a monthly or quarterly basis and were quick to make suggestions if they did not match with the overall long and short term plan.

To facilitate the implementation of the legislation in 1992, the headquarters has left more freedom to the factory manager to adjust their planning and operation as long as it would not deviate much from the long term plan and the annual budget in aggregate.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Very High-High Corporate" to "High-Medium Corporate" since 1992.

## 5.4 Long-Term Plans (Resource Allocation)

Shanghai No.5 Steel Works (SSW5) has been following the "Central 5-Year Planning Policy" of the government since the 1960s. The early 5-year long term plans focused mainly on the production volume as directed by the government without paying due regards to the efficiency, profitability and market demand. After starting the economy reforms in 1979, these factors have been taken into account. In the current 5-year plan (1991-1995 inclusive), the following strategic directions have been laid down.

(a) Product Differentiation and Diversification

The improvement of product features and varieties to match the changes of market demand under the present open-market economy. One example is to satisfy the rocketing demand for construction rod-steel due to the rapid infrastructure and property developments everywhere in China since 1992.

(b) Production Technology and Facility Enhancement

SSW5 has its own R&D Centre to undertake on-going projects for enhancing the production methods and technology. Advanced and improved production plants and facilities have been imported from the European countries and the USA since the late 1980s. Approximately, a total of RMB2 billion is required for the capital expenditure from 1996 to 2000 in order to increase the total production capacity to 2.8 million tonnes.

## (c) Production Capacity Expansion

SSW5 has been trying to expand the output volume of its existing production plants although there should be maximum limits. In order to increase the production capacity at a greater pace, SSW5 entered into a RMB1 billion joint-venture with a foreign partner in 1993, to build another Rod and Wire Steel Factory at the other side of the Sitang River. The main production facility was imported from Germany with very high quality and efficiency.

This new factory started to produce 300,000 tonnes iron and steel products in 1994 (16% of the total output) and made a profit before tax of RMB95 millions which accounted for 56% of SSW5's total PBT in 1994. The majority of the output products supplied to the large infrastructure projects in Shanghai such as the cross-river bridges and subway building.

The total output capacity of this new plant can be increased to 600,000 tonnes before 2000. Because of its high product quality, SSW5 is planning to export 50% of the output through an office or agent in Hong Kong.

### (d) Market Penetration and Diversification

The national demand of various kinds of steel products, in particular construction steel as mentioned before, was greater than total steel output in China before 1995 because of ever increasing infrastructure projects and property developments everywhere in China. The State Council and the Metallurgical Bureau have set a national output target of 100 million tonnes at the end of 1995. But SSW5's philosophy is that "not everyday is a sunny day", so that it should continue to penetrate and diversify their national markets such as the Northwest and Southwest provinces. On the other hand, SSW5 should adopt similar marketing strategies to promote its high quality products to the Eastern European, South American and Southeast Asian markets.

## (e) Manpower and Training

The abolishment of "Three Iron Bowls" (iron employment, iron position and iron wages) or "Life-Long Employment" cannot be effectively implemented in SSW5 because cutting off the about 5,000 redundant employees (25% of the workforce) will create many social problems in the light of the current insufficient employment social welfare and benefits existed in China. (Please refer to Q5.2.1-3 on the questionnaire extracts in Appendix 1.)

One way to tackle this headache problem ("Big Rice Pot") is to transfer the excess workers to the newly established "Tertiary Enterprises" (service enterprises) within the SSW5 organisation structure. These tertiary enterprises include motels, restaurants, department stores, groceries, trading, taxi etc. so that they can be self-financed on their own. Another mean is to request early retirement of the redundant employees at 50 for male and 45 for female.

Of course, training and education are an indispensible planning element for SSW5 in order to crystalize its strategic themes and thrusts in long term. Therefore, SSW5 is running an internal technical college to provide different kinds of technical and management (including accounting) courses for its own staff and even for the external students to generate income.

#### (f) Consolidated Financial Budgets

As from 1991, all the long term plans have been translated into monetary terms, as far as possible, and presented in a form of 5-year financial plans including the capital appropriation budgets. These financial plans will be served as the leading guide for subsequent annual planning review.

## (g) Modern Enterprise

Since the end of 1994, the central government has been promulgating the "modern enterprises" which have the following four distinct management concepts:

- (i) clearcut ownership;
- (ii) defined lines of business;
- (iii) separated politics and enterprise administration; and
- (iv) applied scientific management techniques.

At the same time, 100 large state-owned enterprises were selected by the State Council to be converted into modern enterprises. SSW5 was one of the chosen 14 enterprises in Shanghai to draw out a blueprint on how to become a modern enterprise which would be competable with a typical efficient and profitable foreign corporation.

Before the 1990s, the 5-year long term plans were compromises between the local government and the SSW5 without any involvement from the middle management from the factories. Since the current 5-year plan, a Planning Committee has been formed and which members include all the top management in the headquarters (i.e. GM, Deputy-GMs, Chief Accountant, Chief Engineer, Department Heads) and the staff in charge of each factory (e.g. Factory Manager, Deputy-Factory Managers).

The Planning Committee discusses and reviews the current 5-year plan before the formulation of annual plan or budget held in September every year. If it is in the fourth or fifth of the current 5-year plan, the next long term plans will also be initiated and discussed. In view of the rapid economic changes in China since 1992, ad hoc meetings discussing the long term plan may be held anytime in the year. All the agreed long term plans will be summarised into a booklet and distributed to all members of the Planning Committee.

During the annual planning review, suggestions may be directed by the headquarters because of government's macro-policy changes or market condition changes. However, the factory managers seldom initiate changes in their respectively plans. They mainly concern how the milestones set in the long term plan will affect their next year plans or internal responsibility contracts which will have tight financial surveillance coming from the headquarters at least on a monthly basis.

Therefore, the long term planning and review process is using a top-down approach in the belief that the top management in the headquarters have the better experience and knowledge of the external environment and even the internal operations of the factories.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, from no involvement in long term planning to some participation by the factory managers (middle management), it is a big step of advancement signifying that their participations are an important part of the responsibility accounting system through which they are being assessed and rewarded.

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

## 5.5 Short-Term Plans/Budgets (Resource Allocation)

Since 1991, it has been a usual practice of Shanghai No.5 Steel Works (SSW5) to participate in the Annual National Steel Trade Fair held in Beijing during the last quarter of every year. In this trade fair, buyers and sellers get together to agree on contracts of billions Renminbi and some contracts may cover two to three years. This is the occasion where SSW5 can obtain the major sales orders for the next year. It is also an indicator of the business prospect in the near future of this industry and somehow may affect the SSW5's long term plan.

After having this income source figure plus other sales forecasts from the sales and marketing department, the general manager with his deputy managers, chief accountant and chief engineer further evaluate the internal and external environmental factors in order to determine a set of sales and production targets. At this point in time, the first budget meeting is held by all the members of the Planning Committee as mentioned in section 5.4 above. The major purpose of this first meeting is to discuss with the individual factory managers to ascertain whether the aggregated production capacity can match the initial sales budget. If it exceeds the sales budget, it becomes the primary responsibility of the sales and marketing staff and even the top management to hunt for other sales avenues in order to fully utilize the production capacity. If it is the other way round, then the shortfall production values or quantities fall on the shoulders of individual factory managers who are given a short period of time for discussions among themselves and with their own management staff (including the lower management).

Before the next budget meeting, the factory managers have to send their budget proposals to the headquarters' finance personnel for validation and consolidation into a master budget for submission to the top management for review. Then the second, third or fourth meeting carries on until the gap between the sales forecast and production capacity can be closed. This iterative exercise is finished until all the plans, budgets and contracts are mutally agreed in late January and submitted to the annual general meeting for approval after the Chinese New Year in February. (Please see Appendix A at the end of this data analysis for a flow-chart of this process of annual planning or budgeting.)

The factory budgets mainly include sales (internal and external), production, material, labour, overhead and inventory which are broken down into quarterly budgets for periodic control and measurement. Furthermore, the quarterly production budget is split into monthly targets in order to meet the shipping schedules and reduce the inventory levels.

Whereas, the other management and service departments (they are all discretionary or constrainted cost centres) should formulate their annual budgets as well in a similar fashion but with less negotiations. The whole budgeting system was computerized in 1992.

In the last three years, all the factory managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the internal responsibility contracts with the headquarters subsequently.

In view of the rapid changing market conditions in 1993, the budget review period has been shortened from six months to three months. The Planning Committee now holds a formal review meeting at the beginning of each quarter and sizing targets, such as sales (quantities and prices), production (volume and mix), capacity (labour and shift), may be amended in order to provide more realistic targets for all levels of management.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism transformation legislation and the market economy have compelled the headquarters (top management) to get the factories (middle management) or even their subordinates (lower management) more involved in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the factory managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High Corporate" to "Low Corporate" since 1992.

#### 5.6 Internal Responsibility Contracts (IRC)

Shanghai No.5 Steel Works (SSW5) established its IRC system in 1985. In January 1994, the headquarters signed another round of one-year IRCs with all the 16 factories which have been classified as profit centres.

Before 1993, the major targets set in the IRCs were production volumes and costs. SSW5 implemented a "Standard Costing System" in 1986 mainly for cost control purpose. Therefore, every factory was very conscious in meeting the target production costs set in the IRC. Sometimes, the factories adjusted the input material mixes in order to minimize or achieve the standard costs.

Although the factory managers were involved in setting the costing targets, nevertheless, the headquarters' top management always had high involvement in the process or even sometimes gave specific suggestions on the figures.

As from 1993, the key target to measure in the IRCs is profit, either internal or external. This change can emphasize both the production and sales on one hand and also cost control on the other hand. The IRC acts as a yardstick to determine the total group bonus awarded to each factory on a monthly basis. The major contents of one IRC are highlighted below :

Factory : No.3 Refine Rolling

: 1993 Year

Guidelines (1) Internal profit is the major economic

> (2) Production management emphasizes on the achievement of all qualitative targets.

(3) Bonus is determined on the degree of accomplishment of the economic, qualitative and other targets.

Veto Factors (1) Quality (2) Safety

(3) Major Facility Breakdown

739 staff Headcount

: RMB XXXX (to be calculated) Gross Wages

: (1) Profitability - Internal Profit Economic

(2) Production Management -Targets

(a) Degree of IRC Completeness

(b) Transferred Finished Goods Quantity

(c) Transferred Finished Goods Monthly Rate

(3) Production Planning -

(a) Production Volume(b) Production Mix

(c) Defective Production

(d) Against Production Planning Suggestions

Oualitative Targets

(1) Quality Management(2) Technical Targets -

(a) New Products Development

(b) Attainment of International Standards

(3) Energy Consumption

(4) Production Facilities -

(a) Maintenance Conditions

(b) Breakdown/Stoppage

(c) Repair & Maintenance Costs

(1) Modern Management Methods Used Other Targets :

(2) Technological Information Employed(3) Qualitative Management i.e. Use of Computer

(4) Education and Training

(5) Order and Safety

(6) Environmental Protection

(7) Family Planning

- Notes: (a) The economic and qualitative factors clearly set the increase and decrease in bonus amounts.
  - (b) The other targets are assessed subjectively without specifying the addition or deduction of bonus.
  - (c) The veto factors can reduce the bonus to zero.
  - (d) The bonus is calculated on a group basis whereas the distribution of group bonus to individual employees within the factory is determined by the factory management according to individual performance.
  - management according to individual performance.

    (e) The calculated group bonus should be matched with the overall profit or loss achieved by the whole enterprise. Upward or downward adjustments may be made accordingly by the headquarters.

Since 1993, the IRCs have been initiated by the factories during the budgeting process (September - January). After back and forth discussions and negotiations with the headquarters, the IRCs are agreed and signed by the general manager and the factory managers. In the same year, the factory managers started to sign second level of IRCs with their own production sections or production lines without any involvement from headquarters. The top management believe that this second-tier IRC system can further motivate the lower level of management and hold their accountability to the factory managers.

The IRCs are reviewed quarterly in parallel with the budget review but both the headquarters and the factories are trying to avoid adjusting the targets unless there are significant changes affecting their validity. Because frequent adjustment to the targets can cause confusion to all levels of management.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, SSW5's headquarters have delegated more freedom to the factory managers in initiating and negotiating their own IRCs, and also the full autonomy to breakdown the responsibility or targets into the second-level of IRCs to be shared by their subordinates.

Observation of Planning Influence: shift from "High Corporate" to "Low Corporate" since 1992.

## 5.7 Management of Interdependencies (Transfer Pricing)

Management of Interdependencies means the central influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions needed to be managed. Cross-supply and transfer pricing between the factories, and exploitation of a shared resource are examples that happened in Shanghai No.5 Steel Works (SSW5) and need headquarters' intervention.

As illustrated in the organisation structure in section 2 above, the 12 manufacturing factories are in a continuous process and have some interdependencies. In addition, the four supporting factories supply materials, gas, electricity and oxygen to the 12 manufacturing factories. All these manufacturing and supporting factories are qualified as profit centres. Therefore, transfer pricing is an important issue to be determined especially during the budgeting process and IRC negotiation.

Before 1993, the transfer prices were determined by standard costs plus certain percentages of markup or called "standard transfer prices". The standard costs were based on the historical costs and the projected inflation rates.

Whereas, the profit margins were mainly determined by the headquarters. Although the factories had little autonomy in fixing the transfer prices, however, they would not care too much because their IRCs are mainly measured on production costs but not on internal profit.

The siutation has changed since 1993 when internal profit was used as the major criterion in the IRC to measure the factory's performance. Instead of using the "standard transfer prices", the "adjusted market prices" are employed as the transfer prices. Since the great majority of the intermediate products of SSW5 are available for sales and purchases in the market, therefore, it is not difficult to identify the market prices at the end of the year which will be adjusted for some savings (i.e. administration and transportation costs) and expected inflation, and then used for the transfer prices in next year.

However, during the first quarter of 1993, the iron and steel product prices were increased substantially due to the relaxation of government's price control on most of the commodities. Furthermore, the market prices were fluctuating up and down during the whole year. As a result, SSW5 decided to review the market prices at the end of each quarter and if any market price has been increased or decreased by more than 5%, then an adjustment of that market price would be made accordingly. This approach can keep the transfer prices reflecting the market conditions.

Having had some experience in monitoring the "adjusted market prices", the headquarters started to allow the factory managers to initiate their own transfer prices during the last quarter in 1993. Their recommended transfer prices were vetted by the headquarters' accounting personnel before submitting to the top management for review or further negotiation with the factory managers.

There are some resource sharing problems that have happened among some factories such as the three Refining Rolling factories which are using the same outputs from the Initial Rolling and Forge Pressing Factory. Since 1993, instead of arbitration from the headquarters as practised in the past, these factories have been allowed to negotiate and compromise on their own. Of course, some deadlocks still need the interference from the headquarters.

(Please refer to Q5.9.1-12 on the questionnaire extracts in Appendix 1.)

In summary, since 1993, the headquarters has inserted less interference among the factories as far as transfer pricing and resource sharing are concerned.

Observation of Planning Influence: shift from "Very High Corporate" to "High-Medium Corporate" since 1992.

## Section 6 : Control System

#### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Shanghai No.5 Steel Works (SSW5) has decentralised its production function into 16 semi-autonomous factories or profit centres according to the nature of production in each factory. The factory managers can decide on their own organisation structures, staffing and their roles and functions, and interactions between their sub-units (sections and groups).

The IRC has agreed the target number of employees in each factory which is an important figure to calculate the gross wages to be paid out per annum. However, within the limit of the gross wages, a factory manager has the autonomy to increase (unlikely) or decrease its manpower. If some redundant staff resign or transfer to other factories and "tertiary enterprises", then less employees will share the fixed amount of gross wages (or a portion of the excess will be transferred to a designated welfare fund for that factory).

The factory managers are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of employment with any staff is a difficult task as explained in section 5.4(e) above.

The major control mechanisms employed by the headquarters to control the performance of the factories are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criterion is internal profit set in the IRCs, although some other economic and qualitative targets (non-financial) are employed, however, they are subsidiary ones which do not have very significant effects on the group bonus calculation. But the infringement of veto factors will have substantial reductions in the group bonus.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are dominated in the control mechanisms used in the decentralized operation of SSW5.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.2 Agreeing Objectives

Shanghai No.5 Steel Works (SSW5) sets similar objectives for its factories: factory managers must meet their agreed budget figures or IRC targets for the year and performance improvement year on year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. SSW5 is trying to set for the next year a stretching standard of performance that factory managers are committed to achieve.

Two kinds of pressure are put onto the factory managers at the annual or quarterly review: to submit a budget they can achieve; and at the same time, to aim for results that are, if possible, better than the previous year's. They fully understand that their group bonuses are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. Therefore, the headquarters do not tell the factories what their targets (e.g. internal profit) should be, but tries to "energize" the ambition of the factory management teams to do better year by year.

In addition to the formal annual or quarterly review process, many ad hoc meetings and informal communications are made between the headquarters and factories, and also among the factories themselves.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

#### 6.3 Monitoring Results (Reporting & Performance Measurement)

Shanghai No.5 Steel Works (SSW5) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the headquarters monitor results on a monthly and quarterly basis. All the 16 factories submit monthly results directly to the headquarters on standard formats. They are also required to submit key production figures to the headquarters on a weekly basis.

The monthly condensed report format is unique for each factory. The contents are corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly, quarterly and yearly accumulative actuals are compared with the budgets and the yearly accumulative actuals are also compared with the last year accumulative actuals.

These monthly reports are compiled, through the computer, by the accounting staff in each individual factory who have dotted line relationship with the headquarters' accounting and finance department. Any variances plus or minus 5% are highlighted in order to bring the attention to the factory managers and the top management in the headquarters.

Each monthly report must be reviewed and signed by the factory manager before submitting to the headquarters' accounting department for vetting and consolidating. The accounting personnel in the headquarters rearranges and consolidates some of the financial and non-financial figures to generate a master report with similar comparisons with budgets, IRC and actuals of last year. Then the master and individual monthly reports are submitted to the top management for review.

For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager or his subordinates to dig out the underlining reasons or ask him to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the planning committee, the general manager put forward the monthly factory reports for open disscussion. The factory managers may be asked to explain briefly the significant variances.

The unsatisfactory results sometimes make the factory managers embarassed if they are due to the results of management fault. Consistent failure (say over 10 months) the targets which are controllable by a factory manager, probably he will be replaced by somebody else. It is very common in an SOE to see a factory manager step down from his office and go back to the shop floor and become a technician or worker again. On the other hand, the favourable results are openly praised by the top management and sometimes a special bonus is announced in the same occasion.

After the monthly meeting, all the approved results are passed back to the headquarters' accounting department for calculating the group bonus of each factory for last month. The group bonus result sheets are sent to the personnel and manpower department for verification before submitting to the general manager for final approval. Then the accounting department processes the bonus payments at the end of the month (i.e. this month pays bonus for last month).

SSW5 views a budget or IRC as a contract between the headquarters and the factory. The monitoring process is used to maintain the pressure for performance. Headquarters' close surveillance of results enables them to ensure that no factory goes too far astray before remedial action is taken.

It also gives top management an understanding of the reasons for variances from budget. Where the business is stable, this knowledge enables the headquarters to judge next year's budget without too much elaboration during the planning process. But when the business environment is unpredictable such as the steel industry experienced in 1993, the headquarters may not be able to see the edge of the cliff or catch the factory manager before he hits the bottom. As a result, SSW5 appears to avoid unstable products and markets, especially those with fierce competition.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence : remain "Tight Financial Control" before and after 1992.

#### 6.4 Rewards and Incentives

The take-home pay of each employee in SSW5 is mainly composed of three elements as broken down below:

(1)	Basic Wages	25% -	30%
(2)	Bonus	55% -	45%
(3)	Allowances	20% -	25%

The average annual gross wages per employee was around RMB8,500 in 1993. Under the fierce competition from the other steel works within the same Baoshan District (the second largest steel works in China - Baoshan Steel Works - is also located in this area), SSW5 increased this average figure to RMB11,500 in 1994. In addition, the high inflation rate (23% and 15% overall in China in 1994 and 1995) adds a lot of pressure to increase the remuneration for the workforce of SSW5 in 1995 (perhaps about RMB13,500 per employee).

The "basic wages" is reviewed every year depending on grade and seniority without paying regards to qualification and technical skill. The increments from year to year are not substantial which is similar to the salary scales of the civil servants in Hong Kong. A postman in Hong Kong knows what his salary will be after ten years from now (disregard the inflation factor) if he can stay with the post office for that long. The "basic salary" paying to all the management and administrative staff in SSW5 is very similar to the "basic wages" paid to the workers.

There are two portions for the "allowance". The frist part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once every year mainly for the purpose of combatting inflation in food, transportation, gas and electricity. The second part is decided by the SSW5 which may include housing, meals, travel, childcare, attendance, overtime, inflation, production stoppage, hair-dressing, festival gifts etc., which are trying to balance the relatively low basic wages or salaries and maintain a reasonable standard of living for the employees.

The calculation of "bonous", as described in the above sections, is based on the accomplishment of the IRC. The IRC signed between the top management and the factory manager decides what level of group bonus will be given to the factory. Whereas, the IRCs agreed between a factory manager and his sections or production lines are used as bases to distribute that total amount of group bonus to the respective sections.

And of course, it is up to the section heads to award that lump sum of group bonus to his or her individual subordinates working in the section. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) is retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

How is the bonus determined for the management and administrative staff? It can be described in the following steps:

- (1) Calculation of management score (may be over 100%) based on-
  - (a) performance according to targets set;
  - (b) discipline according to rules and regulations;
  - (c) management methods and styles; and
  - (d) security and safty.
- (2) Calculation of average bonus by Management score % (1) x Monthly average bonus per worker in
  all the factories.
- (3) Calculation of individual bonus by Average monthly bonus (2) x Individual index\*
  - \* Different indexes for different grades of staff, i.e.

General Manager = 2.0
Chief Accountant = 1.8
Department Manager = 1.7
Assistant Department Mgr. = 1.5
Supervisor = 1.3
Senior Clerk = 1.2
Junior Clerk = 1.1

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the municipal government will award a lump sum of "special bonus" to the general manager at the end of the year. But under no circumstance, the remuneration package of the general manager can be greater than three times the total earnings of a factory manager.

If the annual profit before tax can achieve much better than the planned level, an "additional bonus" may also be awarded to all the employees and distributed in a way very similar to the monthly bonus.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. However, as mentioned earlier in section 5.4(e), that the redundant employees will create many social problems in light of the current insufficient empolyment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Despite the fact that many employees voiced their adverse opinion against this new system in the Annual Staff and Worker Representative Meeting (or AGM) held in February 1993 (which is supposed to the highest decision-making authority in a SOE with representatives from all levels of employees), SSW5 decided to implement this contract employment system on the non-production staff first during 1993. Eventually, this system was fully implemented in 1995.

By doing so, firstly, the contract durations are vary from one to three years subject to review and renewal, and secondly, the basic wages and allowances will be combined into a single amount which is assessed according to technical skills, qualifications, job nature and seniority.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, SSW5 believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence : shift from "Tight Financial Control" to "Moderate Financial Control" since 1992"

## Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai No.5 Steel Work (SSW5) belonged to before and after 1992.

·		
Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	Very High/ High Corporate	Medium Corporate
Review Process*	High Corporate	Medium/Low Corporate
Strategic Themes, Thrusts and Suggestions*	Very High/ High Corporate	High/Medium Corporate
Long-term Plans* (Resource Allocation)	Very High/ High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High Corporate	Low Corporate
Internal Responsibility Contract	High Corporate	Low Corporate
Management of Interdependencies* (Transfer Pricing)	Very High Corporate	High/Medium Corporate
Influences	Before 1992	After 1992
Control Influences:		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Tight Financial
Rewards & Incentives*	Tight Financial	Moderate Financial

\* Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992]	
Low Corporate	(Strategic Control)	(Financial Control)	

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai No.5 Steel Works (SSW5) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

Revised: 7 February 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratroy Framework"

Report Title : Data Analysis 2
Report Date : 4 February 1994

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Introduction: A total number of 21 State-owned Enterprises (SOE) have been visited during the period from September 1991 to December 1993 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

Name of SOE: Xiamen Fork Lift Truck Plant (XFLT)

Staff Interviewed: Mr Wang Zhao Liang, Chief Accountant
(No. of years in this enterprise: 4 years)
Mr Huang Tian Qing, Vice-Chief Accountant
(No. of years in this enterprise: 20 years)

Dates of Visits: First Visit - 22 September 1992
Second Visit - 8 June 1993
Third Visit - 15 September 1993
Fourth Visit - 14 September 1994

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### Section 1 : History & Background

Xiamen Fork Lift Truck Plant (XFLT) is a medium size state-owned enterprise specialized in manufacturing fork lift trucks. It is located close to the city centre of Xiamen (10 minutes by bus from the railway station). Xiamen is an island of a hundred square miles with a population of over one million. There is a main road and a bridge for trains connected with the mainland - Fujian Province - which is at the northeast of Guangdong Province. As one of the key enterprises in Fujian Province, the plant was conferred a title "Advanced Enterprise" in 1987 by the Provincial Government. XFLT is the largest fork lift truck manufacturing plant in the Southern China.

Established in 1957, the plant possesses competent technical personnel, good educated staff and hard-working workers. There are high technological level and production condition in main workshops, such as, production by group technology in machining workshop, powder electrostatic coasting equipment from Nordson Corporation of the USA in painting workshop and step-by-step assembly workshop. There are also a testing platform and a testing ground in the plant to ensure the quality of the truck.

XFLT and Cascade Corporation of the USA established a Joint Venture called "Xiamen Cascade Co. Ltd." in 1987 to manufacture fork lift truck's spare parts which have achieved international standards. The major products of XFLT are the 2-14 tonnes new scissor fork lift trucks, 3-6 tonnes side loading trucks and 1-2.5 tonnes electric fork lift trucks, all together in 19 categories.

Over 90% of the trucks are sold domestically (60% to Fujian and Guangdong Province), while some products are exported to the USA, UK, Canada, Southeast Asia and Hong Kong. Under the "SOE Mechanism Transformation Regulations" and "Socialist Market Economy" promulgated by the central government in 1992, XFLT was granted the "Free Import/Export Right" in 1993 so that it can further explore the overseas markets during the coming Ninth Five-Year Plan (1996-2000 inclusive). The annual production volume was 2,000 trucks in 1993 but could not satisfy the national demands. The major competitors are the Sino-Japanese joint-ventures which are exploring the high potential Asian markets.

#### Section 2 : Legal Form & Organisation Structure

Xiamen Fork Lift Truck (XFLT) has been a wholly state-owned enterprise since its establishment in 1957 and it is planning to change into a shareholding SOE in the next three years in order to raise capital from other enterprises, their employees and the general public (individuals) if it can be listed eventually. But there are a lot of stringent rules and regulations imposed by the local and central governments and the Bank of China for converting into a shareholding enterprise. Because XFLT is a wholly SOE, it is under the administration of the Xiamen Municipal Government and the Fujian Provincial Machinery Bureau.

Before the economic reforms started in 1979, the central planning system dictated all the planning and control (long term and short term) in the SOEs. Therefore, XFLT was just acting as a vehicle to carry out the activities according to the commands directed from the Municipal Government and the Machinery Bureau.

Since Xiamen has been one of the five special economic zones in 1981, there are many favourable policies granted to the SOEs and other joint-ventures having operations in this city. policies are mentioned in the long term planning section below. Now the municipal government only oversees the major development projects, mainly long term ones, recommended by the XFLT. On the other hand, the Machinery Bureau is resolving into a "Trade Association" (something like semi-governmental body) and its objective is mainly providing marketing information to the machinery manufacturing enterprises under its umbrella in order to produce the right kinds and the right quantities of products. The XFLT's top management has experienced that these authorities have been taking away their visible hands from and leaving more operating autonomy to the machinery manufacturing industry even before 1992 when the mechanism transformation legislation was announced. (Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of XFLT can be divided into six divisions under the direct control of the Factory Manager who has a Management Office and a Planning & Technology Office directly reporting to him (staff functions). The six divisions are listed as follow:

- 1. Production Division (headed by a Deputy-Factory Manager)
  - 1.1 Production Management Office
    - 1.1.1 Framework Workshop\*
    - 1.1.2 Metalwork Workshop\*
    - 1.1.3 Painting Workshop\*
    - 1.1.4 Assembly Workshop\*
    - 1.1.5 Repairs & Maintenance Workshop\*
    - 1.1.6 Testing Center\*
  - 1.2 Purchasing & Supply Department\*

- 1.3 Facility Department\*
- 1.4 Transportation Department\*
- 2. Technical Division (headed by a Deputy-Factory Manager)
  - 2.1 Design Department\*
  - 2.2 Production Technology Department\*
  - 2.3 Inspection Department\*
  - 2.4 Quality Control Department\*
  - 2.5 Technology Management Department
    - 2.5.1 Technology Information Section
    - 2.5.2 Record Section
    - 2.5.3 Computer Centre
- 3. Economic Division (headed by the Chief Economist)
  - 3.1 Sales & Marketing Department\*
  - 3.2 Technical Support Department\*
- 4. Finance Division (headed by the Chief Accountant)
  - 4.1 Accounting Department
  - 4.2 Cost Reduction Department
  - 4.3 Internal Audit Department
  - 4.4 Legal Department
- 5. Administration Division (head by a Deputy-Factory Manager)
  - 5.1 Personnel Department
  - 5.2 Education & Training Department
  - 5.3 Building & Facility Department
  - 5.4 Security Department
  - 5.5 Medical Department
  - 5.6 General Affairs Department
    - 5.6.1 Canteen
    - 5.6.2 Nursary
- Three Fully Owned Subsidiaries (Third Enterprises)
  - 6.1 Property
  - 6.2 Tourism
  - 6.3 Retailing
- \* Workshops and departments which have entered into Internal Responsibility Contracts (IRC) with the Factory Manager.

Other than the three fully owned subsidiaries which are profit centres by themselves, all the other divisions, departments, offices and sections are classified as cost centres.

XFLT had a total of 1,100 employees at the end of 1993. It is classified as a "Medium size SOE" in China.

#### Section 3 : Financial Indicators

Total assets : RMB 52M (1992)
Turnover : RMB102M (1992)
RMB120M (1993)

RMB150M (1994)

Income before tax : RMB5.5M (1992) - 5.4% of sales

RMB7.5M (1993) - 6.3% of sales

Income tax rate : 15%

## Section 4 : Economic Responsibility Contract System (ERCS)

Since there have been special policies applied to the five special economic zones (including Xiamen) in early 1980s, Xiamen Fork Lift Truck (XFLT) has not signed any formal ERC with the municipal government. However, since 1984, XFLT has agreed the following two targets with the municipal government:

- (1) "Income Before Tax" with 10% annual growth rate; and
- (2) "Income Tax" rate of 15%.

XFLT was underwritten to hand over a fixed portion of the "Income Before Tax" per year to the MUnicipal Government irrespective of actual performance (profit or loss) achieved. For example,

(RMB'000	) 1984	1985	1986
Budget Income Before Tax (10% grow	wth) 1,000	1,100	1,210
Handover to Government (10%)	100	110	121
	900	990	1,089
Income Tax (15% on IBT)	150	165	182
Income After Tax left for XFLT	750	825	907
	=====	=====	=====

If the actual "Income Before Tax" in 1984 was lower or greater than the annual agreed target, then the senario would become as follow:

(RMB'000)	1984 (Budget)	1984 (Actual)	1984 (Actual)
Dudant Income Defense War (a)		•	•
Budget Income Before Tax (a)	1,000	800	1,200
Handover to Government	100	100	100
(fixed at 10% of budget)			
	900	700	1,100
Income Tax (15% on actual IBT)	150	120	180
Income After Tax left for XFLT	(b) 750	580	920
	====	====	=====
IAT % of IBT (b)/(a)	75%	73%	77%

\* In this senario, the break-even point would be an Income Before Tax of RMB118,000.

This system would encourage XFLT to enhance its profitability in order to retain more income after tax for development, reserve, empolyee bonus and welfare purposes.

#### Section 5 : Planning System

### 5.1 Organisation Structure

The guiding theme of the structure of Xiamen Fork Lift Truck (XFLT) is simplicity and accountability. To avoid the setting of internal transfer prices and calculating internal profits, all the six departments under the production management office are treated as cost centres. Since 1992, XFLT has been decentralizing more responsibility to each department such as initiating the annual budget and the internal responsibility contract. The profit responsibility lies with the top management who keep a surveillance cost control on each division, department or office.

The selection and appointment of the Factory Manager is still decided by the Municipal Government. Since 1992, the factory manager has full autonomy to appoint the deputy-factory managers, chief economist, chief accountant (the two chiefs are equivalent to deputy-factory managers) and the department heads under the six divisions. Any major changes of the organisation structure in each division should be initiated by the deputy-factory managers and approved by the factory manager. However, more autonomy of internal management and operation has been delegated to the heads of divisions (deputy-factory managers) since 1992. And in turn, the deputy-factory managers have involved their department heads more in planning, control and decision making. (Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, XFLT has a decentralized structure in which the individual divisional heads report directly to the factory manager, and they play a linking and control role between the divisions and the factory manager.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.2 Review Process

Since 1992, Xiamen Fork Lift Truck (XFLT) has implemented a regular formal planning process - for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). This process starts in October (i.e. fourth quarter) each year and ends in February the next year. Based on some guidelines provided by the factory manager, e.g. sales and profits, each workshop and department initiates an annual plan or budget in which some key criteria are used as the measurement yardsticks of the internal responsibility contract. In fact, the IRC is a subset of the annual plan or budget in order to highlight the key variables to measure the performance and determine the group bonus for each workshop and department.

The finance division validates all the budgets and consolidates them into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions are held between the factory manager, deputy-factory managers and department heads either collectively or individually. This iterative exercise is finished until all the plans, budgets and contracts are mutally agreed in January or February. Then the finance division publishes the final master plan and sends to all the management staff.

Before 1992, there was no such dedicated and formal annual budget review process and the top management gave directions to the departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, wastage rates etc. Since 1992, under the legislative changes and market economy promulgation, XFLT has been given higher automomy in formulating its strategic directions. As a result, all the workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year. Therefore, the factory manager has less interference in departmental planning decisions, but without reducing the tight financial control. (Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

## 5.3 Strategic Themes, Thrusts and Suggestions

Xiamen Fork Lift Truck (XFLT) has been promulgating "Quality" as the most important strategic theme which can be easily seen for the organisation structure above (section 2) where there are testing center, inspection department and quality control department. XFLT is very proud of its quality control standard which has been highly recognised by the municipal government and a RMB40,000 bonus for quality was awarded by the government in 1992. Also, XFLT is ranked the top within this sector of industry in Southern China in terms of product quality. Quality is the most important guideline and element given to and imbedded into the planning and control system of XFLT. And there is no trade-off for any deterioration in quality in whatever aspects.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

Product development and capacity expansion (long and short term) are the strategic thrusts that XFLT always emphasizes in the planning process. There have been significant manufacturing technology and production efficiency advancement since the late 1980s by importing new plants and machines for the USA. These production facility innovations have always received top priorities in the capital appropriation budget which is formed an integral part of the annual budget.

The above strategic themes and thrusts are initiated by the top management which have positive roles to play in creating the strategic plans for the whole XFLT.

Before 1992, the top management in XFLT from time to time made suggestions on specific issues relating to the planning review process such as selling prices, marketing strategies and production quantity and mix. The top management followed the financial indicators and performance closely on monthly and quarterly basis and were quick to make suggestions if they did not match the overall long and short term plan. To facilitate the implementation of the legislation in 1992, the top management has gradually left more freedom to the workshop managers and department heads to adjust their plans and operations as long as they would not deviate much from the long term plan and the annual budget in aggregate.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Very High-High Corporate" to "High-Medium Corporate" since 1992.

## Long-Term Plans (Resource Allocation)

As mentioned in section 2 above, since Xiamen is one of the five special economic zones, some favourable policies have been given to the SOEs by the central government, for example,

- lower income tax of 15% compared with 33% in Shanghai; (1)
- (2) lower import materials or components tax;
- less municipal taxes; (3)
- free import and export rights; and (4)
- generous land and building use rights. (5)

In order to speed up the implementation of the "SOE Mechanism Transformation Legislation" enacted in 1992, the Xiamen Municipal Government issued ten specific additional policies for the SOEs These ten policies are related to : at the end of 1992.

- production planning right; (1)
- investment right; (2)
- product pricing right; (3)
- import and export rights; (4)
- (5) asset appropriation right;
- organisational design right; (6)
- (7)
- manpower planning right;
  personnel management right; (8)
- (9) wages and bonus distribution right; and
- (10) profit appropriation right.

The above ten policies or guidelines explain specifically the different rights that the SOEs in Xiamen could exercise in order to enjoy further autonomy in planning and controlling their businesses. They also indicate the committment of the Xiamen Municipal Government to actualise the spirit behind the 1992 legislation.

Armed with so many favourable policies, Xiamen Fork Lift Truck (XFLT) can sweep away the worries of many restrictive rules, imposed from time to time by the government, and feel assured to plan ahead for 5 years or longer. In the current 5-year plan (1991-1995 inclusive), the following strategic directions have been laid down.

#### Product Differentiation and Diversification (a)

The improvement of product features and varieties can match the changes of market demand under the present open-market One of the major missions of the technical division is to design and pilot test new products at least a few types in every year.

# (b) Production Capacity Expansion

In order to increase the production capacity to at least five times of the present level, XFLT is planning to relocate its own plant. XFLT has acquired a piece of land of 170,000 square metres in the Eastern Xiamen on which a new complex will be erected in about three-years (1994-1996). The new plant will accommodate 3,000 employees with a production capacity of 10,000 to 20,000 trucks during the period of 1997 to 2000. The present plant will be relocated to the new complex whereas the present land, except reserving 8,000 square metres for the three subsidiaries (third enterprises), will be sold to Great Alantic Hong Kong Limited in ordr to raise RMB180M capital for the new building. It is expected that the new XFLT will be the largest fork lift truck plant in China.

### (c) Market Penetration and Diversification

The present national demand of fork lift trucks is greater than total supply from a total of 17 manufacturing plants in The customers have to wait for at least six months to recieve the shipments. In order to finance the working capital and to combat the high inflation of input materials or components particularly during the last two years, it is the usual policy accepted by most of the customers to pay a high percentage of deposit to XFLT when an order is placed. However, under the fiercer competition coming from the counterparts and other Sino-Japanese joint-ventures, XFLT has been spending more effort in the market research to penetrate and diversify the domestic markets. In particular to expand in the inner provinces like the Northwest and the On the other hand, with the free import and Southwest. export right granted by the municipal government and the huge expansion plan in the coming few years, XFLT is looking at the new markets in the Southeast Asian countries.

# (d) Manpower and Training

The abolishment of "Three Iron Bowls" (iron employment, iron position and iron wages) or "Life-Long Employment" has not be effectively implemented in XFLT because cutting off, say, 10% of the labour force will create many social problems in light of the current insufficient employment social welfare and benefits existing in China. One way to tackle this headache problem ("Big Rice Pot") is to transfer the excess workers to the three fully-owned subsidiaries (tertiary enterprises) as mentioned in the organisation chart in section 2 above.

Another important consideration is that more than half of the present employees have been working in this plant for over 12 years. It seems to be emotional and reluctant for the management to lay off some of the redundent employees. Therefore, the same old "big rice pot" concept is still generally existed in XFLT. (Please refer to Q5.2.1-3 on the questionnaire extracts in Appendix 1.)

To face with the challenge of rapid expansion of capacity in the coming new plant, XFLT has been hiring more post-graduates, graduates, and experienced technicians to prepare for the future. XFLT emphasizes external and internal training very much and even counts this element in the internal responsibillity contract and performance evaluation. They send staff to universities, technical colleges and overseas companies (e.g. USA and Germany) for formal training. Internal training courses are also organised from time to time.

Before the 1990s, the 5-year long term plans were agreements between the local government and the XFLT with very little involvement from the middle management such as the heads of departments. When the current 5-year plan (1991-1995 inclusive) started to be discussed in 1990, a Senior Management Committee was formed and the members included all the top management, workshop managers and department heads. The senior management committee discusses and reviews the current 5-year plan before the formulation of annual plan or budget held in October every year. If it is in the fifth year of the current 5-year plan, the next long term plan will also be initiated and discussed. In view of the rapid economic changes in China since 1992, ad hoc meetings to discuss the long term plan may be held anytime in the year. All the agreed long term plans will be summarised into a booklet and distributed to all members of the committee.

During the annual planning review, suggestions may be directed by the factory manager because of government's macro-policy changes or market condition changes. However, the workshop managers and department heads seldom initiate changes in their respective plans. They mainly concern with how the milestones set in the long term plan will affect their next year plans or internal responsibility contracts which will have tight financial surveillance coming from the factory manager at least on a monthly basis. Therefore, the long term planning and review process is using a top-down approach in the belief that the factory manager (over 20 years working experience in the plant) has experience and knowledge of the external environment and even the internal operations of the departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, from no involvement in long term planning to some participation by the heads of departments (middle management), is a big step of advancement signifying that their participation is an important part of the responsibility accounting system through which they will be assessed and rewarded.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

Since 1990, the general short term planning policy adopted by Xiamen Fork Lift Truck (XFLT) is "production determined by sales" which means sales is the initial driving force of all the activities. As from October 1992, the XFLT has used the following annual budgeting process.

In the short term planning or budgeting cycle, it is the first responsibility of the Sales and Marketing Department together with other sales offices and agents located in the other cities to forecast the sales in next year. At this point in time, the sales and marketing personnel are involved in formal and informal discussions with the factory manager in order to determine a set of sales mix figures (i.e. sales budget). These sales forecasts are then provided to the respective departments, more importantly to the production workshops, for them to initiate their own budgets.

After having the sales budget, the first budget meeting is held by all the members of the Senior Management Committee as mentioned in section 5.4 above. The major purpose of this first meeting is to discuss with the individual manufacturing workshops and supporting departments to ascertain whether their production capacities can be matched with the initial sales budget. Since the domestic demand of fork lift trucks is greater than the supply, it was the case in 1993 that the production capacity of XFLT could not satisfy the sales forecast. The only solution was to defer some of the shipments (usually on a FIFO basis) to 1994. Therefore, there was a significant back-logged orders at the end of 1993. Expansion of production capacity is a must, otherwise, XFLT will lose its competitive edge to its counterparts.

Before the next budget meeting, the workshops and departments have to submit their budget proposals to the finance division for consolidation. Then the second, third or fourth meeting carries on until compromises and agreements have been reached among the divisions and departments. Since October 1992, the workshop managers and department heads have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the factory manager.

The budgets mainly include sales (domestic and export), production, material, labour, overhead, inventory and capital expenditure which are broken down into quarterly budgets for periodic control and measurement. Furthermore, the quarterly production budgets are split into monthly targets in order to meet the shipping schedules and reduce the inventory levels.

Whereas, the other management and service departments should formulate their annual budgets as well in an expenditure control fashion and a more qualitative way but with less negotiations. The whole budgeting system was computerized in 1992.

In view of the rapid changing market conditions especially the input costs in 1993, the budget review period has been shortened from six months to three months. The senior management committee holds a formal review meeting at the beginning of each quarter and sizing targets, such as sales (quantities and prices), production (volume and mix), capacity (labour and shift), may be amended in order to provide more realistic targets for all levels of management.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given XFLT more freedom to plan ahead. The top management have involved the middle management or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence : shift from "High-Medium Corporate" to "Low Corporate" since 1992. \_\_\_\_\_

Internal Responsibility Contracts (IRC)

Xiamen Fork Lift Truck (XFLT) established its IRC system in 1987 in order to motivate the productivity and cost reduction in the production workshops. Gruadually, this system has been extended to other support or service departments (see organisation chart in section 2) in early 1990s.

The IRC of a production department is described below :

Department

: Framework Workshop

Year

1993

Guidelines

- : (1) Production volume and cost are the major economic targets.
  - (2) Production management emphasizes on the achievement of all qualitative targets.
  - (3) Bonus is determined on the degree of accomplishment of the economic, qualitative and other targets.

Veto Factors : (1) Quality

- (2) Safety

Headcount : XXX staff (per budget) : (1) Production Quantity Economic Targets (2) Production Cost (3) Production Cost Reduction Percentage (1) Production Management Oualitative (2) Production Technology(3) Quality Management Targets (4) Production Facilities Management (5) Inventory Management Other Targets (1) Modern Management Methods Used : (2) Safety Management(3) Education and Training (4) Family Planning Specific amounts of group bonus will be awarded Notes : (a) according to the accomplishment of the economic targets. (b) The qualitative and other factors will be scored to determine the group bonus for management merits. The veto factors can reduce the bonus to zero. (c) The bonus is calculated on a group basis whereas the (d) distribution of group bonus to individual employees within the workshop is determined by the workshop management according to individual performance. The following is an IRC of a department under the economic division : Technical Support Department Department : 1993 Year : (1) The major responsibilities are -Guidelines (a) sales of spare parts; (b) provide warranty service; and (c) provide repairs & maintenace. (2) The group bonus depends on sales and gross profit achieved. (1) Total income from sales of spare parts, Economic warranty service and repairs & maintenance Targets (2) Gross profit Other Targets

(1) Spare parts inventory(2) Warranty service quality (3) Repairs & maintenance service quality : 2% (RMB80,000) (1) Total income RMB4M Bonus RMB4M - 5.5M : 4% (RMB60,000) Calculation : 6% over RMB5.5M : 2% (RMB34,000) (2) Gross profit RMB1.7M RMB1.7M-2.3M : 4% (RMB24,000) over RMB2.3M : 8% (3) Spare part repairs income : 25% (4) Truck repairs income

- (5) 3% of total income is allowed for sales expenses, and 20% of any savings will be given as group bonus
- (6) The group bonus is calculated on a monthly basis.
- Notes: (a) The other targets will be assessed according to subjective measures.

(b) The bonus is calculated on a group basis whereas the distribution of group bonus to individual employees within the department is determined by the department management according to individual performance.

The following is an IRC of another department under the economic division :

Department

Sales & Marketing Department :

Year

(1) Total sales of RMB149M Economic

1993

Targets

Other Targets (1) Working capital employed:

- (a) Month-end finished stock RMB12M (12month's average)
- (b) Month-end debtors RMB15M (12-month's average)
- (2) Deduct from the group bonus of 20% of any loss caused by management mistake
- Bonus Calculation
- (1) RMB23 per RMB10,000 of sales (i.e. if on budget sales RMB149M, then group bonus = RMB342,700)
- (2) Each employee pays RMB30 per month as risk premium (department head pays RMB60), if
  - (a) annual sales < 90% of budget, deduct 60% of the total risk premium paid;
  - (b) 90%< annual sales <100%, deduct 30% of the total risk premium paid; and
  - (c) annual sales on budget, refund all the risk premium paid
- (3) Selling expenses control limits:
  - (a) delivery charges RMB305,000 per year
  - (b) discount allowed 1% of total sales

  - (c) entertainment RMB150,000 per year(d) sales agents expenses RMB756,000 p.a.
  - (e) sales promotion bonus by employees in other departments - RMB60,000
  - \* For any savings or overspending of (a)-(e) above, charge 10% bonus or penalty
  - (f) travelling expenses RMB355,000
  - (g) advertising expenditure RMB416,000
  - (h) national trade fair expenses 60% paid by the department

- (i) cigarette expenses RMB20,000 per year
- (j) spare parts sales commission 5% of income
- (4) The group bonus is calculated on a monthly basis.

Notes: (a) The bonus is calculated on a group basis whereas the distribution of group bonus to individual employees within the department is determined by the department management according to individual performance.

Since 1992, the IRCs have been initiated by the departments during the budgeting process (October - February). After iterative discussions and negotiations with the factory manager and finance division (acting as controller), the IRCs are agreed and signed by the department heads and the factory managers.

The IRCs are reviewed quarterly in parallel with the budget review but the factory manager, workshop managers and department heads are trying to avoid adjusting the targets unless there are significant changes, i.e. material and overhead costs, affecting their validity.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the factory manager has delegated more freedom to the workshop managers and department heads in initiating and negotiating their own IRCs, and also involved the finance division intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Since all the departments in the Xiamen Fork Lift Truck (XFLT) are treated as cost centres and the production workshops are measured against production volume and cost, therefore, internal transfer pricing does not exist.

# Section 6 : Control System

### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Xiamen Fork Lift Truck (XFLT) has three distinct levels of management hierarchy:

- Top Management (factory and deputy-factory managers)
  Middle Management (workshop managers and department heads) (1)
- (2)
- Lower Management (foremen and supervisors) (3)

The deputy-factory managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (groups, sections, shifts). In addition, since 1992, the workshop managers and department heads have been more active in suggesting organisational and personnel changes to their divisional deputy-factory managers.

The deputy-factory managers, workshop managers and department heads are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task as explained in section 5.4(d) above.

The major control mechanisms employed by the top management to control the performance of the workshops and departments are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are sales and expenses set in the IRCs, although some other qualitative targets (non-financial) are employed, however, they are subsidiary ones which do not have very significant effects on the group bonus calculation.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the dominating factors in the control mechanisms used in the decentralized operation of XFLT.

Observation of Control Influence : shift from "Financial Control" to "Moderate Strategic Control" since 1992.

# 6.2 Agreeing Objectives

Xiamen Fork Lift Truck (XFLT) sets similar objectives for its production and service departments: workshop and department managers must meet their agreed budget figures or IRC targets for the year and expect improvement in performance year on year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. In view of the favourable market conditions, XFLT is trying to set for the next year a demanding standard of performance that workshop managers and department heads are committed to achieve.

Two kinds of pressure are put on department heads at the annual or quarterly review: to submit a budget tht they can achieve; and at the same time, to aim for results that are, most likely, better than the previous year's. They fully understand that their group bonuses are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. Therefore, the top management does not tell the departments what their targets (e.g. sales, production and expenses) should be, but tries to "energize" the ambitions of the middle management teams to do better year by year. But in terms of costs and expenses, control is tighter and specific suggestions sometimes will be given by the top management.

In addition to the formal annual or quarterly review process, many ad hoc meetings and informal communications are made between the top and middle management, and also among the departments themselves.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

### 6.3 Monitoring Results (Reporting & Performance Measurement)

Xiamen Fork Lift Truck (XFLT) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the departments submit monthly results on standard forms to their respective divisional heads and also to the chief accountant for vetting and comparison with budgets and IRCs. The production workshops are also required to submit production figures to the top management on a weekly basis.

The monthly report format is unique for each department. The contents are mainly corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the fixed budgets. However, many of the qualitative targets set in the budgets or IRCs (especially non-production departments) are not measured in the monthly reports. These monthly reports are compiled, through the computer, by the accounting staff. Any significant variances (without specifying tolerance limits) are highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the factory and deputy-factory managers for review.

For any serious adverse variances shown on any report, the factory and deputy-factory managers contact with the respective workshop managers and department heads to dig out the underlining reasons or ask them to perform investigation immediately. And it is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the senior management committee, the factory manager put forward the monthly results for open discussion. The workshop managers and department heads may be asked to explain briefly the significant variances. The unsatisfactory results sometimes will make the workshop managers and department heads feel embarassed if the poor performance are due to management fault. Consistent failure (say over 12 months) in meeting the targets which are controllable by a department head, probably he will be replaced by somebody else. It is very common in an SOE to see a workshop manager step down form his office and go back to the shop floor and become a technician or worker again. On the other hand, the favourable results are openly praised by the top management.

After the monthly meeting, all the approved results are passed back to the accounting department for calculating the group bonus of each workshop and department for last month. Then the accounting department processes the bonus payments at the end of the month (i.e. this month pays bonus for last month).

To facilitate the planning and control mechanisms, XFLT has invested substantially since early 1990s in installing a centralised mini-computer and tailor-made software packages. Furthermore, a post-graduate in computer science was recruited in 1989 from the Fudan University, which is one of the most famous colleges in Shanghai to head the computer centre. His staff relationship to the Chief Accountant reveals the emphasis of management accounting control system in the finance division. It is amazing that in a few years' time, a local network system (LANS) has been built up to integrate the sales, purchasing, inventory, production, accounting (financial and management reporting), wages, fundflow (cash flow) systems.

Different levels of access to the LANS have been assigned to various levels of management. For example, the factory manager can access to all the systems in the network, whereas, the sales and marketing manager cannot assess to the accounting information through his terminal. Passwords have been assigned to each system in the network and also every employee who is authorized to access to the LANS.

XFLT views a budget or IRC as a contract between the top management and the department. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

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#### 6.4 Rewards and Incentives

According to the Fujian Provincal Government's policy, the annual gross wages (including bonus) growth rate of all the SOEs can not exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the XFLT is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

The take-home pay of each employee in XFLT is mainly composed of three elements as broken down below:

(1) Basic Wages 25% - 30% (2) Bonus 55% - 45% (3) Allowances 20% - 25%

The average annual gross wages per employee was around RMB8,000 in 1993. Under the current high inflation rate (overall average 23% in China in 1994), the average annual gross wages per employee was increased to RMB9,500 in 1994.

As from 1992, the "basic wages" is reviewed bi-annually depending on grade and seniority without paying regards to qualification and technical skill. Even though increments are made twice a year, they are not substantial and are not in line with inflation. The "basic salary" paid to all the management and administrative staff in XFLT is similar to the "basic wages" paid to the workers.

The "allowances" may include housing, meals, travel, childcare, attendance, overtime, inflation (now adjusted bi-annually in Xiamen), production stoppage, hairdressing, festival gifts etc., which are provided to balance the relatively low basic wages or salaries and maintain a reasonable standard of living for the employees.

The calculation of "bonus" is based on the accomplishment of the IRC. An IRC signed between the factory manager and a production workshop decides what level of group bonus will be given to the workshop. Of course, it is up to the workshop manager to award that lump sum of group bonus to his or her subordinates according to invidual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (20% - 30%) is retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

How the bonus is determined for the management and administrative staff? It can be described in the following steps:

- (1) Calculation of management score
  - (a) Job performance (60%)
  - (b) Rules & regulations (20%)
  - (c) Management methods (10%
  - (d) Security and safty (10%)
- (2) Calculation of average bonus

Management score % (1) x Monthly average production worker's bonus

(3) Calculation of individual bonus

Average monthly bonus (2) x Individual index\*

\* Different indexes for different grades of staff, i.e.

Factory Manager = 2.0 Deputy-Factory Manager = 1.8

Department Head = 1.6

Deputy Department Head = 1.5

Supervisor = 1.4

Since the parity of annual salary between the factory manager and a department head is not big, the factory manager is allowed by the local government to be personnally awarded a lump sum of "special bonus" at the end of the year if the overall financial performance of XFLT can reach an annual target set by the government in the long term plan. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a production worker.

If the quarterly and annual profit before tax can achieve better than the planned levels, "additional bonus" is also awarded to all the employees and distributed in a way very similar to the monthly bonus.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, as mentioned earlier in section 5.4(d), to lay off the redundant employees will create many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Despite this fact, XFLT has decided to implement this contract employment system which is applicable to those new employees who have joined since October 1992. Their contract durations vary from one to three years subject to review and renewal.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, XFLT believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence : shift from "Financial Control" to "Moderate Financial Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Xiamen Fork Lift Truck (XFLT) belonged to before and after 1992.

	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	High Corporate	Medium Corporate
Review Process*	Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	Very High to High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High to Medium Corporate	Low Corporate
Internal Responsibility Contract	High to Medium Corporate	Low Corporate
Management of Interdependencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Financial	Moderate Strategic
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

 $<sup>\</sup>star$  Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate	[1	[Pre-1992]	
Low Corporate	(Strategic Control)	(Financial Control)	

### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Xiamen Fork LIft Truck before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. Furthermore, it has observed that the control style is moving from financial control to strategic control with more decentralised structure and more autonomy given to middle management in short term planning.

As a matter of fact, both the degrees of planning and control influences are on two separate continua. The planning influence should run from high corporate, then medium corporate and down to low corporate. Similarly, there should be measurement in between tight strategic control and tight financial control.

### 4 February 1994

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

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Research Title : "The Responsibility Accounting In China

- Towards An Exporatory Framework"

Report Title : Data Analysis 3
Report Date : 23 February 1994

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

Name of SOE: Guangzhou Friendship Department Store (GFDS)

Staff Interviewed : Mr Zhu Zu Xuan, Deputy-Chairman of Directors

and Deputy General Manager

(No. of years in this enterprise : 25 years)

Mr Ho Li Qian, Deputy-Chief Accountant

(No. of years in this enterprise: 7 years)

Dates of Visits : First Visit - 7 July 1993

Second Visit - 29 October 1993

# Section 1 : History & Background

Since 1959, the Chinese Government has established many "Friendship Stores" in the big cities in order to provide different Chinese-made export commodities of better quality for the foreigners to purchase by paying either foreign currencies or Reminbi. The operation scale of these early friendship stores was rather small because the customers were all foreigners.

The major objective of the friendship stores was quite political, as the name implied to make friendship with the foreigners. Therefore, every store was only a cost-centre without paying regards to any profit or loss. In other words, friendship stores were quasi-government supplying centres instead of separate accountable economic entities.

Guangzhou Friendship Department Store (GFDS) was established in 1959. By that time, GFDS was only an attached department inside the Nanfang Building which was the largest department store in Guangzhou. In 1977, GFDS occupied 600 square meters of space inside the Nanfang Building. In April 1978, GFDS was moved to the present five-storey old building, which is situated at the heart of the city centre, by employing RMB2M invested by the local government. Other than the foreigners, the Chinese visitors from Hong Kong and Macau were allowed to purchase in the GFDS. In 1980, a supermarket, the very first one in Guangzhou, was opened inside the GFDS. Then, in 1981, GFDS was opened to the general public including the local Chinese but all the customers must pay in "Foreign Exchange Certificate" (FEC) which could be exchanged by using foreign currencies.

Since 1978, GFDS was upgraded by the local government to a formal state-owned enterprise with certain level of autonomy in management and operation under the central planning economic system. In 1986, GFDS was expanded by adding the sixth floor on top of the old building for the purposes of adding shopping area, administrative offices and storage space. Now the total shopping area is 9,000 square meters. Since early 1993, another six-storey building adjacent to the present one has been under construction in order to increase the area of shopping mall to 15,000 square meters at the end of 1994. Other than the main stores in the present location, GFDS has four branches located in other hotels and buildings in Guangzhou.

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# Section 2 : Legal Form & Organisation Structure

Guangzhou Friendship Department Store (GFDS) has been a wholly state-owned enterprise since 1978 and it was converted into a private shareholding enterprise in November 1992 by issuing 15% of the total shares to the employees. The local government is the majority shareholder by holding 85% of the shares. Before the legal form conversion, GFDS's total net assets were revalued (by an authorized CPA firm) at RMB85M which was equivalent to 85% of the share-value held by the government. Then, the employees subscribed for an additional RMB15M of new shares which is equivalent to 15% of the total share-value of RMB100M (i.e. RMB85M+RMB15M).

There is a ceiling, imposed by the Ministry of Finance (MOF) and the Bank of China (BOC), that the total shares held by the employees of a shareholding enterprise cannot exceed 20%. The employees of GFDS had the free options to subscribe from one share up to some limits which were set for different staff according to their grades and seniorities. The shares are not transferrable among the employees or to any outsiders.

In June 1993, GFDS revalued its total net assets again in order to apply for a public listing in the Shenzhen Stock Exchange which is located just across the boarder of Hong Kong. However, this application was not successful because the MOF and BOC have very stringent criteria in screening the candidates. Tentatively, the Guanzhou Nanfang Building Group has been approved to be the first department store listed in the Shenzhen Stock Exchange in 1994. Nevertheless, GFDS will not give up its ambition to apply for public listing in the near future.

All the friendship stores in China are under the auspices of the Ministry of Commerce which has delegated its supervision role to the provincial or municipal Commerce Bureau. Since 1978, GFDS has been reporting to the Guangzhou First Commerce Bureau which is overseeing all the retailing enterprises in Guangzhou.

Before the economic reforms started in 1979, the central planning system dictated all the planning and control aspects (long term and short term) in the SOEs. Therefore, GFDS, as mentioned in the last section, was just acting as a quasi-government supplying centre instead of an independent economic entity. GFDS had to carry out the commands, including the quantities and varieties of commodities sold, as directed from the Bureau.

Turning into the beginning of 1990s, the Guangzhou First Commerce Bureau has changed it role to just scrutinise the major development projects, mainly long term ones, recommended by the GFDS. In addition, the Bureau is providing marketing information to the retailing enterprises in Guangzhou in order to help them purchase and sell the right commodities to the right customers at the right time.

The GFDS's top management has experienced that the Bureau has been taking away its visible hands from and leaving more operating autonomy to the retailing industry even before 1992 when the mechanism transformation legislation was announced.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of GFDS can be divided into three levels which are listed below.

- 1. Board of Directors (BOD)
  - 1.1 Chairman (also the General Manager) \*
  - 1.2 Deputy Chairman (also the Finance Deputy-General Manager)\*
  - 1.3 Deputy Chairman (also the Communist Party Secretary) \*
  - 1.4 Director (also the Sales Deputy-General Manager)
  - 1.5 Director (also the Purchasing Deputy-General Manager)
  - 1.6 Director (also the Labour Union Leader)
  - \* They are appointed by the government as representatives to the board of directors.
- 2. Headquarters
  - 2.1 General Manager Office (also Chairman of the BOD)
  - 2.2 Accounting & Finance Department (headed by a Deputy-General Manager who is also the Deputy Chairman of the BOD)
  - 2.3 Marketing & Sales Department (headed by a Deputy-General Manager who is also a Director of the BOD)
  - 2.4 Purchasing Department (headed by a Deputy-General Manager who is also a Director of the BOD)
  - 2.5 Planning Department
  - 2.6 Personnel Department
  - 2.7 Transportation Department
  - 2.8 Service Evaluation Department
  - 2.9 General Affairs Department
    - 2.9.1 Security
    - 2.9.2 Training & Education
    - 2.9.3 Medical
    - 2.9.4 Housing
    - 2.9.5 Canteen

- 3. Department Stores#
  - 3.1 Cosmetic & Medicine Department
  - 3.2 Ladies' Wear Department

  - 3.3 Men's Wear Department 3.4 Arts & Craft Department
  - 3.5 Furniture & Appliance Department
  - 3.6 Supermarket Department
  - # Each department store has at least the following staff:

    - (a) 1 Manager
      (b) 2-3 Deputy Managers
      (c) Marketing & Sales Section
    - (d) Purchasing Section
    - (e) Accounting Section
    - (f) Personnel Section

Therefore, GFDS is using a matrix management structure such as the departmental accounting staff have line function to the store managers and also staff function to the accounting and finance department in the headquarters.

All the six department stores are classified as "profit centres" with "Internal Responsibility Contracts" (IRCs) signed with the headquarters annually.

GFDS also has a fully-owned restaurant adjacent to the present main building. This separate economic entity is treated as a self-financed "tertiary enterprise" employing less than 20 staff.

GFDS had a total of 2,300 employees at the end of 1993. It is classified as a "Medium size SOE" in China.

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# Section 3 : Financial Indicators

Total assets : RMB100M (1992) Turnover : RMB466M (1992)

RMB710M (1993)

Income before tax : RMB 35M (1992) - 7.5% of sales

RMB 50M (1993) - 7.0% of sales

Income tax rate : 15% (for shareholding enterprises)

The decrease of profit margin in 1993 was due to inflation and higher sales and related taxes. \_\_\_\_\_\_

# Section 4 : Economic Responsibility Contract System (ERCS)

Guangzhou Friendship Department Store (GFDS) signed its first 5-year Economic Responsibility Contract (ERC) with the Guangzhou Municipal Government in 1987. The major target set in the ERC was "Income Before Tax" with 10% growth rate. GFDS was underwritten to hand over 60% of the targeted "Income Before Tax" per year to the Municipal Government irrespective of actual performance (profit or loss) achieved. If the actual income before tax exceeded the annual target, 30% of the excess would be paid to the government.

For example,

	=====	=====	=====
Income After Tax left for GFDS	4,000	4,400	4,840
Handover to Government (60%)	6,000	6,600	7,260
Budget Income Before Tax (10% growth)	10,000	11,000	12,100
(RMB'000)	1987	1988	1989

If the actual "Income Before Tax" in 1987 was lower or greater than the annual agreed target, then the senario would become as follow:

(RMB'000)	1987	1987	1987
Budget Income Before Tax (a)	(Budget) 10,000	(Actual) 8,000	(Actual) 12,000
Handover to Government	6,000	6,000	6,000
(fixed at 60% of budget)			
	4,000	2,000	6,000
Tax on Excess Income			600
(12,000-10,000)x30%			
Income After Tax left for GFDS	(b) 4,000	2,000	5,400
	======	=====	=====
IAT % of IBT (b)/(a)	40%	25%	45%

The "Income After Tax" left for GFDS will be transfered to four reserves, namely,

- (1) Business Development Reserve;
- (2) Employee Bonus Reserve;
- (3) Employee Welfare Reserve; and
- (4) Special (Standard-by) Reserve.

According to the actual income after tax and the level of bonus reserve, the employees might get an additional bonus at the end of the year.

This system would encourage GFDS to enhance its profitability in order to retain more income after tax for development, reserve, empolyee bonus and welfare purposes.

After transforming into a shareholding enterprise in November 1992, the second ERC (1992-1996 inclusive) was terminated at the end of 1992. As from 1993, GFDS has to pay an income tax of 15%. It would be interesting to compare the taxation impact between the ERC and Shareholding system by taking the performance of 1993 as an example.

	(RMB'000)		areholding
Budget Income Before Tax	3 (	0,000	
	<del>-</del> -		
Actual Income Before Tax Handover to Government :		0,000	50,000
ERC (30,000x60% + 20,	000x30%) 24	4,000	
Shareholding (50,000)	- (15%)		7,500
_			
Income After Tax Assume 100% Dividend Decla		5,000	42,500
to Government (85%)	•		36,125
Income After Tax left to :			
GFDS's Four Reserves	26	5,000	
GFDS's Employees as I		•	6,375
	===	====	=====

In terms of remuneration to the employees, if a year-end bonus of RMB6,375,000 (24.5% of income after tax i.e. RMB26M) under the ERC system was paid to the employees in 1993, then the two systems would be similar. However, under the ERC system, GFDS had the flexibility to transfer the "Income After Tax" among the four reserves of which two of them (development and special reserves) were important for the growth of the business. But under the shareholding system, GFDS would have nothing left for future development if the government decided to declare all the profit before tax as dividend. Furthermore, GFDS has lost the privilege previously allowed under the ERC system to deduct the bank loan repayment from the taxable profit in assessing income tax.

To tackle this potential problem, GFDS has been negotiating with the municipal government to allow them either:

- (1) to borrow back the government's portion of distributed dividend as a loan with interest below prime rate; or
- (2) to carry on with the terms of the second ERC until 1996 when some other arrangements can be made.

However, no compromise has been agreed between the government and GFDS yet. Therefore, the dividend for 1993 has not yet been declared and distributed to the employees yet.

# Section 5 : Planning System

### 5.1 Organisation Structure

The organisation structure of Guangzhou Friendship Department Store (GFDS) is very similar to the type of "Strategic Control Companies" as mentioned on p.87 of the "Strategic Management Styles" written by Goold and Campbell. Just to quote that section as follow:

"The predominant organizational theme in these companies has been the creation or reinforcement of independent, profit-responsible divisions that can devise their own strategies with little need for coordination between divisions, and that can be held separately accountable for their results. The businesses within these divisions often require coordinated strategies, and this is a prime function for the divisional management level. Nevertheless, the divisions are broken up into profit centre units, which each report separately to the centre."

The six department stores in GFDS are independent profit centres which are allowed to formulate their own short term strategies in the annual planning and budgeting process. The interactions between the department stores are minimal because they are selling different types of goods and commodities. Therefore, they have little need for coordination and they can be held separately accountable for their results. The different sections within each department store require coordinated strategies, such as the relationship between the furniture section and household appliance section. Some people, like the newly married couples may intend to buy both furniture and household appliance together for their new homes. The coordination work among the sections is one of the prime functions for the manager and deputy managers in each department store.

After the conversion into a shareholding enterprise in 1992, the ownership and management of GFDS are supposed to be separated. The top management are vested with full autonomy to plan and control all the operations. Since then, the top management have been decentralizing more responsibility to each department store such as initiating the annual budget and the internal responsibility contract. The profit responsibility lies with the department store managers who should decide their own strategies in marketing, selling, purchasing, recruiting and training, cost controlling, etc., in order to achieve the targets set in the IRCs on one hand and creat a solid fundation for future sales or profit growth on the other hand.

All the members in the Board of Directors (BOD) are employees in the GFDS. It has the disadvantage of conflicts and bias due to dual roles played by the board members, but the advantage is that they understand each facet of the business well. The selection and appointment of the board members are decided by the AGM but they should be approved by the First Commerce Bureau. In principle, all the top management (general manager, deputy general managers, department heads and store managers) should be appointed by the BOD. Any major changes of the organisation structure in the department stores should be initiated by the store managers and approved by the general manager.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, GFDS has a decentralized structure in which the store managers report directly to the general manager, and they play a linking and control role between the department and the general manager.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

#### 5.2 Review Process

Since the conversion into a shareholding enterprise in 1992, Guangzhou Friendship Department Store (GFDS) has implemented a more formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). This process starts in November (i.e. fourth quarter) each year and ends in February the next year. After intensive internal and external environmental studies by the general manager with his deputy managers and the planning department, a preliminary sales target for next year can be decided. From this overall target, guidelines are provided by the general manager to the six department store managers to formulate their own annual plans and budgets. Other functions in the headquarters have to compile their manpower and expense budgets as well.

The budgets proposed by the department stores are used as the bases for setting the targets in the subsequent internal responsibility contracts. In fact, the IRC is a subset of the annual plan or budget in order to highlight the key variables to measure the performance and determine the group bonus for each department store.

The accounting and finance department validates all the budgets and consolidates them into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions are held between the general manager, deputy-general managers and store managers either collectively or individually. This iterative exercise is finished until all the plans, budgets and contracts are mutually agreed in February. Then the master budget is tabled in the AGM to be held in mid-February for approval.

Before 1992, the department stores and other functions in the headquarters were also required to participate in the budgeting process, but it was only for compiling the "Financial Plan" and "Commodity Turnover Plan" in standard formats for submission to the First Commercial Bureau annually. Due concerns and focus had not been given to these two pieces of planning documents by both sides provided the ERC's targets could be reached as appeared on the financial plan.

After the change into a shareholding enterprise in 1992, and under the legislative changes and market economy promotion, GFDS has been given higher automomy in formulating its strategic directions. As a result, all the department stores and functions are compelled to participate in the planning process and extend their planning horizon beyond one year.

The top management not only insert minimal interference in departmental planning decisions, but also leave the short and medium term tactical or strategic decisions to the department stores as well.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

### 5.3 Strategic Themes, Thrusts and Suggestions

As suggested by Goold and Campbell, a distinguishing feature of the strategic control companies is the decentralization of strategy formulation responsibility to divisional or business unit level. Thus, broad themes, major thrusts and specific suggestions are generally delivered, if at all, in low key.

In the case of Guangzhou Friendship Department Store (GFDS), different department stores have different strategic themes and thrusts because of different:

- (1) seasonal periods;
- (2) market segments;

- (3) age and sex of customers;
- (4) customers preferences and tastes;
- (5) fashions and trends;
- (6) quality requirements; and
- (7) price acceptances.

As far as strategic theme and thrust are concerned, the six department stores are allowed to formulate their own tactics and strategies in terms of :

- (1) sales promotion;
- (2) commodity pricing;
- (3) internal design and decoration;
- (4) display arrangement; and
- (5) delivery and after sales service.

However, the headquarters do insist a few basic and common themes and thrusts such as:

- (1) courteous service attitude to customers;
- (2) high quality of commodities sold;
- (3) reasonable selling prices; and
- (4) comfortable environment for customers.

Another very important strategic thrust that is being undertaking by GFDS is to expand the total area of the shopping mall as mentioned in the history and background (section 1) in order to increase the commodity varieties and compete with other local-and foreign-invested department stores.

Before 1992, the top management in GFDS sometimes made suggestions on specific strategic issues such as commodity varieties, selling prices, promotion tatics and even display arrangements. The top management followed the financial targets as agreed in the IRCs closely on monthly and quarterly basis and are quick to make suggestions if they do not match the overall long and short term plan. To facilitate the implementation of the legislation in 1992, the top management has left more freedom to the department stores to adjust their strategies and tactics as long as they would not deviate much from the basic themes, thrusts and the annual budget. However, the purchasing policy or function is still controlled by the headquarters because this activity involves significant working capital investment.

(Please refer to Q5.2.4-7 and Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

# 5.4 Long-Term Plans (Resource Allocation)

The Guangzhou Friendship Department Store (GFDS) attempted a 20-year long range planning in 1987. The top management of GFDS was trying to define some long term objectives for the enterprise although they realised that the economic environment in China was changing rapidly. After a few days of discussion, the top management eventually laid down the following three important missions for GFDS to achieve in the next two decades.

- (1) Retailing (i.e. department stores) should remain the core business.
- (2) Retailing related businesses should be developed in the 1990s (horizontal or vertical integration).
- (3) Other lines of businesses should be considered in the 1990s and beyond (diversification).

Since then, GFDS has actively initiated its first (1987-1991 inclusive) and second (1992-1996 inclusive) 5-year plans. The current 5-year plan has included the following projects.

# (a) Expansion of Floor Space

The commodity varieties sold have been increased rapidly since mid-1980s and soon the office and storage areas had to be reduced in order to provide more space for the six department stores but it was still insufficient.

Since early 1993, another six-storey building adjacent to the present one has been under construction in order to increase the area of shopping mall to 15,000 square meters at the end of 1994. The construction work of the new building was completed in December 1993 and it was connected with the old building in a "L" shaped six-storey building. Each floor is occupied by one or two department stores. The 5th floor (old plus new building) will be renovated and decorated first for the furniture and household appliances. After opening the new 5th floor for business, the 4th floor will be renovated and decorated for the men's wear. The 6th floor will be reserved for administrative offices, stockroom, canteen and other facilities.

This process of work will be done floor by floor in order to maintain the operation for the customers but the sales will be affected to a certain extent due to the inconvenience caused by the work in progress. Therefore, it would be very difficult to forecast the turnover in 1994.

# (b) Expansion of Stockroom

A piece of land with 4,000 square meters has been purchased in the Guangzhou Special Economic Development Zone (located at the South Eastern District) in order to build up a stockroom for the imported goods which will enjoy lower import tax benefit.

# (c) High Class Department Store

In order to enhance the status and image of GFDS and compete with the local- and foreign-invested (Japanese and Hong Kong) department stores, the following policies have been implemented:

- (i) to sell higher quality commodities;
- (ii) to increase the commodity varieties especially to add more imported goods;
- (iv) to enhance the service quality such as salesgirl's hospitality, free delivery, after-sales service and replacement.

# (d) Supermarket Chain

Since 1980, a supermarket was established in the present building (ground floor) of GFDS. In view of the popularity of supermarket in Guangzhou since early 1990s, GFDS has been searching suitable sites to establish a chain of supermarket in various places of the city.

#### (e) Investment Business

In 1993, GFDS purchased RMB10 million value of shares in the largest investment company in Guangzhou, Nanfang Security Company, and became a major shareholder with a representative sitting on its board of directors. This strategic investment is the first step of diversification and on the other hand, it may help GFDS to raise future capital either through public listing or by other means.

#### (f) Tourism

Tourism has become a hot business in 1993 not only for foreign tourists coming to visit Guangzhou, but also for many rich local Chinese to travel abroad (e.g. Hong Kong, Macau, Singapore, Thailand, Indonesia etc.). GFDS is forming a travel agency in 1994 which is related to the present retailing business.

(g) Joint Venture Retailing,

GFDS is looking for foreign partners, most likely from Hong Kong, to open a few specialized retailing shops such as selling clothing, fast food, bakery, ice-cream, gift and stationery etc.

(h) Commercial Joint Venture

GFDS is also searching for local and foreign partners to form a couple of joint ventures for commercial businesses such as wholesale, import and export activities.

(i) Property Development

GFDS is discussing with the Municipal Government and the First Commercial Bureau to acquire another piece of land with 150,000 square metres located inside the Special Economic Development Zone for developing commercial and residential buildings.

Apart from the long term plans of (a), (b), (c) and (d) above, the other plans are not related to the six department stores and are totally initiated and executed by the board of directors or the top management. However, the store managers' participation in the first four long term plans is restricted to the extent of consultation. Therefore, the formulation of long term planning in GFDS is adopting a top-down approach with little involvement from the store managers.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

The promulgation of "Market Economy" since 1992 has entrusted more freedom to GFDS for planning ahead on one hand but simultaneously has induced fiercer competition. Now many foreign invested department stores (i.e. Japan, Taiwan and Hong Kong) have been allowed to open up branches in Beijing, Shanghai, Guangzhou and Shenzhen. In addition to the keen competition from the local department stores, GFDS is facing threats from these foreign counterparts as well. But this open-door policy is carefully monitored by the government in order to protect the state-owned department stores such as GFDS where management skills are not as sophisticated as the foreign department stores. In this respect, the central government has imposed certain restrictions on the foreign invested department stores such as:

- (a) any proposed new branch must be approved by the Beijing central government;
- (b) they are not allowed to perform wholesale business; and
- (c) they are not entitled to special tax concession.

All in all, retailing is the most vulnerable service industry (or called "tertiary enterprise") in China because of having a consumable market size of over 1.2 billion of people. There are too many unstable and unpredictable political, economical, social and demographical factors affecting the planning vision of GFDS especially the difficulty in long term planning.

Observation of Planning Influence: Shift from "High-Medium Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

Before 1992, GFDS was required to submit the following two annual plans to the Guangzhou First Commerce Bureau:

- (a) Financial Plan to highlight the incomes, expenses, profits, taxes, loan repayments and balance sheet items.
- (b) Commodity Turnover Plan to highlight the quantities and varieties of commodities to be purchased, sold and carried. (The purchasing is controlled by GFDS since the 1990s.)

These two plans were used by the Bureau to exercise its macro economic control on GFDS through directives or negotiation. After the implementation of the mechanism transformation legislations in 1992, these two plans were not required by the Bureau. As from November 1992, GFDS has used the following annual planning or budgeting process.

In late October or early November, the general manager asks the accounting and finance department to provide the year-to-date financial results. He also requests the planning department to supply information concerning the changes in local, national and international economic environments. Then he calls up a meeting with the top management in the headquarters and the six department store managers in order to review and discuss the following aspects which have direct or indirect impacts on the next year's plan or budget.

- (1) Capability Evaluation
  - (a) Financial performance
  - (b) Financial stability
  - (c) Borrowing capacity
  - (d) Space & facility availability#
  - (e) Manpower and training

# The new building will affect the space, facility and turnover as from 1994.

- (2) Environmental Scanning\*
  - (a) Worldwide economy changes
  - (b) China economy changes
  - (c) Guangdong province economy changes
  - (d) Guangzhou city economy changes
  - (e) Competitor analysis (other Chinese department stores and foreign-invested department stores)
  - (f) Consummer analysis (purchasing power, fashion, taste, service expectation, etc.)
  - \* Most of the environmental information is collected and analysed by the Planning Department through news cuttings, market or customer surveys and consulting experts.

- (3) Shareholder Expectations
  - (a) First Commerce Bureau expectations
  - (b) Board of Directors expectations

The general conclusion of this first meeting is to set a preliminary total sales target expected to be achieved in next year. Of course, a certain extent of stretch is built into this target in order to enforce the department store managers to plan their own budgets more agressively.

The next step is for the store managers to formulate their budgets by discussing with their own deputy managers, sales, accounting, personnel and other supporting staff. At the beginning of December, the store managers have to send their first budget drafts to the accounting and finance department for screening and consolidation before submitting to the top management in the headquarters for consideration. At this point in time, informal discussions may be held between the top management and the stores managers trying to bridge the gap of different expectations.

Then the second, third or fourth meeting carries on until compromises and agreements have been reached between the headquarters and the department stores. After the Chinese New Year in mid-February, the master budget is tabled in the Annual General Meeting for approval, and after that, implementation begins. The budgets and IRCs are broken down into quarterly targets for periodic control and measurement.

Since October 1992, the department store managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the general manager. Furthermore, the approved budgets and IRCs affect their strategies and tactics for short and medium term developments.

In view of the rapid changing market conditions especially the the retailing businesses all over China, the budget review period has been shortened from quarterly to monthly. The top management in headquarters and all the department store managers hold a formal review meeting at the beginning of each month to review and discuss the financial performance of last month. Remedial actions are suggested to correct any significant controllable deviations from the quarterly budgets. The targets determined in the budgets and IRCs are seldom adjusted unless facing substantial uncontrollable environmental factors. Basically, a fixed budget concept is employed.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, the shareholding system, the mechanism legislation and the market economy have driven GFDS spending more effort to plan ahead. The top management have involved the department store managers or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the store managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

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### 5.6 Internal Responsibility Contracts (IRC)

Guangzhou Friendship Department Store (GFDS) established its IRC system in 1984 in order to motivate the aggressiveness of the departments and to attain at least the financial targets set in the ERC signed with the government. This IRC system only applies to the six department stores.

The IRC of one of the department stores is described below :

Department

Furniture & Household Appliance

Year

1993

Guidelines

- (1) Sales and profit are the major economic
- (2) Qualitative targets must be emphasised and measured as well.
- (3) Bonus is determined on the degree of accomplishment of the economic and qualitative targets.

Headcount	:	XXX	staff (per budget)	
Economic	:	(1)	Sales/Turnover	(45%)
Targets	•	(2)	Profit Before Tax	(27%)
J		(3)	Foreign Exchange	(18%)
Qualitative	:		Service Attitude/Quality	( 3%)
Targets			Discipline	( 2%)
			Decoration/Display/Sanity	( 2%)
			Daily Operation	(2%)
			Security and Safety	(1%)
			Total Score for Bonus	(100%)

# Bonus Calculation

- (1) Actual Sales x Bonus/10,000 of Sales(a)
- (2) Actual Profit x Bonus/10,000 of Profit(a)
- (3) Actual Foreign Exchange x Bonus/10,000 of Foreign Exchange(a)
- (4) [(1)+(2)+(3)] x Total Score for Bonus %

- Notes: (a) For example, RMB10 per RMB10,000 of sales, then if actual sales is RMB8,000,000, then bonus = RMB8,000.
  - (b) The qualitative factors are assessed by the service evaluation department in the headquarters. They have intrinsic values to the employees although their weightings in calculating bonus are low. Good performance in these qualitative factors may be praised openly by individual or group on the notice board.
  - (d) The bonus is calculated on a group basis whereas the distribution of group bonus to individual employees within the department is determined by the manager according to individual performance (i.e. sales made by a certain salesgirl for the month).

Since 1992, the IRCs have been initiated by the department stores during the budgeting process (November - February). After iterative discussions and negotiations with the general manager and finance department (acting as controller), the IRCs are agreed and signed by the store managers and the general manager.

The IRCs are reviewed quarterly in parallel with the budget review but both the general manager and the store managers are trying to avoid adjusting the targets unless there are significant uncontrollable environmental changes affecting their validity.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the store managers in initiating and negotiating their own IRCs, and also involved the finance department intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Because the six department stores in Guangzhou Friendship Department Store (GFDS) are all independent with very minimal interactions and interdependencies, therefore, internal transfer pricing does not exist.

Section 6 : Control System

# 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Guangzhou Friendship Department Store (GFDS) has four distinct levels of management hierarchy:

- (1) Board of Directors (BOD)
- (2) Top Management (general and deputy-general managers)
- (3) Middle Management (department store managers, deputy managers and other functional managers)
- (4) Lower Management (section leaders under the store managers)

Although there are overlaps between the BOD and the top management who are playing dual roles in both levels, nevertheless, the seggregation of duties are clearly defined. The general manager (also chairman of BOD) is acting as an arbitrator to harmonize any role conflicts which happen among the members in the BOD.

The store managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). In addition, since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

The store managers are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation, remuneration (distribution of bonus) and even termination of employment. Unlike Beijing and Shanghai, the labour market in Guangzhou is rather free which means employees can choose new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the terms of the employment contracts. GFDS has fully implemented the "employment contract system" since 1992 and the "big rice pot" or "three iron bowls" concept has been abolished.

The major control mechanisms employed by the top management to control the performance of the department stores are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are sales and profits set in the IRCs, although some other qualitative targets (non-financial) are employed. However, they account for 10% of the weighting in the group bonus calculation.

As long as the department stores can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility for strategy development to the stores without much interference.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: Shift from "Moderate Financial Control" to "Strategic Control" since 1992.

### 6.2 Agreeing Objectives

Objectives in Guangzhou Friendship Department Store (GFDS) emerge from the detailed discussion of the annual plans or budgets with the department stores. The financial objectives stem from the plans, rather than vice versa. This is not to suggest that the objective-setting process is wholly bottom-up. The initiative lies in the first instance with the department stores, who formulate the plans, rather than with the headquarters, but top management in the headquarters can and do push and probe for alternative objectives as they see fit. With the long years of experience and information (financial and marketing) gathered by the general manager, he can give suggestions to individual department stores to amend the financial objectives both in short or long term. Furthermore, the general manager has a holistic view to achieve the overall financial objectives year after year according to the long term plan. Finally, the result is usually a compromise that both headquarters and department can live with.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: In between "Moderate Strategic Control" and "Tight Strategic Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Guangzhou Friendship Department Store (GFDS) has monthly and quarterly reporting systems to track actual results versus plan or budget. All the department stores send monthly results on prescribed formats to the accounting and finance department for calculating the profits and comparing with budgets before submission to the general manager for review.

The contents of the monthly report are simpler than the manufacturing industries. The key financial results such as sales and expenditures are the major concerns of the headquarters. The non-financial measurement yardsticks (see IRC in section 5.6) are assessed by the service evaluation department through continuous inspections. The comments and ratings of the service evaluation are written on the same monthly reports. These monthly reports are compiled, through the computer, by the accounting staff. Any significant variances (without specifying tolerance limits) are highlighted in order to bring the attention to the top management.

For any serious adverse variances shown on any report, the general or deputy-general managers will contact the respective store managers to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the effect of advertisement).

During the monthly meeting between the top management in headquarters and the store managers, the general manager put forward the monthly results for open discussion. The store managers may be asked to explain briefly the significant variances and any other potential problems. Infrequent failures in meeting the budget by the store managers can be tolerated as long as they are taking remedial tactics or strategies to put things back on the right track and attain the budget at the end of the year. Of course, if any serious uncontrollable environmental factors happened to hit any department store adversely, the manager should not be blamed.

After the monthly meeting, all the approved results are passed back to the accounting department for calculating the bonus for last month.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: Shift from "Moderate Financial Control" to "Strategic Control" since 1992.

# 6.4 Rewards and Incentives

According to the Guangzhou Government's policy, the annual gross wages (including bonus) growth rate of all the shareholding enterprises can not exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the GFDS is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

Under the previous ERC system, GFDS could transfer a certain percentage of its annual profit after tax (or handover to government) to a "Employee Bonus Reserve" which could be distributed as a year-end bonus to the employees according to the overall financial performance and level of this reserve. This kind of flexibility or buffer was lost when GFDS was tranformed into a shareholding enterprise in November 1992. In addition, GFDS is now subject to the above two limits or ceilings. As a result, the total annual wages increase can not cover the high inflation in Guangzhou (1993 - 35% the highest in China). As an interim measure, GFDS has been approved by the municipal government to allow them to exceed the above two limits or ceilings but the excess portion (wages paid) would be taxed at 15%.

The take-home pay of each employee in GFDS is mainly composed of three elements as broken down below:

(1)	Basic Wages	15% - 20%
(2)	Bonus	60% - 50%
(3)	Allowances	25% - 30%

The average annual gross wages per employee was around RMB10,000 in 1993. Under the current high inflation rate and the keen competition in the labour market of this industry, the average annual gross wages per employee was increased to RMB12,000 in 1994.

The "basic wages" is reviewed annually depending on grade and seniority without paying regards to qualification and technical skill. Every point increase on the basic pay scale is RMB10, therefore, it is not substantial enough to catch up with the inflation. Obviously, the "bonus" is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The first part is determined by the Manpower Bureau of the Guangzhou Government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the GFDS which may include housing, meals, travel, education, attendance, overtime, festival gifts etc. The payment of "allowances" is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus", as described in section 5.6 above, is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to his or her subordinates according to individual performance, such as the sales achieved by a salesgirl in a certain month. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (20% - 30%) is retained in a reserve in order to make up the low bonus obtained during the months of slack season. The payment of year-end bonus, if there is any, is also according to the annual performance of each department stores. Of course, it is possible for a department store to receive very low or even zero bonus if it performs much below the targets but it seldom happens in the past few years.

The bonus paid to the management and administrative staff in the headquarters is calculated as follow:

Monthly average bonus in all department stores x Individual index\*

\* Different indexes for different grades of staff, i.e.

General Manager = 2.0 Deputy-General Manager = 1.8 Store Manager = 1.6 Supervisor = 1.4

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. GFDS has implemented this contract employment system since 1992 and now all the employees have signed employment contracts from one to three years subject to review and renewal. In general, the motivation of the employees has been improved.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, the enforcement of financial objectives has both a stick and a carrot aspect. Evidence of the stick can be found in the reduction of monthly or year-end bonus and even manangement turnover in senior positions. The carrot is represented by substantial increase in bonus and perhaps career advancement. Due to the difficulty of defining long term strategic control objectives because of the volatility of this industry to the market conditions, the control process tends to stress control against budgeted financial results.

As mentioned by Goold and Campbell, due to the lack of precise "strategic" targets, the control contract focuses on short term profit and cash flow figures.

Observation of Control Influence: In bewteen "Finance Control" and "Moderate Strategic Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Friendship Department Store (GFDS) belonged to before and after 1992.

	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	High/Medium Corporate	Low Corporate Corporate
Review Process*	Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	High/Medium Corporate	Low Corporate
Long-term Plans* (Resource Allocation)	High/Medium Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	Medium Corporate	Low Corporate
Internal Responsibility Contract	Medium Corporate	Low Corporate
Management of Interdependencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Moderate Financial	Strategic
Agreeing Objectives*	Moderate Financial	Tight Strategic
Monitoring Results*	Moderate Financial	Strategic
Rewards & Incentives*	Financial	Moderate Strategic

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence			
	Tight Strategic	Tight Financial		
High Corporate	(Strategic Programming)	(Financial Programming)		
Medium Corporate		- [Pre-1992]		
Low Corporate	[Post-1992]< (Strategic Control)	(Financial Control)		

### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Friendship Department Store before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of strategic control style as suggested by Goold and Campbell.

As a matter of fact, both the degrees of planning and control influences are on two separate continua. The planning influence should run from high corporate, then medium corporate and down to low corporate. Similarly, there should be measurement in between tight strategic control and tight financial control.

Revised: 6 March 1995

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 4
Report Date : 1 March 1994

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Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

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Name of SOE: Guangzhou Dongshan Department Store (GDDS)

Staff Interviwed: Mr Chen Hang, Deputy-Chairman of BOD and

Deputy General Manager

(No. of years in this enterprise : 26 years)

Dates of Visits : First Visit - 10 July 1993

Second Visit - 30 October 1993

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## Section 1 : History & Background

The original name of this department store was "May Hua" which was established by 57 American Chinese in 1948 by contributing US\$65,000 as capital. In 1956, it was transformed into a state-owned enterprise with capital injected by the Chinese government and then the number of employees increased from 30 to 250. In 1970, it was moved to the present Dongshan District (located at the Eastern part of Guangzhou city) and merged with another department store and then changed the name to Guangzhou Dongshan Department Store (GDDS) with 1,000 square metres of floor space in an old building. The turnover during the early 1970s was around RMB10M.

After the "Cultural Revolution" (1966-1977), GDDS was moved again to the present 9-storey air-conditioned building with 8,416 square metres of floor space in 1978. The construction cost of the present building was RMB3M borrowed from a bank in 1978 and this loan was repaid in 1981.

Other than this main store, GDDS has no other branches in Guangzhou but the board of directors is planning to erect a new building adjacent to the present one. The long term plan is to increase total shopping space to over 15,000 square metres in 1997. This strategic plan of course needs capital injection which is to be obtained by listing the shares in the stock market or invite foreign investment (i.e. Hong Kong).

### Section 2 : Legal Form & Organisation Structure

Guangzhou Dongshan Department Store (GDDS) has been a wholly state-owned enterprise since 1956 and it was converted into a private shareholding enterprise in December 1992 by issuing 20% of the authorized shares to the employees. The local government is the majority shareholder by holding 80% of the shares. Before the legal form conversion, GDDS's total net assets were revalued (by an authorized CPA firm) at RMB30M which was equivalent to 80% of the share-value held by the government. Then, the employees subscribed for an additional RMB7.5M of new shares which is equivalent to 20% of the total share-value of RMB37.5M (i.e. RMB30M+RMB7.5M).

There is a ceiling, imposed by the Ministry of Finance (MOF) and the Bank of China (BOC), that the total shares held by the employees of a shareholding enterprise cannot exceed 20%. The employees of GDDS had the free options to subscribe from one share up to some limits which were set for different staff according to their grades and seniorities. The shares are not transferrable among the employees or to any outsiders.

All the department stores in China are under the auspices of the Ministry of Commerce which has delegated its supervision role to the provincial or municipal Commerce Bureau. GDDS has been reporting to the Guangzhou First Commerce Bureau which is overseeing all the retailing enterprises in Guangzhou.

Before the economic reforms started in 1979, the central planning system dictated all planning and control (long term and short term) in the SOEs. Therefore, GDDS had to carry out the commands, including the quantities and varieties of commodities purchased and sold, as directed from the Bureau.

Turning into the beginning of 1990s, the Guangzhou First Commerce Bureau has changed its role to just scruitinizing the major development projects, mainly long term ones, recommended by the GDDS. In addition, the Bureau is providing marketing information to the retailing enterprises in Guangzhou in order to help them purchase and sell the right commodities to the right customers at the right time.

The GDDS's top management has experienced that the Bureau has been taking away its visible hands from and leaving more operating autonomy to the retailing industry even before 1992 when the mechanism transformation legislation was announced.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of GDDS can be divided into three levels which are listed below.

- Board of Directors (BOD)
  - 1.1 Chairman (also the General Manager) \*

  - 1.3 Deputy Chairman (also the Communist Party Secretary) \*
  - 1.4 4 Directors (also Deputy-General Managers of Departments shown below)
  - 1.5 1 Director (representative from the Labour Union)
  - 1.6 One representative from the First Commerce Bureau
  - \* They are appointed by the government as representatives to the board of directors.
- 2. Headquarters
  - 2.1 General Manager Office (headed by Chairman of the BOD)
  - 2.2 Accounting & Finance Department (headed by a Deputy-General Manager who is also the Deputy Chairman of the BOD)
  - 2.3 Marketing & Sales Department (headed by a Deputy-General Manager who is also a Director of the BOD)
  - 2.4 Purchasing Department (headed by a Deputy-General Manager who is also a Director of the BOD)

- 2.5 Planning Department (headed by a Deputy-General Manager who is also a Director of the BOD)
- 2.6 Personnel Department (headed by a Deputy-General Manager who is also a Director of the BOD)
- 2.7 Service Department
- 2.8 Transportation Department
- 2.9 General Affairs Department
  - 2.9.1 Security
  - 2.9.2 Training & Education
  - 2.9.3 Housing
  - 2.9.4 Medical
  - 2.9.5 Canteen
- 3. Department Stores#
  - 3.1 Cloth Department
  - 3.2 Clothing & Fashion Department
  - 3.3 Knit Wear Department
  - 3.4 Furniture Department
  - 3.5 Electricity Appliance Department
  - 3.6 Houseware Department
  - 3.7 Watch & Clock Department
  - 3.8 Arts & Craft Department
  - 3.9 Chinaware Department
  - 3.10 Stationery & Toy Department
  - 3.11 Consumables Department
  - 3.12 Food Department

# Each department store has one manager, one to two deputy managers and some supporting staff for purchasing, marketing, accounting, personnel and transportation functions.

Therefore, GDDS is using a matrix management structure such as the departmental supporting staff have line functions to the departmental managers and also have staff functions to the respective departments in the headquarters.

All the 12 department stores are classified as "profit centres" with "Internal Responsibility Contracts" (IRCs) signed with the headquarters annually.

GDDS had a total of 950 employees at the end of 1993. It is classified as a "Medium size SOE" in China.

# Section 3 : Financial Indicators

Total assets : RMB 45M (1992) Turnover : RMB230M (1992) RMB400M (1993)

Income before tax : RMB 14M (1992) - 6.1% of sales

RMB 22M (1993) - 5.5% of sales

Income tax rate : 15% (for shareholding enterprises)

The decrease of profit margin in 1993 was due to inflation and higher sales and related taxes (i.e. sales tax is 5% plus a 0.45% surcharge for urban development).

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# Section 4 : Economic Responsibility Contract System (ERCS)

Guangzhou Dongshan Department Store (GDDS) signed its first 5-year Economic Responsibility Contract (ERC) with the Guangzhou Municipal Government in 1987. The major target set in the ERC was "Income Before Tax" with 6% growth rate. GDDS was underwritten to hand over 55% of the targeted "Income Before Tax" per year to the Municipal Government irrespective of actual performance (profit or loss) achieved. If the actual income before tax exceeded the annual target, 16.5% of the excess would be paid to the government.

For example,

(RM	B'000) 19	987	1988	1989
Budget Income Before Tax (6%	growth) 3	,000	3,180	3,370
Handover to Government (55%)	1	,650	1,750	1,850
Income After Tax left for GD	DS 1	,350	1,430	1,520
	=:	====	====	====

If the actual "Income Before Tax" in 1987 was lower or greater than the annual agreed target, then the senario would become as follow:

(RMB'000)	1987 (Budget)	1987 (Actual)	1987 (Actual)
Budget Income Before Tax (a)	3,000	2,000	4,000
Handover to Government	1,650	1,650	1,650
(fixed at 55% of budget)			
	1,350	350	2,350
Tax on Excess Income	·		165
(4,000-3,000)x16.5%			
Income After Tax left for GDDS	(b)1,350	350	2,185
	=====	====	====
IAT % of IBT (b)/(a)	45%	18%	55%

The "Income After Tax" left for GDDS could be transfered to four reserves, namely,

- (1) Business Development Reserve;
- (2) Employee Bonus Reserve;
- (3) Employee Welfare Reserve; and
- (4) Special (Standard-by) Reserve.

According to the actual income after tax and the level of bonus reserve, the employees might get an additional bonus at the end of the year.

This system would encourage GDDS to enhance its profitability in order to retain more income after tax for development, reserve, empolyee bonus and welfare purposes.

After transforming into a shareholding enterprise in December 1992, the second ERC (1992-1996 inclusive) was terminated at the end of 1992. As from 1993, GDDS has to pay an income tax of 15%. It would be interesting to compare the taxation impact between the ERC and Shareholding system by taking the performance of 1993 as an example.

(RMB'000)	ERC	Shareholding
Budget Income Before Tax	15,000	
Actual Income Before Tax Handover to Government :	22,000	22,000
ERC $(15,000x55\% + 7,000x16.5\%)$	9,400	
Shareholding (22,000x15%)		3,300
•		
Income After Tax	12,600	18,700
Assume 100% Dividend Declared :		
to Government (80%)		14,960
Income After Tax left to :		
GDDS's Four Reserves	12,600	
GDDS's Employees as Dividend	,	3,740
	=====	=====

In terms of remuneration to the employees, if a year-end bonus of RMB3,740,000 (30% of income after tax i.e. RMB12.6M) under the ERC system was paid to the employees in 1993, then the two systems would be similar. But according to the past experience, it was unlikely to distribute such a high percentage of year-end bonus to the employees. However, under the ERC system, GDDS had the flexibility to transfer the "Income After Tax" among the four reserves of which two of them (development and special reserves) were important for the growth of the business. But under the shareholding system, GDDS would have nothing left for future development if the government decides to declare all the profit after tax as dividend. Furthermore, GDDS has lost the privilege previously allowed under the ERC system to deduct the bank loan repayment from the taxable profit in assessing income tax.

To tackle this potential problem, GDDS has agreed with the municipal government to allow them either:

(1) to borrow back the government's portion of the declared and distributed dividend as a loan at favourable interest 20% lower than prime rate; or (2) to declare and distribute less than 100% of the profit after tax as dividend.

In general, GDDS favours the shareholding system under which the staff have become both employees and shareholders who will receive higher remuneration than the previous ERC system.

# Section 5 : Planning System

# 5.1 Organisation Structure

The organisation structure of Guangzhou Dongshan Department Store is similar to the type of "Strategic Control Companies" as mentioned on p.87 of the "Strategic Management Styles" written by Goold and Campbell. Just to quote that section as follow:

"The predominant organizational theme in these companies has been the creation or reinforcement of independent, profit-responsible divisions that can devise their own strategies with little need for coordination between divisions, and that can be held separately accountable for their results. The businesses within these divisions often require coordinated strategies, and this is a prime function for the divisional management level."

The 12 department stores in GDDS are independent profit centres which are allowed to formulate their own short term strategies in the annual planning and budgeting process. The interactions between the department stores are minimal because they are selling different types of goods and commodities. Therefore, they have little need for coordination and they can be held separately accountable for their results. The different sections within each department store require coordinated strategies, such as the relationship between the stationery and toy sections whose customers are largely children. The coordination work among the sections is one of the prime functions for the manager and deputy managers in each department store.

After the conversion into a shareholding enterprise in 1992, the ownership and management of GDDS are supposed to be separated. The top management are vested with full autonomy to plan and control all the operations. Since then, the top management have been decentralizing more responsibility to each department store such as initiating the annual budget and the internal responsibility contract. The profit responsibility lies with the department store managers who should decide their own strategies in marketing, selling, purchasing, recruiting and training, cost controlling, etc., in order to achieve the targets set in the IRCs on one hand and creat a solid fundations for future sales or profit growth on the other hand.

All the members in the Board of Directors (BOD) are employees in the GDDS. It has the disadvantage of conflicts or bias due to dual roles played by the board members, but the advantage is that they understand each facet of the business well. The selection and appointment of the board members are decided by the AGM but they should be approved by the First Commerce Bureau.

In principle, all the top management (general manager, deputy general managers, department heads and department store managers) should be appointed by the BOD. Any major changes of the organisation structure in the department stores should be initiated by the store managers and approved by the general manager. It is interesting to note that a representative is sent by the First Commerce Bureau to sit on the BOD. He or she may have some influence on the planning decisions made by the BOD.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, GDDS has a divisionalised structure in which the department store managers report directly to the general manager, and they play a linking and control role between the department and the general manager.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

### 5.2 Review Process

Since the conversion into a shareholding enterprise in 1992, Guangzhou Dongshan Department Store (GFDS) has implemented a more formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). This process starts in November (i.e. fourth quarter) each year and ends in February the next year. After intensive internal and external environmental studies by the general manager with his deputy managers and the planning department, a preliminary sales target for next year is decided. From this overall target, guidelines are provided by the general manager to the 12 department store managers to formulate their own annual plans and budgets. Other functions in the headquarters have to compile their manpower and expense budgets as well.

The budgets proposed by the department stores are used as the bases for setting the targets in the subsequent internal responsibility contracts. In fact, the IRC is a subset of the annual plan or budget in order to highlight the key variables to measure the performance and determine the group bonus for each department store.

The accounting and finance department validates all the budgets and consolidates them into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions are held between the general manager, deputy-general managers and department store managers either collectively or individually.

This iterative exercise is finished until all the plans, budgets and contracts are mutually agreed in February. Then the master budget is tabled in the AGM to be held in mid-February for approval.

Before 1992, the department stores and other functions in the headquarters were also required to participate in the budgeting process, but it was only for compiling the "Financial Plan" and "Commodity Turnover Plan" in standard formats for submission to the First Commerce Bureau annually. Due concerns and focus had not been given to these two pieces of planning documents by both sides provided the ERC's targets could be reached as appeared in the financial plan.

After the change to a shareholding enterprise in 1992, and under the legislative changes and market economy promotion, GDDS has been given higher automomy in formulating its strategic directions. As a result, all the department stores and functions are compelled to participate in the planning process and extend their planning horizon beyond one year.

The top management has been trying to insert minimal interference in departmental planning decisions, and also leave the short and medium term tactical or strategic decisions to the department stores as well. But if the headquarters think that the budget of a certain department store is too conservative, specific direction will be given to the store manager to build in stretch into the targets.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

## 5.3 Strategic Themes, Thrusts and Suggestions

As suggested by Goold and Campbell, a distinguishing feature of strategic control companies is the decentralization of strategy formulation responsibility to divisional or business unit level. Thus, broad themes, major thrusts and specific suggestions are generally delivered, if at all, in low key.

In the case of Guangzhou Dongshan Department Stores, different department stores have different strategic themes and thrusts because of different:

- (1) seasonal periods;
- (2) market segments;
- (3) age and sex of customers;
- (4) customers preferences and tastes;
- (5) fashions and trends;
- (6) quality requirements; and
- (7) price acceptances.

As far as strategic themes and thrusts are concerned, the 12 department stores are allowed to formulate their own tactics and strategies in terms of :

- (1) sales promotion;
- (2) commodity pricing (agreed by headquarters);
- (3) internal design and decoration;
- (4) display arrangement; and
- (5) after sales service.

However, the headquarters do insist on a few basic and common themes and thrusts such as:

- (1) courteous service attitude to customers;
- (2) good quality of commodities sold;
- (3) reasonable selling prices; and
- (4) comfortable environment for customers.

Another very important strategic thrust that is being undertaking by GDDS is to expand the total area of shopping mall as mentioned in the history and background (section 1) in order to increase the commodity varieties and compete with other local department stores.

Before 1992, the top management in GDDS sometimes made suggestions on specific strategic issues such as commodity varieties, selling prices, promotion tactics and even display arrangements. The top management followed the financial targets as agreed in the IRCs closely on a monthly and quarterly basis and was quick to make suggestions if they do not match the overall long and short term plan. To facilitate the implementation of the legislation in 1992, the top management has left more freedom to the department stores to adjust their strategies and tactics as long as they would not deviate much from the basic themes, thrusts and the annual budget. However, the puchasing function and policy are still controlled by the headquarters because it involves significant working capital investment.

(Please refer to Q5.2.4-7 and Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

## 5.4 Long-Term Plans (Resource Allocation)

The Guangzhou Dongshan Department Store (GDDS) is located at the Eastern side of the Guangzhou city which is close to the Special Economic Development Zone. Dongshan District is recognised to have the highest potential for business development in the 1990s and beyond, and it may become the centre of the city. The future underground, which frist line is expected to start running in 1998, will have two stations in this district. As a result, both the numbers of working population and residents in this district have been increased substantially since 1990. GDDS foresees that this trend will further boost their retailing business and some other lines of business should be considered in the long term.

Just before the conversion into a shareholding enterprise in December 1992, GDDS has formulated a five-year long term plan (1993-1997 inclusive) which was subsequently approved by the BOD. The top management of GDDS was trying to define some long term objectives for the enterprise although they realised that the economic environment in China was changing rapidly. The following three objectives have been laid down in this 5-year long term plan.

- (1) Retailing (i.e. department stores) should remain the core business.
- (2) Target customers or market segment should aim at lower-middle and middle classes.
- (3) Retailing-related or other lines of businesses should be developed in the 1990s and beyond (diversification).

The following are a few projects included in the current 5-year plan:

### (a) Expansion of Present Site

The volumes and varieties of commodities sold have been increased rapidly since the 1990s and the floor space required by the 12 department stores have to be increased. GDDS is planning to erect a new 10-storey building adjacent to the present one to provide a total floor space of 20,000 square metres in order to increase total shopping space by 8,000 square metres and to use the other 12,000 square metres for diversifying into other businesses and generating rental income.

This strategic plan of course needs a huge amount of capital investment which may be sourced from a combination of the following means:

- (1) retained earnings;
- (2) dividend or tax payable to the government retained as loan capital;
- (3) bank loan;
- (4) investment from other local enterprises;
- (5) investment from Hong Kong companies; and
- (6) public listing in the stock market (GDDS is one of the 10 SOEs selected by the government to be qualified for public listing in the Shenzhen Stock Exchange).

This new building is planned to be completed in 1997.

## (b) Expansion of Branches

A piece of land of 2,000 square meters in size has been purchased closed to the Guangzhou Special Economic Development Zone (located at the South Eastern District) in order to build up the first branch of GDDS.

# (c) Joint Venture Retailing

GDDS is looking for foreign partners, most likely from Hong Kong, to open a few specialized retailing shops such as selling clothing, fast food, bakery, ice-cream, gift and stationery etc.

### (d) Commercial Joint Venture

GDDS is also searching for local and foreign partners to form a couple of joint ventures for commercial businesses such as wholesale, import and export activities.

## (e) Property Development

GDDS is discussing with the Municipal Government and the First Commerce Bureau to acquire another piece of land located inside the Special Economic Development Zone for developing commercial and residential buildings.

The above long term plans are initiated and executed by the board of directors or the top management. The store managers' participation in some of these plans is restricted to the extent of consultation. Therefore, the formulation of long term plans in GDDS is a top-down approach with little involvement from the department store managers.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

The promulgation of "Market Economy" since 1992 has entrusted more freedom to GDDS for planning ahead on one hand but simultaneously has induced fiercer competition. Now many foreign invested department stores (i.e. Japan, Taiwan and Hong Kong) have been allowed to open up branches in Beijing, Shanghai, Guangzhou and Shenzhen. In addition to the keen competition from the local department stores, GDDS is facing threats from these foreign counterparts as well. But this open-door policy is carefully monitored by the government in order to protect the state-owned department stores such as GDDS whose management skills are not as sophisticated as the foreign department stores. In this respect, the central government has imposed certain restrictions on the foreign invested department stores such as:

- (a) any proposed new branch must be approved by the Beijing central government;
- (b) they are not allowed to perform wholesale business; and
- (c) they are not entitled to special tax concession.

All in all, retailing is the most vulnerable service industry (or so-called "tertiary enterprise") in China because of having a market size of over 1.2 billion consumers. There are too many unstable and unpredictable political, economical, social and demographical factors affecting the planning vision of GDDS especially the difficulty in long term planning.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.5 Short-Term Plans/Budgets (Resource Allocation)

Before 1992, GDDS was required to submit the following two annual plans to the Guangzhou First Commerce Bureau :

- (a) Financial Plan - to highlight the incomes, profits, taxes, loan repayments and balance sheet items.
- Commodity Turnover Plan to highlight the quantities and varieties of commodities to be purchased, sold and carried. (b) (The purchase function is controlled by GDDS since 1990s.)

These two plans were used by the Bureau to exercise its macro economic control on GDDS through directives or negotiation. After the implementation of the mechanism transformation legislations in 1992, these two plans were not required by the As from November 1992, GDDS has used the following annual planning or budgeting process.

In late October or early November, the general manager asks the accounting and finance department to provide the year-to-date financial results. He also requests the planning department to supply information concerning the changes in local, national and international economic environment. Then he calls up a board meeting (top management of the headquarters) to review and discuss the following aspects which have direct or indirect impacts on the next year's plan or budget.

- Capability Evaluation (1)
  - Financial performance Financial stability (a)
  - (b)
  - (c) Borrowing capacity
  - (d) Space & facility availability
  - Manpower availability
- (2) Environmental Scanning\*
  - (a) Worldwide economy changes
  - (b) China economy changes
  - (c) Guangdong province economy changes
  - (d)
  - Guangzhou city economy changes Competitor analysis (other Chinese department stores (e) and foreign-invested department stores)
  - Consummer analysis (purchasing power, fashion, taste, (f) service expectation, etc.)
  - \* Most of the environmental information is collected and analysed by the Planning Department through news cuttings, market or customer surveys and consulting experts.
- Shareholder Expectations (3)
  - First Commerce Bureau expectations
  - Board of Directors expectations

The general conclusion of this board meeting is to set a preliminary total sales target expected to be achieved in the next year. Of course, a certain extent of stretch is built into this target in order to enforce the department store managers to plan their own budgets more agressively. Then the general manager notifies this overall target to all the store managers.

The next step is for the department store managers to formulate their budgets by discussion with their own deputy managers and supporting staff. At the beginning of December, the store managers have to send their first budget drafts to the accounting and finance department for screening and consolidation before submitting to the top management in the headquarters for consideration. At this point in time, informal discussions may be held between the top management and the store managers trying to bridge the gap of different expectations.

Then formal and informal meetings are held until compromises and agreements have been reached between the headquarters and the department stores. After the Chinese New Year in mid-February, the master budget is tabled in the Annual General Meeting for approval, and after that, implementation begins. The budgets and IRCs are broken down into quarterly targets for periodic control and measurement.

Since November 1992, the department store managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the general manager. Furthermore, the approved budgets and IRCs affect their strategies and tactics for short and medium term developments.

In view of the rapid changing market conditions especially the retailing businesses all over China, the budget review period has been shortened from quarterly to monthly (sometimes ad hoc meetings are held on a weekly basis). The top management in headquarters and all the department store managers hold a formal review meeting at the beginning of each month to review and discuss the financial performance of last month. Remedial actions are suggested to correct any significant controllable deviations from the quarterly budgets. The targets determined in the budgets and IRCs are seldom adjusted unless facing substantial uncontrollable environmental factors. Basically, a fixed budget concept is employed.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, the shareholding system, the mechanism legislation and the market economy have driven GDDS spending more effort to plan ahead. The top management have involved the department store managers or even their subordinates (lower management) in the annual planning and budgeting process which on the one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the store managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

### 5.6 Internal Responsibility Contracts (IRC)

\_\_\_\_\_\_\_

Guangzhou Dongshan Department Store (GDDS) established its IRC system in 1987 in order to motivate the departments to attain at least the financial targets set in the ERC signed with the government. This IRC system only applies to the 12 department stores.

Since 1993, the major targets set in the IRCs with the 12 department stores are sales (turnover), net profit before tax and some other qualitative factors. The departmental bonus was determined by the accomplishment of these targets. But before going into the calculation of departmental group bonus, the headquarters have to set an upper limit for the monthly total bonus (for the whole enterprise) in the following steps.

(1) For monthly sales = RMB10M, then bonus = RMB250 per employee

<sup>(1)</sup> For monthly sales = RMB10M, then bonus = RMB250 per employee For monthly sales = RMB20M, then bonus = RMB500 per employee For monthly sales = RMB30M, then bonus = RMB750 per employee For monthly sales = RMB40M, then bonus = RMB1,000/employee

e.g. if monthly sales = RMB15M, then average bonus = RMB[250+(500-250)x(15-10)/(20-10)] = RMB375/employee#.

BUT, the prerequisite is that the whole enterprise must achieve a net profit margin of 5.6% before tax.

IF, net profit margin was 2.8% (half of the target 5.6%), then,

for monthly sales = RMB20M, then bonus = RMB250 per employee for monthly sales = RMB40M, then bonus = RMB500 per employee

IF, net profit margin was 11.2% (double of the target 5.6%), then,

for monthly sales = RMB10M, then bonus = RMB500 per employee for monthly sales = RMB20M, then bonus = RMB1,000 per employee.

(This measure was a precaution to over emphasis on sales volume without regards to prices and cost control.)

The above method can be summarised in the following table :

PBT	Required Monthly Sales	Average Bonus/Employee
5.6%	RMB10,000,000 RMB20,000,000 RMB30,000,000 RMB40,000,000	RMB 250 RMB 500 RMB 750 RMB1,000
2.8%	RMB20,000,000 RMB40,000,000 RMB60,000,000 RMB80,000,000	RMB 250 RMB 500 RMB 750 RMB1,000
11.2%	RMB10,000,000 RMB20,000,000 RMB30,000,000 RMB40,000,000	RMB 500 RMB1,000 RMB1,500 RMB2,000

- #The average bonus per employee per (1) x Budgeted total
  number of employees = Total monthly bonus for the whole
  enterprise (which was the ceiling).
- (3) Then the departmental bonus was calculated according to the accomplishment of the targets set in the individual IRC.

As from 1993, GDDS has adopted the guidelines recommended by the Guangzhou First Commerce Bureau in setting both finanical and non-financial targets for its 12 department stores. The basic contents are described below:

\_\_\_\_\_\_

Department : XXXX Year : 1993

Headcount : YYY staff (per budget)

Principles :

(1) Each store manager should bear the ultimate profit or loss responsibility of his or her department. In turn, his or her employees should share the corresponding responsibility to achieve the profit targets.

(2) Any financial loss incurred due to ineffective or inefficient operation of a department, the store manager and his or her subordinates should share this responsibility accordingly.

(3) A store manager will be warned or his/her salary be reduced if his or her department incurs an overall loss in the first year.

(4) If a department incurs two consecutive years of loss, the store manager will be demoted, transferred or dismissed.

### Guidelines

- (1) Sales and profit are the major economic targets.
- (2) Qualitative targets must be emphasized and measured as well.
- (3) Bonus is determined on the degree of accomplishment of the economic and qualitative targets.

## Economic Targets :

		Marks on	Over/Under	(+)/(-)
		Target	Target %	Marks
	Sales/Turnover	10	3%	1
(2)	Profit before Tax	40	1%	1
	Sales/Employee '	10	3%	1
(4)	PBT/Employee	10	3%	1
		70		

## Qualitative Targets:

(5) Business Development\* 10

(6) Store Management#	10	
(7) General@	10	
		(the actual score may be over
	===	or under 100%)

\* Measurement criteria include new commodities and varieties, department renovation and decoration, usage of floor space, etc.

- # Measurement criteria include daily operation, staff discipline, commodity display, etc.
- @ Measurement criteria include service attitude, after sales service, security and safety, fictitious or competable commodities, cleanliness, customer's comments, etc.

Bonus Calculation Similar to the steps above in determining the "average bonus per employee" and "total bonus for the whole department" but adjusted by the actual score assessed as above.

### Notes:

(a) The qualitative factors are assessed by the headquarters. They have intrinsic values to the employees although their weighting in calculating bonus is only 30%. Good performance in these qualitative factors may be praised openly by individual or group on the notice board.

(b) The bonus is calculated on a group basis whereas the distribution of group bonus to individual employees within the department is determined by the manager according to individual performance (i.e. sales made by a certain salesgirl for the month).

### Year-End Bonus :

In order to enhance the overall economic effectivenss of the enterprise and to motivate the profit-consciousness of each department store, the store manager will be awarded a "special year-end bonus" according to the following criteria:

Profit before Tax (PBT)	% of PBT	Cummulative Bonus*
RMB 500,000 - 1,000,000 RMB1,000,001 - 3,000,000	1 <b>%</b> 7%	RMB 5,000 - 10,000 RMB 10,000 - 150,000
RMB3,000,001 - 5,000,000	5%	RMB150,000 - 250,000
RMB5,000,000 - 10,000,000 For over RMB10.000.000	3 % 2 %	RMB250,000 - 400,000

\* How the "special year-end bonus" can be distributed to the employees of the department will be agreed between the store manager and his or her employees.

Since 1992 the IPCs have been developed by the department stores

Since 1992, the IRCs have been developed by the department stores during the budgeting process (November - February). After iterative discussions and negotiations with the general manager and finance department (acting as controller), the IRCs are agreed and signed by the store managers and the general manager.

The IRCs are reviewed quarterly in parallel with the budget review but both the general manager and the store managers are trying to avoid adjusting the targets unless there are significant uncontrollable environmental changes affecting their validity.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the store managers in initiating and negotiating their own IRCs, and also involved the finance department intensively as a vetting mechanism in order to set the targets as objectively as possible.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

## 5.7 Management of Interdependencies (Transfer Pricing)

Because the 12 department stores in Guangzhou Dongshan Department Store (GDDS) are all independent with very minimal interactions and interdependencies, therefore, internal transfer pricing does not exist.

Section 6 : Control System

# 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Guangzhou Dongshan Department Store (GFDS) has four distinct levels of management hierarchy:

- (1) Board of Directors (BOD)
- (2) Top Management (general and deputy-general managers)
- (3) Middle Management (department store managers, deputy managers and other functional managers)
- (4) Lower Management (section leaders under the store managers)

Although there are overlaps between the BOD and the top management who are playing dual roles in both levels, nevertherless, the segregation of duties are clearly defined. The general manager (also chairman of BOD) is acting as an arbitrator to harmonize any role conflicts which happen among the members in the BOD.

The department store managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). In addition, since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

The department store managers are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation, remuneration (distribution of bonus) and even termination of employment. Unlike Beijing and Shanghai, the labour market in Guangzhou is rather free which means employees can choose new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the terms of the employment contracts. GDDS has fully implemented the "employment contract system" since 1992 and the "big rice pot" or "three iron bowls" concept has been abolished. If a redundant or badly-performing employee cannot be transferred to another departement store, he or she will be asked to leave the enterprise.

The major control mechanisms employed by the top management to control the performance of the department stores are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are sales and profits set in the IRCs, although some other qualitative targets (non-financial) are employed, however, they are subsidiary and account for only 30% in the group bonus calculation.

As long as the department stores can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility for strategy development to the stores without much interference.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Moderate Financial Control" to "Strategic Control" since 1992.

### 6.2 Agreeing Objectives

Objectives in Guangzhou Dongshan Department Store (GDDS) emerge from the detailed discussion of the annual plans or budgets with the department stores. The financial objectives stem from the plans, rather than vice versa. This is not to suggest that the objective-setting process is wholly bottom-up although the top management initiates an overall financial target for all the store managers. It is still the primary function of the store managers to formulate their detailed budgets and IRCs. But top management in the headquarters can and do push and probe for alternative objectives as they see fit. With the long years of experience and information (financial and marketing) gathered by the general manager, he can give suggestions to individual department stores to amend the financial objectives both in the short or long term. Furthermore, the general manager has a holistic view to achieve the overall financial objectives year after year according to the long term plan. Finally, the result is usually a compromise that both headquarters and department can live with.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Moderate Financial Control" and "Strategic Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Guangzhou Dongshan Department Store (GDDS) has monthly and quarterly reporting systems to track actual results versus plan or budget. All the department stores send monthly results on prescribed formats to the accounting and finance department for calculating the profits and comparing with budgets before submission to the general manager for review.

The contents of the monthly report are simpler than the manufacturing industries. The key financial results such as sales and expenditures are the major concerns of the headquarters. The non-financial measurement yardsticks (see IRC in section 5.6) are assessed by the service department through daily inspections. The comments and ratings of the service evaluation are written on the same monthly reports. These monthly reports are compiled, through the computer, by the accounting staff. Any significant variances (without specifying tolerance limits) will be highlighted in order to bring to the attention to the top management.

For any serious adverse variances shown on any report, the general or deputy-general managers will contact the respective store managers to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the internal decoration and display arrangement).

During the monthly meeting between the top management in headquarters and the store managers, the general manager puts forward the monthly results for open discussion. The store managers may be asked to explain briefly the significant variances and any other potential problems. Infrequent failures in meeting the budget by the store managers can be tolerated as long as they are taking remedial tactics or strategies to put things back on the right track and attain the budget at the end of the year. Of course, if any serious uncontrollable environmental factors happened to hit any department store adversely, the manager should not be blamed.

After the monthly meeting, all the approved results will be passed back to the accounting department for calculating the bonus for last month.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

The financial results achieved by GDDS in 1992 were very encouraging and publicised in two local newspapers. The sales and profit per employee of GDDS in 1992 was ranked the ninth in the retailing industry in China. Furthermore, measuring in terms of sales per square metre per year (RMB500,000), GDDS was the number one among all the department stores in Guangdong province in the same year.

Observation of Control Influence : Shift from "Moderate Financial Control" to "Moderate Strategic Control" since 1992. 

### 6.4 Rewards and Incentives

According to the Guangzhou Government's policy, the annual gross wages (including bonus) growth rate of all the shareholding enterprises can not exceed either one of the following limits:

- (1)
- "Income Before Tax" annual growth rate; and "Productivity Per Employee" annual growth rate. (2)

Within these two ceilings, the GDDS is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

Under the previous ERC system, GDDS could transfer a certain percentage of its annual profit after tax (or handover to government) to an "Employee Bonus Reserve" which could be distributed as a year-end bonus to the employees according to the overall financial performance and level of this reserve. kind of flexibility or buffer was lost when GDDS was tranformed into a shareholding enterprise in December 1992. In addition, GDDS is now subject to the above two limits or ceilings. declared dividend for the employees is not high enough, then, the total annual wages increase cannot cover the high inflation in Guangzhou (1993 - 35% the highest in China). As an interim measure, GDDS has been allowed by the municipal government to exceed the above two limits or ceilings but the excess portion (wages paid) is not tax deductable.

The take-home pay of each employee in GDDS is mainly composed of three elements as broken down below :

(1)	Basic Wages	15% - 20%
(2)	Bonus	65% - 55%
(3)	Allowances	20% - 25%

The average annual gross wages per employee was around RMB9,500 in 1993. Under the current high inflation rate and the keen competition in the labour market of this industry, the average annual gross wages was increased to RMB12,000 in 1994.

The "basic wages" is reviewed annually depending on grade and seniority without paying regards to qualification and technical skill. Every point increase on the basic pay scale is RMB10, therefore, it is not substantial enough to catch up with the inflation. Obviously, the "bonus" is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The first part is determined by the Manpower Bureau of the Guangzhou Government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the GDDS which may include housing, meals, travel, education, attendance, overtime, festival gifts etc. The payment of "allowances" is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus", as described in section 5.6 above, is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to his or her subordinates according to individual performance, such as the sales achieved by a salesgirl in a certain month. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (20% - 30%) is retained in a reserve in order to make up the low bonus obtained during the months in slack season. The payment of year-end bonus, if there is any, is also according to the annual performance of each department store. It is possible that a department store will receive very low or even zero bonus if it performs much below the targets but it was seldom happened in the last few years.

The bonus paid to the management and administrative staff in the headquarters is calculated as follow:

- (1) For monthly sales = RMB10M, then bonus = RMB250 per employee For monthly sales = RMB20M, then bonus = RMB500 per employee For monthly sales = RMB30M, then bonus = RMB750 per employee For monthly sales = RMB40M, then bonus = RMB1,000/employee
  - e.g. If monthly sales = RMB15M, then bonus = RMB[250+(500-250)x(15-10)/(20-10)] = RMB375/employee (irrespective the % of profit before tax).

In addition to the remuneration paid to the in-service employees, GDDS has to pay pension and other allowances to 135 retired employees. This kind of life-long responsibility is common to most of the state-owned enterprises and sometimes it is adding a significant financial burden to the profit and loss account.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. GDDS has implemented this contract employment system since 1992 and now all the employees have signed employment contracts from one to three years subject to review and renewal. In general, the motivation of the employees has been improved.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, the enforcement of financial objectives has both a stick and a carrot aspect. Evidence of the stick can be found in the reduction of monthly or year-end bonus and even manangement turnover in senior positions. The carrot is represented by substantial increase in bonus and perhaps career advancement. Due to the difficulty of defining long term strategic control objectives because of the volatility of this industry to the market conditions, the control process tends to stress control against budgeted financial results. As mentioned by Goold and Campbell, due to the lack of precise "strategic" targets, the control contract focuses on short term profit and cash flow figures.

Observation of Control Influence: In bewteen "Finance Control" and "Moderate Strategic Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Dongshan Department Store (GDDS) belonged to before and after 1992.

Influences	Before 1992	
Planning Influences:		
Organisation Structure*	Hign/Medium Corporate	Low Corporate
Review Process*	Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	High/Medium Corporate	Low Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High/Medium Corporate	Low Corporate
Internal Responsibility Contract	Medium Corporate	Low Corporate
Management of Interdepen- dencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Moderate Financial	Strategic
Agreeing Objectives*	Moderate Financial	Strategic
Monitoring Results*	Moderate Financial	Moderate Strategic
	Financial	Moderate Strategic

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992] 	
Low Corporate	[Post-1992]< (Strategic Control)	      (Financial   Control)	

### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Dongshan Department Store before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifted from "Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) gradually although it has not yet reached a very strong-form (very low corporate) of strategic control style as suggested by Goold and Campbell.

As a matter of fact, both the degrees of planning and control influences are on two separate continua. The planning influence should run from high corporate, then medium corporate and down to low corporate. Similarly, there should be measurement in between tight strategic control and tight financial control.

Revised: 6 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 5 Report Date : 7 March 1994

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

\_\_\_\_\_\_

Name of SOE: Beijing Electrostatic Equipment Factory (BEEF)

Staff Interviewed : Mr Quo Zhong Mao/Chief Accountant

(No. of years in this enterprise : 31 years)

Miss Li Xiao Min/Cost Accountant

(No. of years in this enterprise: 7 years)
Miss Huang Jin Yu/Chief Accountant/Beijing
International Instrument Corporation (BIIC)

Dates of Visits : First Visit - 22 May 1993 Second Visit - 30 August 1993

Third Visit - 3 September 1994

# Section 1 : History & Background

Beijing Electrostatic Equipment Factory (BEEF) is a small size state-owned enterprise established in 1964 and specialized in manufacturing electrostatic equipment for various industrial uses. It is located in the Southern District of Beijing, the capital of China, and is not far away from the "heart" of Beijing city (i.e. the Forbidden Palace) by taking a bus for about 15 minutes.

BEEF is currently producing the following five types of products which are all sold domestically in China.

- (1) Electrostatic Precipitators (Auto-control high-voltage)
- (2) Electrostatic Air Separation Percipitators
- (3) Electrostatic Spray Equipment
- (4) Disc Electrostatic Power Spraying Equipment
- (5) Electrostatic Transformer

In order to compete with its strong counterparts in Dalian (Northeast), Shanghai (Central Coast) and Fuzhou (Southeast), BEEF has been invested substantially in both hardware and software for research and development since early 1990s. To enhance the product quality and diversify the product range are the product strategies of BEEF on one hand, and to explore the overseas' markets is an important marketing strategy on the other hand.

### Section 2 : Legal Form & Organisation Structure

Beijing Electrostatic Equipment Factory (BEEF) has been a wholly state-owned enterprise since its establishment in 1964 and it does not have a concrete plan to convert into a shareholding enterprise in the next few years because of the stringent rules and regulations governed by the Ministry of Finance (MOF) and the Bank of China (BOC). These bodies have selectively approved 3,600 large and medium size SOEs, which have good financial performance track records, to transform into shareholding enterprises since 1990 to 1995.

Since BEEF is a wholly state-owned enterprise, it is under the administration of the Beijing Municipal Government and the Beijing Instrument Bureau. Under the central economic planning system before the 1980s, BEEF's planning and control systems were dictated by these authorities and it was just acting as a vehicle (or a cost centre) to carry out the activities as scheduled by them.

In 1983, the Beijing Instrument Bureau was transformed into a quasi-government body called Beijing International Instrument Corporation (BIIC) as an initial step to delegate the governing role to this self-regulated institution composed of all the instrument manufacturing industries in Beijing. Since then, more autonomy in terms of planning and control decisions has been authorised by the Beijing Government to the BIIC and turning into this decade, BIIC's major roles played for its subordinate enterprises are:

- (1) appointing the factory manager (or general manager) and the communist party secretary;
- (2) maintaining a macroeconomic control or balance on the 5-year's plans suggested by its enterprises; and
- (3) acting as a bridge or facilitator between the government# and its enterprises in policy matters such as capital investment, import and export autonomy, taxation, legal form transformation i.e. shareholding, etc.
- # Some of the issues have to be discussed and approved by the Beijing Commission of Economic Reform as well.

In responding to and implementing of the "SOE Operation Mechanism Tranformation Regulations" enacted by the People's Congress in July 1992, the BIIC has delegated the planning and management responsibilities to the BEEF although quarterly and annual reports have to be submitted to the BIIC for review.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of BEEF can be divided into four divisions under the direct control of the Factory Manager. The departments in the four divisions are listed as follow:

- 1. Production Division (headed by the Chief Engineer)
  - 1.1 Research & Development Department (headed by the Vice-Chief Engineer)
  - 1.2 Quality Control Department
  - 1.3 Repair & Maintenance Department
  - 1.4 Production Workshop No.1\*
  - 1.5 Production Workshop No.2\*
  - 1.6 Production Workshop No.3\*
  - 1.7 Production Workshop No.4\*
- 2. Operation Division (headed by a Deputy-Factory Manager)
  - 2.1 Marketing & Sales Department
  - 2.2 Purchasing Department
  - 2.3 Supply (Inventory) Department

- 3. Finance Division (headed by the Chief Accountant)
  - 3.1 Accounting & Finance Department
  - 3.2 Planning Department
- 4. Administration Division (headed by a Deputy-Factory Manager)
  - 4.1 Personnel Department
  - 4.2 Security & Estate Department
  - 4.3 General Affairs Department
    - 4.3.1 Education & Training
    - 4.3.2 Medical
    - 4.3.3 Canteen
- \* All the four production workshops are classified as "profit centres" and they have signed Internal Responsibility Contracts (IRC) with the factory manager.

BEEF had a total of 600 employees at the end of 1993. It is classified as a "small size SOE" in China.

## Section 3 : Financial Indicators

Total assets : RMB 25M (1992)
Turnover : RMB 15M (1992)

RMB 12M (1993) RMB 17M (1994)

Income before tax : RMB1.5M (1992) - 10.0% of sales

RMB1.1M (1993) - 9.2% of sales

RMB 0M (1994)

Income tax rate : 33%

Both the sales and profit in 1993 were lower than 1992 because of the following reasons:

- (1) before a new product was launched in the market, a competitive product had been available to the potential customers in mid-1993;
- (2) the market economy policy allows head to head competition from the other three major competitors in Dalin, Shanghai and Fuzhou; and
- (3) the market penetration and diversification strategies are not vigorous enough.

# Section 4 : Economic Responsibility Contract System (ERCS)

Since 1986, the Chinese government has actively promoted the ERCS to the state-owned enterprises with an aim to enhance their economic efficiency (over one-third of them were running into losses) through the participation in the profit sharing. The first stage of the ERCS development was from 1986 to 1990. During the first three years of this stage, ERCS created effects as the government revenue and the labour remuneration were both increased. However, in the following two years, due to the macroeconomic contraction policy adopted by the government to curb down the overheated economy, the market demand for products and services declined and as a result, a lot of contracts could not be fulfilled. Therefore, during the second stage (1991-1995) of the ERCS development, many enterprises were not willing to enter into contracts with the government in 1991. Then the government had to give more favourable terms and conditions to the enterprises into order to induce them to go into the contracts.

Under the above situation, the Beijing Electrostatic Equipment Factory (BEEF) entered into an ERC with the Beijing Municipal Government in 1992. It is a standing contract without duration (time limit) specified but subject to review by both parties every year. The terms and conditions of this contract are similar to the "Policy No.180" recommended by the Inland Revenue Department under which BEEF has to undertake a "Profit Before Tax" (PBT) of RMB1 million for the four years from 1992 to 1995 inclusive. This PBT base was determined according to the average annual profit of the last three years before 1992 and it will be subject to review in 1996. On this PBT target, an income tax of 33% (i.e. RMB1Mx33%=RMB330,000) was levied which was less than the standard income tax rate of 55% for the state-owned enterprises in Beijing by that time. As from 1994, the majority of the state-owned enterprises have been subject to the unified income tax rate of 33%.

The top management (factory manager and four divisional heads) together with BIIC have had some negotiation and discussion with the government in setting the terms and conditions of the ERC. In view of the current product and market position and potential, the top management believe that the PBT target can be achieved even under the unfavourable situation in 1993.

Another favourable term provided for BEEF is to deduct the bank loan repayment from the PBT before income tax assessment, for example at the end of 1992,

Income Before Tax Bank Loan Repayment	ť	RMB1,500,000 300,000
Taxable Income Income Tax (33%)		1,200,000 396,000
Income After Tax		RMB 804,000

Therefore, both the contractor (Government) and contractee (BEEF) are happy with the present arrangements in the ERC.

## Section 5 : Planning System

## 5.1 Organisation Structure

In consideration of the relatively small operation of Beijing Electrostatic Equipment Factory (BEEF), the guiding theme of the organisation structure is simplicity and accountability. It went to some length in 1993 to create stand-alone business units e.g. the 4 production workshops as independent profit centres (or divisions) that are controlled by individual workshop managers with clear lines of authority and responsibility.

Each production workshop is manufacturing different product lines but some finished products of a workshop become the input components of other workshops. Therefore, internal transfer pricing is involved among the four production workshops which will be described in another section below. Other than these four production workshops, all the other departments are classified as cost centres.

Since 1992, BEEF has been decentralizing more planning responsibility to each workshop and department such as initiating the annual budget and the internal responsibility contract. The profit responsibility primarily lies with the workshop manager but the top management keep a surveillance cost control on each production workshop through monthly or weekly report.

The selection and appointment of the factory manager is still decided by the Beijing International Instrument Corporation (BIIC) and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a predetermined lump sum bonus at the year end.

Since 1992, the factory manager has full autonomy to appoint the deputy-factory managers, chief engineer, chief accountant (the two chiefs are equivalent to deputy-factory managers) and the departmental managers under the four divisions. Any major changes of the organisation structure in each division should be initiated by the deputy-factory managers and approved by the factory manager. However, more autonomy of internal management and operation has been delegated to the heads of divisions (deputy-factory managers) since 1992. And in turn, the deputy-factory managers have involved their department heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, BEEF has a decentralized structure in which the individual divisional heads report directly to the factory manager, and they play a linking and control role between the divisions and the factory manager.

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

#### 5.2 Review Process

Since November 1992, Beijing Electrostatic Equipment Factory (BEEF) has implemented a regular formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). First of all, the factory manager evaluates the internal and external environmental factors and then discusses with his deputy managers in order to determine the annual sales and profit targets for 1993. Based on these preliminary targets, some guidelines are provided to the workshop managers and other department heads for them to initiate their own plans or budgets for the next year. As far as the four production workshops are concerned, their budget proposals contain the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

During December, the planning department under the finance division validates all the budget drafts and consolidates into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions are held between the factory manager, deputy-factory managers and department heads either collectively or individually. This iterative exercise carries on until all the plans, budgets and contracts are mutually agreed and approved in the AGM (all the employees can attain) held during February 1994. Then the finance division publishes a set of the final master plan and sends to the top management and all the department heads.

Before 1992, there was no such dedicated and formal annual budget review process and the BIIC and in turn the top management gave directions to the workshops and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, etc. Since 1992, under the legislative changes and market economy promotion, BIIC has delegated higher automomy to BEEF in formulating its strategic directions. As a result, all the workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan.

Therefore, the factory manager has less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc. As far as strategic themes are concerned, the Beijing Electrostatic Equipment Factory (BEEF) has explicitly written the following in the introductory section of the master plan or budget.

"The objectives of the 1993 plan are :

- (1) to promote marketing and sales;
- (2) to enhance research and development;
- (3) to guarantee the quality standards;
- (4) to raise the economic efficiency;
- (5) to strengthen the internal management;
- (6) to develop new products; and
- (7) to emphasize the cost reduction activities."

The above strategic themes are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise. BEEF has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets (i.e. Southeast Asian countries) on the other hand. As far as hardware is concerned, BEEF has imported some modern manufacturing plant and equipment from the USA and Europe to replace the old ones since the 1990s.

To assist the management with relevant information for quality control, the finance division is developing a "Quality Control Accounting" system which will be implemented in 1995. In fact, this accounting system is a "cost and benefit" analysis. On the cost side, the following four items will be identified and quantified:

(1) preventative costs (i.e. maintenance costs);

(2) internal repairing costs (i.e. machine breakdown, worker's careless mistake, product or production design, etc.);

(3) external repairing costs (i.e. repairing costs incurred to correct the faults complained by the end-users); and

(4) quality maintenance costs (i.e. incoming and outgoing inspection costs, costs of QC department, education and

training on quality control, etc.).

It is difficult to track down the "benefit" of spending money on quality control. The finance division is thinking along the following lines:

- (1) to avoid loss on or delay in sales due to quality rejection;
- (2) to increase revenue due to product quality improvement; and
- (3) to reduce internal and external repairing costs due to spending on preventative and quality maintenance costs.

This strategic thrust relating to quality control is initiated by the chief accountant and is fully supported by the top management who have involved all the employees to participate in the design and subsequent implementation of this system.

Another interesting strategic thrust for the accounting and finance function to achieve is the "Accounting System Standard" upgrading. The Ministry of Finance classifies the accounting planning and control systems practised in the state-owned enterprises into five grades i.e. National Grade and Grade 1 to 4. This classification system has been adopted since mid-1980s and applied to all the state-owned enterprises. There are too many criteria, in terms of both financial and management accounting systems, to assess which grade should be awarded to an enterprise. BEEF has attained the Grade 3 and is now actively pursuing Grade 2 through the following changes:

- (1) to transform the traditional financial accounting system into the new accounting standards (mandatory as from 1 July 1993);
- (2) to refine its planning and control aspects in the responsibility accounting system; and
- (3) to implement the quality control accounting as mentioned above.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

Before 1992, the top management in BEEF from time to time made suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix.

The top management followed the financial indicators and performance closely on monthly and quarterly basis and were quick to make suggestions if they did not match the overall long and short term plan.

To facilitate the implementation of the legislation in 1992, the top management has given some freedom to the department heads to compile their own plans or budgets and to adjust their plans and operations as long as they would not deviate much from the ultimate sales and profit targets. Nevertheless, the top management still provide guidelines and suggestions to the departments in the planning process.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence : shift from "Very High-High Corporate" to "High-Medium Corporate" since 1992.

## 5.4 Long-Term Plans (Resource Allocation)

Since the establishment of Beijing Electrostatic Equipment Factory (BEEF) in 1964, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system. The commencement of the economic reforms in 1979 started to allowed BEEF to participate in the 5-year's planning with the BIIC and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse.

The changing role of BIIC since 1990 has encouraged BEEF, for the first time, to formulate their own long term strategic plan (1991-1995). Before 1992, all types of capital appropriation and expenditure budgets must be approved by the BIIC and/or the municipal government. After the implementation of the mechanism transformation legislation enacted in 1992, this capital expenditure policy has been changed in the following manner:

- (1) for expenditure below RMB5M, BEEF can decide on its own;
- (2) for expenditure above RMB5M but below RMB20M, approval must be obtained from BIIC; and
- (3) for expenditure over RMB20M, approval must be sought from the Beijing Commission of Economic Reform.

Since then, the top management reviewed the long term plan at the end of each year. After lengthy discussion, another new 5-year plan will be emerged. In fact, a rolling 5-year plan is in operation. In the current 5-year plan (1993-1997 inclusive), the following strategic directions have been laid down.

# (a) Competitive Edge

The major domestic competitors are the three electrostatic equipment factories located in Dalin (Northeast), Shanghai (Central Coast) and Fuzhou (Southeast) who all belong to forerunning economic development cities since early 1980s and benefit from the following favourable policies by the central government:

- (i) lower income tax;
- (ii) less municipal taxes;
- (iii) more import and export autonomy;
- (iv) lower import and export tax;
- (v) more sources of finance for capital investment; and
- (vi) generous land and building use rights.

Therefore, in order to sustain the market share and a competitive edge against these counterparts, BEEF has to enhance its product quality by various means as described in the strategic themes and thrusts section above.

## (b) Research and Development

Related to the competitive edge strategy mentioned above, BEEF has taken the following steps to enhance its R&D function:

- (i) to renew and upgrade the production equipment and facilities;
- (ii) to improve the product design by using value analysis;
- (iii) to investigate and improve the production technology;

- (iv) to strengthen the manpower and technical skills in the research and development department; and
- (v) to provide more training in research and development.

# (c) New Product Development

In 1992, about 80% of the profit before tax came from two major types of products which were also manufactured by the other competitors. BEEF has emphasized very much on the new product development which is one of the major missions of the research and development department and their performance is partly measured against this objective.

## (d) Overseas Markets

BEEF and BIIC are working hard to negotiate with the government in obtaining the export right (also the foreign exchange usage right) so that they can explore the overseas markets such as Southeast Asian, South American and Eastern European Countries.

## (e) Cost Reduction

In order to enhance the competitive edge and to increase the profitability, BEEF has taken the following measures to reduce the total cost of operation:

- (i) to cut production costs by value engineering;
- (ii) to set up a standard (target) costing system;
- (iii) to freeze the total number of employees;
- (iv) to reduce overheads e.g. heat, light, etc.; and
- (v) to tighten functional budgets i.e. accounting, personnel, sales, purchasing, etc.

A portion of the costs reduced or savings will be distributed to the employees as a kind of bonus.

The current 5-year plan was compiled after long discussions between the BIIC and the BEEF's top management. It was eventually agreed and reflected in the ERC signed with the municipal government. Although the department heads (middle management) have been involved in this planning process, they were playing a consultation role only. Furthermore, the department heads are mainly concerned with how the milestones set in the long-term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the factory manager at least on a monthly basis. Therefore, the long term planning and review process are using a top-down approach in the belief that the factory manager (over 20 years in the plant) has better experience and knowledge of the external environment and even the internal operations of the departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the BIIC has devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the top management of BEEF is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

## 5.5 Short-Term Plans/Budgets (Resource Allocation)

Since 1990, the general short term planning policy adopted by Beijing Electrostatic Equipment Factory (BEEF) is "production determined by sales" which means sales is the initial driving force of all the activities. Reference should also be made to the rolling 5-year plan especially to estimate what the sales potential will be for the newly developed product(s) in the next year. As from November 1992, BEEF has employed the following annual budgeting process.

The factory manager is very active in performing some marketing activities himself such as going to the trade fairs and visits to exisiting and potential customers with his sales and marketing staff. (When I first visited BEEF on 22 May 1993, I had lunch with the factory manager who had just come back from a customer visit in Hainan Province - a big island [just 20% smaller than Taiwan] located between Hong Kong and Vietnam.) In early November, he evaluates the present and future internal capability with the chief engineer and the chief accountant. He also scans the external environment with the sales and marketing staff. Eventually, the factory manager tentatively determines a set of sales mix figures (i.e. sales budget). These sales forecasts are provided to the respective departments, more importantly to the production workshops, for them to initiate their own budgets.

The first budget submission is in December and the planning department under the finance division consolidates all the pieces into a master budget (financial plan) for factory manager's review before the first budget meeting is held with all the workshop managers and department heads. The major purpose of this first meeting is to discuss with the four workshop managers to ascertain whether their production capacities can be matched with the initial sales budget. If they exceed the sales budget, it becomes the primary responsibility of the sales and marketing staff and even the factory manager to hunt for other sales avenues in order to fully utilize the production capacity. there is excess demand, then priorities are given to the customers for delivery and agreements must be made with the customers beforehand. Since the competition in this industry is very keen, BEEF has been under full capacity (about 80%) in the last two years.

Again, the second budget submission in January is consolidated by the planning department for further review by the factory manager who then discusses informally or formally with the workshop managers and department heads. Finally, the agreed master budget is tabled to the annual general meeting for approval by all the employees in February right after the Chinese New Year.

Since November 1992, the workshop managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the factory manager. The other department heads have also participated carefully in devising their expense budgets which they would be measured against as performance yardsticks.

The contents of the master budget are briefly described in Appendix A at the end of this case analysis. From this extract of the master budget, it is noted that before 1992, BIIC was involved in BEEF's budgeting process and provided expectations (or targets) to some of the line items. The master budget was computerised in 1993.

The workshops or departments are measured on their individual agreed budgets which are divided into quarterly or monthly (for workshops) targets.

In view of the changing market conditions, the budget review period has been shortened from quarterly to monthly. The factory manager and his deputy managers hold a formal meeting at the beginning of each month to review the financial performance against the master budget and individual departmental budgets. But the budgets are seldomly amended unless there are very significant factors affecting the overall sales target. Therefore, BEEF is using a fixed budgeting system.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given BEEF more freedom to plan ahead. The government representative, BIIC, has almost completely devolved the short term planning autonomy to BEEF, except to agree on the overall sales target. The top management have involved the middle management or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan or the ERC, and on the other hand, it is an important motivational factor for the workshop managers and department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

# 5.6 Internal Responsibility Contracts (IRC)

Beijing Electrostatic Equipment Factory (BEEF) established its IRC system in 1993, just one year after signing the first ERC with the municipal government, in order to motivate the efficiency, profitability and cost reduction in the production workshops.

The IRC of a production workshop is described below :

Department

Electrostatic Precipitators Workshop

Year

1993

Guidelines

- (1) Internal profit is the major economic targets.
  - (2) Production management emphasizes on the achievement of all qualitative targets.
  - (3) Bonus is determined on the degree of accomplishment of the economic and qualitative targets.

Veto Factors

- (1) Quality
- (2) Safety

Headcount Economic

- XXX staff (per budget)
- (1) Internal profit

Targets

(standard selling price - actual cost)

(2) Output volume

Qualitative

Targets

- (1) Production Management
- (2) Production Technology
- (3) Quality Management
- (4) Inventory Management
- (5) Safety Management
- (6) Education and Training
- Notes: (a) Specific amounts of group bonus will be awarded according to the accomplishment of the economic targets.
  - (b) The qualitative factors will be scored to determine a minor part of the group bonus for management merits
  - (c) The veto factors can reduce the bonus to zero.
  - (d) The bonus is calculated on a group basis whereas the distribution of group bonus to individual employees within the factory is determined by the factory management according to individual performance.

There is no formal IRC signed between the factory manager and the other non-production departments, however, it is interesting to note that the finance division has a very concise manual defining the authorities, responsibilities and duties of each post (altogether 8 staff from chief accountant to the cashier) in this division.

Furthermore, the front page, of this manual has laid down the following targets to be achieved in 1993:

- (1) to compile the annual financial plan (or master budget);
- (2) to strengthen the cost management (or control);
- (3) to enhance the working capital and fund management;
- (4) to achieve Grade 2 in the "Accounting System Standard" to be assessed by the Ministry of Finance;
- (5) to implement the "Quality Control Accounting" system;
- (6) to carry out all the assignments delegated by the annual general meeting (acting in the capacity of company secretary); and
- (7) to enhance the education and training for staff.

It took a few months for the factory manager and the workshop managers to negotiate with the terms and conditions for the first four IRCs signed after the master budget was approved by the annual general metting in February 1993. This long process indicated that the setting of IRC was not a top-down approach and the workshop managers were very eager on this issue upon which they would be measured against and rewarded thereupon. The 1993 IRCs were subject to at least quarterly review but no adjustments had been made since agreed.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the factory manager has delegated more freedom to the workshop managers in initiating and negotiating their own IRCs, and also involved the finance division intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

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Management of interdependencies means the central influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the workshops, and exploitation of a shared resource are examples that happen in Beijing Electrostatic Equipment Factory (BEEF) that need headquarters' intervention.

Before 1993, the transfer prices were determined by standard cost of production which was based on the historical cost and adjusted for projected inflation rates. Motivation to a workshop manager to transfer products to another workshop was low because there was no profit margin and most of the times, the actual cost of production was higher than the standard because of unexpected up-rising inflation rates. The workshop managers had little autonomy in fixing the transfer prices, however, they would not be concerned too much because they were measured as cost centres.

The situation has changed since 1993 when the four workshops were converted into profit centres and internal profit was used as the major criterion in the IRC to measure the workshop's performance. Instead of using the "standard cost of production", the "standard cost plus" method has been used. On top of the standard cost of production, an across the board 10% mark-up is added on to create the transfer price. Although the new transfer prices may be lower than the market prices of the intermediate products, nevertheless, they can provide a profit margin to the workshop or a buffer to cover the underestimation of inflation rates in setting the standard cost.

Since the new transfer pricing method has been implemented in 1993, it is still under review and is too early to comment on its effectiveness. The top management is considering varying the mark-up percentage for different products and in doing so, it will allow more room for negotiation with the workshop managers other than the setting of standard costs.

Observation of Planning Influence: Shift from "Very High Corporate" to "High-Medium Corporate" since 1992.

# Section 6 : Control System

#### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Beijing Electrostatic Equipment Factory (BEEF) has three distinct levels of management hierarchy:

- (1) Top Management (factory manager, deputy-factory managers, chief accountant and chief engineer)
- (2) Middle Management (workshop managers and department heads)
- (3) Lower Management (foremen and supervisors)

The deputy-factory managers, and the two chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task which will be explained in the rewards and incentives section.

The major control mechanisms employed by the top management to control the performance of the workshops and departments are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are internal profit and production volume set in the IRCs, although some other qualitative targets (non-financial) are employed. However, these are subsidiary ones which have lower weightings in calculating the group bonus. (Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of BEEF.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

# 6.2 Agreeing Objectives

Beijing Electrostatic Equipment Factory (BEEF) sets similar objectives for its production workshops: workshop managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. In view of the fierce competition within this industry, the production workshops sometimes feel passive in setting their objectives or targets in the budgets or IRCs because their activities are depending on the sales demand.

A high pressure to achieve the budgeted production and internal profit is put on the workshop managers at the quarterly or monthly review. They fully understand that their group bonus are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. In terms of expenses, control is tighter and a system of standard cost is going to be implemented. Although the other departments do not have the IRCs, they have agreed specific objectives or targets with the factory manager, for example, marketing and selling expenses as a percentage of sales, purchasing material price variances, tasks set by finance division (see IRC section), etc. The promotion, salary and bonus of these functional staff are correlated with these quantitative and non-financial targets.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Beijing Electrostatic Equipment Factory (BEEF) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the workshops and departments submit monthly results on standard forms to their respective divisional heads and also to the chief accountant for vetting and comparison with budgets and IRCs. The production workshops are also required to submit production figures to the top management on a weekly basis.

The monthly report format is unique for each department. The contents are mainly corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the fixed budgets. The qualitative targets are usually subjectively measured by the divisional heads and written in the monthly reports as well. These monthly reports are compiled, through the computer, by the accounting staff. Any significant variances (without specifying tolerance limits) are highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the factory manager for review.

For any serious adverse variances shown on any report, the factory manager will contact with the respective deputy managers, workshop managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the top management with the middle management, the factory manager puts forward the monthly results for open discussion. The workshop managers and the department heads may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a workshop manager, probably he will be replaced by somebody else.

It has happened once in the last two years that a workshop manager has been replaced. On the other hand, the favourable results are openly praised by the top management.

After the monthly meeting, all the approved results are passed back to the accounting department for calculating the group bonus of each workshop or department for last month. Then the accounting department processes the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization is not well recognised by the top management even though a few stand-alone personal computers have been used for calculating payroll, compiling budgets and performing financial analysis. There is no plan for implementing a comprehensive integrated management or accounting information system. Perhaps the lack of capital for investment in computer hardware and software and the urgent needs to focus on the marketing strategies put computerization at the bottom of the priority list.

Now, BEEF views a budget or IRC as a contract between the top management and the department or workshop. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

#### 6.4 Rewards and Incentives

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

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Within these two ceilings, the BEEF is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

The take-home pay of each employee in BEEF is mainly composed of three elements as broken down below:

(1)	Basic Wages	35% -	45%
(2)	Bonus	40% -	25%
(3)	Allowances	25% -	30%

The average annual gross wages per employee was around RMB5,600 in 1993. This wages level is at least 30% lower than the Southern cities like Xiamen and Guangzhou because the inflation rate is lower in Beijing (20% compared with 35% in Guangzhou in 1993). Nevertheless, under the current high inflation rate (overall average 23% in China in 1994), BEEF increased the average annual gross wages to RMB7,200 in 1994.

According to the general national standard adopted by most of the state-owned enterprises, BEEF's production workers are classified into 8 classes and within each class there are two to three sub-classes. Promotion from one class (or sub-class) to the next higher class (or sub-class) mainly depends on seniority, knowledge of work, technical skill and training. Usually, there is an annual assessment or test of every worker to determine his or her promotion. The pay scale of monthly basic wages to workers ranges from RMB60 to RMB180. Therefore, the wages difference between two successive classes is only about RMB15 and it may take over 20 years rising from the lowest class to the highest class. The annual wages increment can never catch up with the inflation.

There is another basic salary pay-scale divided into 16 classes (2 to 3 sub-classes in each class) for the technical and management staff and its range is from RMB80 (Class 1) to RMB300 (Class 16) per month. For example,

Management Staff Post	Classes	Technical Staff Post	Cla	ass	ses
Factory Manager	15 - 16				
Deputy Factory Mgr.	13 - 14				
Chief Accountant	13 - 14				
Chief Engineer	13 - 14				
Department Head	10 - 12	Senior Engineer	10	-	12
Deputy Dept. Head	8 - 10	Engineer	8	-	10
Supervisor	6 - 8	Senior Technician	6	-	8
Section Leader	5 - 6	Technician	5	-	6
Senior Clerk	3 - 4	Junior Technician	3	-	4
Junior Clerk	1 - 2	Trainee	1	-	2

There are two portions for the "allowance". The first part is determined by the Manpower and Wages Bureau of the Beijing Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity.

The second part is decided by the BEEF which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowance" is about RMB115 to RMB140 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the workshops, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the factory manager and a workshop manager decides what level of group bonus will be given to the department. Of course, it is up to the workshop manager to award that lump sum of group bonus to his or her subordinates according to invidual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) is retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

How is the bonus determined for the management and administrative staff in the other departments? It can be described in the following steps :

- Calculation of management score (1)
  - (a) Performance according to targets set
  - (b) Discipline according to rules and regulations
  - (c) Management methods and styles (d) Security and safty
- Calculation of average bonus (2)

Management score % (1) x Monthly average production bonus

Calculation of individual bonus (3)

Average monthly bonus (2) x Individual index\*

\* Different indexes for different grades of staff, i.e.

Factory Manager = 2.0

Deputy-Factory Manager = 1.8

Department Head

Deputy Department Head = 1.5

Supervisor = 1.4

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the BIIC will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management).

If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

In addition to the wages and salaries to the present employees, BEEF has to pay pensions and other allowances (i.e. medical) to 400 retired employees. The total payment for the retired employees was RMB750,000 in 1992 which was a significant burden added into the profit and loss account. This is a kind of "social welfare policy" mandated by the government to be implemented in all the state-owned enterprises.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of redundant employees may cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Instead of fully implementing this contract employment system, BEEF has signed "In-Post Contracts" with most of the employees for periods from one to five years. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages (according to class in pay-scale), allowance and bonus. Without such a contract, that employee is out of job but he or she is still an employee of BEEF and is allowed to receive a basic monthly subsidy of about RMB100. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, BEEF believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Electrostatic Equipment Factory (BEEF) belonged to before and after 1992.

Influences	Before 1992	
Planning Influences :		
Organisation Structure*	Very High/High Corporate	Medium Corporate
Review Process*	High Corporate	Medium Corporate
Strategic Themes, Thrusts and Suggestions*	Very High/High Corporate	High/Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High/Medium Corporate	Medium/Low Corporate
Internal Responsibility Contract	High Corporate	Medium Corporate
Management of Interdepen- dencies* (Transfer Pricing)	Very High Corporate	High/Medium Corporate
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992]	
Low Corporate	(Strategic Control)	(Financial Control)	

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Electrostatic Equipment Factory (BEEF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

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# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Planning Influence Control Influence RA Style

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 6
Report Date : 15 June 1994

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Framiling influence	Concrot infruence	W PCATE
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)
=======================================	=======================================	=======================================
Name of SOE :	Shanghai Measuring Works (SMCW)	Instrument & Cutting Tool
Staff Interviewed :	Mr Ju Wei Ya/Assist	f Accountant is enterprise : 31 years) ant Chief Accountant is enterprise : 25 years)
Dates of Visits :	First Visit - 17 S Second Visit - 7 S Third Visit - 12 S	eptember 1993

Third Visit - 10 February 1995

# Section 1 : History & Background

Shanghai Measuring Insturment & Cutting Tool Works (SMCW) was established in 1958 by the Shanghai Municipal Government as a cooperative enterprise (i.e. partnership between state and private owners) by consolidating a few small private factories in the same industry. A certain portion of the initial capital was invested by the government who subsequently purchased all the shares from the other partners. SMCW then became a wholly state-owned enterprise as from October 1966. It is located in the Southwest Suburb District of Shanghai of a distance about 25 km from the city centre.

SMCW is currently producing the following three types (14 categories) of products which are 75% sold domestically and 25% exported to 30 countries overseas (e.g. mainly USA, Canada, Eastern Europe, etc.).

- (1) Measuring Tools
  - 1.1 Calipers
  - 1.2 Gauges
  - 1.3 Protractors
  - 1.4 Micrometers
- (2) Cutting Tools
  - 2.1 Flute End Mills
  - 2.2 Slitting Saws
  - 2.3 Milling Cutters
  - 2.4 Hand Reamers
  - 2.5 Gear Hobs
- (3) Measuring Instruments
  - 3.1 Gear Testers
  - 3.2 Hob Testers
  - 3.3 Parallelism Testers
  - 3.4 Electronic Checkers
  - 3.5 Micropole Controllers

The above products are made in compliance with the national and international standards. SMCW is also manufacturing some tailor-made products according to customers' own specifications. The overall demand of the products is lower than the supply and as a result inventory has been built up. Therefore, SMCW has been actively undertaking marketing and sales strategies to promote sales and reduce the capital tied up in stock. As a result, the production and sales ratio was 1:0.94 in 1994. But the major problem is the delay in collecting accounts receivable.

Since the late 1980s, SMCW has introduced advanced technology and equipment (automated and computerised) from abroad (i.e. Sweden and Switzerland) in order to develop new products, enhance the product quality, mordernize the production process and explore the overseas' markets.

## Section 2 : Legal Form & Organisation Structure

Shanghai Measuring Instrument & Cutting Tool Works (SMCW) has been a wholly state-owned enterprise since 1966 and it does not have a concrete plan to convert into a shareholding enterprise in the next few years because of the stringent rules and regulations governed by the Ministry of Finance (MOF) and the Bank of China (BOC). These bodies have so far approved 3,600 large and medium size SOEs, which have good financial performance track records, to transform into shareholding enterprises since 1990.

Since SMCW is a wholly state-owned enterprise, it is under the administration of the Shanghai Mechanical Equipment and Instrument Bureau which is a branch of the corresponding ministry in Beijing. Before the economic reforms started in 1979, the central planning system dictated all the planning and control systems of the state-owned enterprises. Therefore, SMCW acted just as a vehicle (or cost centre) to carry out the activities according to the commands directed from the bureau. Since the economic reform started in 1979, instead of dictatorship from the bureau, SMCW has been involved in the 5-year long range plan even though SMCW for most of the time had to take the directives from and give in their negotiations to the authority.

This situation has been changing rapidly since early 1990s. Now the bureau only oversees the major development and projects, mainly long term ones, recommended by SMCW. Furthermore, the bureau regulates and suggests the product pricing policy for the enterprises within its industry although the ultimate price ranges are determined by the enterprises themselves through regular meetings. In addition, under the bureau, a semi-governmental body called Shanghai Mechanical Equipment & Instrument Corporation was established in 1992. The major role played by this corporation is to maintain an economical balance of the production and sales among its 39 member enterprises (reduced from 43 to 39 in 1995 due to mergers). It also arranges capital to finance the approved projects or investments for the enterprises under its umbrella. Another important function of the corporation is to provide market information for its industry to produce the right products and sell to the right markets at the right time.

In responding to and implementing of the "SOE Operation Mechanism Tranformation Regulations" énacted by the People's Congress in July 1992, both the bureau and the corporation have delegated the planning and control responsibilities to the top management of SMCW to run their own business. However, the investment autonomy has not yet been fully delegated and raising capital for project investment has to be arranged by the corporation.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

Under the Factory Manager, who has an Enterprise Management Office, the organisation structure of SMCW is listed as follow:

- 1. Production Deputy-Factory Manager
  - 1.1 Production Workshop No.1 (Cutting Tools)\*
  - 1.2 Production Workshop No.2 (Measuring Tools-Calipers)@\*
  - 1.3 Production Workshop No.3 (Measuring Tools-Others) \*
  - 1.4 Production Workshop No.4 (Measuring Instruments) \*
  - 1.5 Production Workshop No.5 (Chibao Factory) &\*
  - 1.6 Production Support Workshop#@
    - 1.6.1 Materials Preparation
    - 1.6.2 Heat Treatment
    - 1.6.3 Electroplating
    - 1.6.4 Tools
    - 1.6.5 Machine Repairs
  - @ 95% output for export in 1994.
  - & established in 1995 (see 5.4a below)
- 2. Chief Engineer
  - 2.1 Production Planning Department
  - 2.2 Research & Development Department
  - 2.3 Quality Control Department
  - 2.4 Inspection Department
  - 2.5 Safety & Technology Department
  - 2.6 Energy & Facility Department
- Purchasing & Sales Deputy-Factory Manager
  - 2.1 Purchasing & Supply Department@
  - 2.2 Marketing & Sales Department\*@
- 4. Chief Accountant
  - 4.1 Accounting & Finance Department
  - 4.2 Internal Audit Department
- 5. Personnel Deputy-Factory Manager
  - 5.1 Manpower & Wages Department
  - 5.2 Personnel Department

- 6. General Affairs Deputy-Factory Manager
  - 6.1 Estate & Development Department
  - 6.2 Security Department
  - 6.2 Administration Department
    - 6.2.1 Education & Training
    - 6.2.2 Medical
- 7. Communist Party Office
- 8. Trade Union Office
- Tertiary Enterprises (14)
  - 9.1 Canteen
  - 9.2 Sales Outlets (Shops)
  - 9.3 Engineering & Consultancy
  - 9.4 Retailing
  - 9.5 Restaurant
  - 9.6 Employee Quarters
  - 9.7 Motel
  - 9.8 Nursary & Kidnergarten etc.
- \* All the five Production Workshops and the Sales Department have signed Internal Responsibility Contracts (IRCs) with the Factory Manager. The 5 Production Workshops are mainly based on good production and efficiency to determine bonus. The bonuses for the Sales Department are linked up with the turnover and cash received from sales. For the details, please refer to section 5.6: Internal Responsibility Contracts below.
- # After fulfilling the internal requirements, the Production Support Workshop can provide its repair and maintenance services to the outsiders. Therefore, it is an independent profit centre by itself having 100 employees. Half of the external profit made can be retained by the workshop.
- The top management is planning to convert these few department into independent and self-financed tertiary enterprises in 1996.

SMCW had a total of 1,550 employees at the end of 1993. It is classified as a "medium size SOE" in China. One-third of the employees are involved in the direct production and 350 employees are working in the 14 "tertiary enterprises" (i.e. retailing). All the employees have signed "employment contracts" with duration from one to three years.

# Section 3 : Financial Indicators

Total assets : RMB 108M (1992) RMB 195M (1995) Turnover : RMB 44M (1992) RMB 71M (1993)

RMB 102M (1994)

RMB 140M+ (1995 forecast)#

Income before tax : RMB 5.9M (1992) - 13.5% of sales##

RMB 6.5M (1993) - 9.2% of sales\*
RMB 7.7M (1994) - 7.5% of sales\*

RMB 3.3M (1995) - 2.4% of sales\*\*

Income tax rate : 55% (before 1995) 33% (from 1995)@

- + including export sales of US\$4.6 million (equivalent to RMB40 million).
- # The 4 financial targets in 1995 were :
  - (1) production value RMB100 million
  - (2) foreign exchange per employee RMB10,000
  - (3) average production value per employee RMB10,000
  - (4) annual average income per employee RMB10,000
- ## Before implementing the new "Enterprise Accounting Standards" in July 1993, SMCW's inventories absorbed selling, distribution, administration and financial overheads. In theory, to comply with the new accounting standards, SMCW had to charge these non-manufacturing overheads from the opening inventories to the profit and loss at the end of 1993. In considering of the significant impact on the profitability in 1993, SMCW obtained the permission from the Shanghai Bureau of Finance to treat this amount of adjustment as deferred expenses and written off in not more than 5 years. Hence, this accounting policy would affect the profit and loss to a less extent from 1993 to 1997.
- \* The reduction of profit margin is mainly due to the inflation of input materials, wages and overheads. In addition, the total long and short term bank loan amounted to RMB120 million and had to pay RMB13 million interest in 1994.
- @ The income tax (55% or 33%) and value-added tax (17% on sales) paid by SMCW to the Shanghai Finance Bureau have been refunded to the Shanghai Mechanical Equipment and Instrument Corporation, the administration authority of SMCW, for repaying a long term loan of RMB300 million from the World Bank used for technology and facility imports. This bank loan is guaranteed by the Shanghai Finance Bureau.

\*\* The accounts receivable and payable at the end of 1995 were RMB85 million and RMB65 million respectively indicating a significant amount of bad and doubtful debts but without any provision. In fact, about RMB6.5 million of bad debts was indentified in 1995 and reported to the Shanghai State Assets Administration Bureau. The income before tax in 1995 would be greatly reduced because of this bad debts was written off at the year end.

# Section 4: Economic Responsibility Contract System (ERCS)

The Shanghai Measuring Instrument & Cutting Tool Works (SMCW) entered into the first Economic Responsibility Contract with the Shanghai Mechanical Equipment & Instrument Bureau and the Shanghai Finance Bureau (representing the Shanghai municipal government) in 1988. This first ERC was based on the "Three Guarantees and One Linkage" concept which means the contractee (SMCW) had to guarantee :

- income tax handed over to the government; (1)
- (2) technology improvement;
- (3) foreign exchange created from export; and

the total remuneration payable to the employees was linked up with the overall economic (or financial) performance.

The terms and conditions of this ERC are summarised as follow:

## 4.1 Duration

From 1st January 1988 to 31st December 1992 (5 years).

- 4.1 Basic Targets\* (for 1988)
- (1)
- Profit before income tax = RMB6,350,000 Income tax handed over (55%) = RMB3,494,000 (zero (2) growth rate for 5 years)
- Foreign exchange from export = (not available) (3)
- If income tax exceeds RMB3,494,000 by less than 5%, then 70% of the excess will be refunded to SMCW (this is the first option of the 4 generally ERC options available for the (4)Shanghai enterprises in 1988)
- If income tax exceeds RMB3,494,000 by more than 5%, then 80% (5) of the excess (over 5%) will be refunded to SMCW

# 4.2 Other Targets\* (from 1988 to 1992)

	(million of RMB)	1988	1989	1990	1991	1992
(1)	sales tax	1.60	1.68	1.87	1.87	1.87
(2)	income tax	3.49	3.49	3.49	3.49	3.49
(3)	loan repayment	2.26	2.80	3.60	3.60	3.60
(4)	technology improvement	2.62	7.00	6.00		
(5)	fixed asset increase	8.02	12.00	16.50	15.50	14.10
(6)	improved products sales	3.14	3.89	4.28	6.72	7.87
(7)	no. of new product	1	2	3	1	1

<sup>\*</sup> The basic and other targets for 1988 were determined according to the actual performance in 1987.

- 4.3 Contractee's (SMCW) Responsibilities
- (1) If the income tax target cannot be achieved, SMCW has to make up any deficit from the reserve.
- (2) SMCW must comply with the government's principles, policies, laws and regulations in relation to the implementation of this contract.
- (3) SMCW must make proportionate provisions for depreciation and repair according to rules and regulations (under the new accounting standards implemented since 1 July 1993, these depreciation and repair are charged to profit and loss on actual expenditures).
- (4) SMCW must pay due care to production safety in order to have zero death rate, 0.03% serious injury rate and 2% minor injury rate. No major production facility breakdown leading to stoppage is allowed. Any deviation from these standards will cause reduction of bonus and further liability on the management.
- (5) SMCW must pay high regards on product quality which should attain the standards set by the bureau. During the quality inspection by the bureau, no sub-standard products could be allowed.
- 4.4 Contractee's (SMCW) Rights
- (1) SMCW has the right to employ and use its own fixed and current assets. SMCW also has the autonomy to manage its own operations i.e. purchasing, production and selling.
- (2) Under the government policy and enterprise's financial capability, SMCW has the autonomy to determine its wages distribution, recruiting and terminating of employees.

- (3) According to the enterprise's needs, SMCW has the right to decide its own organization structure and the number of staff establishment.
- (4) SMCW has the right to terminate this contract if the contractor (bureau) has violated any terms and conditions of this contract.
- (5) SMCW can exercise other rights empowered by the central government.
- 4.5 Contractee's (SMCW) Benefits
- (1) SMCW's benefits are according to the Document No.12 announced by the Shanghai Municipal Government in 1988.
- (2) If SMCW achieves the basic targets (i.e. 4.1 above) and the other targets (i.e. 4.2 above), and does not have any major accidents occured, the factory manager will be awarded a special bonus which can exceed the average annual remuneration per employee. If actual performance is better than the targets, the special bonus can exceed twice the average annual remuneration per employee.

If actual performance is very outstanding, then the special bonus can be three times the average annual remuneration per employee. However, if SMCW cannot achieve the basic targets, 5%-10% of the factory manger's basic salary and bonus will be deducted. For each of the other targets which cannot be attained, 5% of the factory manager's basic salary and bonus will be deducted.

- 4.6 Contractor's (Bureau) Responsibilities
- (1) To gaurantee the legal rights entitled by the contractee under this contract.
- (2) To honour the benefits (i.e. 4.5 above) entitled by the contractee if SMCW can achieve the targets set under this contract.
- (3) To provide the service and environment in order to assist the contractee to manage the operation.
- 4.7 Contractor's (Bureau) Rights
- (1) Through the finance, quality and audit authorities, the bureau has the right to inspect and supervise the operating activities of the contractee.

- (2) The bureau has the right to take legal action against SMCW if the latter has caused any loss to the financial interest of the former (i.e. all the assets are supposed to be owned by the state).
- (3) If the contractee cannot achieve the basic targets, the bureau has the right to ask for economic compensation. If the contractee fails to attain the basic targets for two consecutive years, the bureau has the right to terminate this contract.
- (4) If the contractee cannot achieve any of the basic or other targets, the bureau has the right to deduct the remuneration of the factory manager according to the terms set above (i.e. 4.5 above).
- 4.8 Contractor's (Bureau) Benefits
- (1) According to the terms of this contract, the contractor has the right to receive the predetermined income and sales taxes from the contractee.
- 4.9 Remuneration Linkage with Economic Performance

The details of the employees' total remuneration linkage with the enterprise's economic performance are described in a seperated document.

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The top management (factory manager, deputies and chiefs) have had some negotiation and discussion with the two bureaus in setting the terms and conditions of the ERC. In view of the product and market position and potential in the past, SMCW has successfully accomplished the basic targets from 1988 to 1992.

Another favourable term provided for SMCW was to deduct the bank loan repayment from the PBT before income tax assessment, for example at the end of 1988,

Income Before Tax	RMB7,350,000
Bank Loan Repayment*	1,000,000
Manual 1-1 - X	6 350 000
Taxable Income	6,350,000
Income Tax (55%)	3,494,000
Income After Tax	RMB2,856,000
·	=======================================

\* The outstanding bank loan in September 1993 was about RMB50 million which was equivalent to 50% of the total assets. In other words, a significant proportion of current assets was financed by the bank loan.

Due to the fact that some controversial problems, such as the determination of initial targets and subsequently growth rates and the short term behaviour of the enterprise management, have been encountered since the implementation of ERC system in the mid-1980s, many state-owned enterprises are now very careful in renewing their ERCs. Under this circumstance, SMCW signed the second ERC just for two years as from 1993 to 1994 with similar terms and conditions as the first one. Eventually, all the major targets have been achieved. Instead of entering into another ERC, the Corporation would just agreed the basic (financial) targets with SMCW on an annual basis.

Section 5 : Planning System

## 5.1 Organisation Structure

Following the guidelines of the Enterprise Mechanism Transformation legislations promoted in July 1993, Shanghai Measuring Instrument & Cutting Tool Works (SMCW) has simplified and streamlined its organisation structure as shown in section 2 above. It went to some length in 1993 to create stand-alone business units e.g. the 4 production workshops and some tertiary enterprises as semi-independent profit centres that are controlled by individual workshop and enterprise managers with clear lines of authority and responsibility.

Each production workshop is manufacturing different product lines and the Production Support Workshop is providing material preparation, heat treatment, electroplating, tools, repair and maintenance services for the production departments. Therefore, internal transfer pricing is involved between the support workshop with the other production workshops which will be described in another section below. Other than these five production workshops, all the other departments are classified as cost centres.

Since 1992, SMCW has been decentralizing more planning responsibility to each workshop and department such as initiating the annual plan and the internal responsibility contract. The profit responsibility primarily lies with the workshop manager but the top management keep a surveillance quantity and quality control on each production workshop through monthly or weekly report.

The selection and appointment of the factory manager is still decided by the Shanghai Mechanical Equipment and Instrument Corporation and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a predetermined lump sum bonus at the year end (see section 4.5 above).

Since 1992, the factory manager has full autonomy to appoint the deputy-factory managers, chief engineer, chief accountant (the two chiefs are equivalent to deputy-factory managers) and the other departmental managers. Any major changes of the organisation structure in each division should be initiated by the deputy-factory managers and approved by the factory manager. However, more autonomy of internal management and operation has been delegated to the deputy-factory managers and the chiefs since 1992. And in turn, the deputy-factory managers and chiefs have involved their department heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, SMCW has a decentralized structure in which the individual divisional heads report directly to the factory manager, and they play a linking and control role between the divisions and the factory manager.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.2 Review Process

Since October 1992, Shanghai Measuring Instrument & Cutting Tool Works (SMCW) has implemented a formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). Before starting the whole planning process, the top management formulate a Planning Policy which is treated as major guidelines for compiling the individual budgets and IRCs. The followings indicate the headings of the 1995 Planning Policy issued in September 1994:

- (1) general requirements and themes (see 5.3 below);
- (2) achieve the 3 leadings, 2 developments and 1 reduction -
  - 2.1 3 leadings
    - 2.1.1 leading products
    - 2.1.2 leading technology
    - 2.1.3 leading quality

- 2.2 2 developments
  - 2.2.1 develop the Chibao Factory (see 5.4a below)
  - 2.2.2 develop tertiary enterprises
- 2.3 1 reduction
  - 2.3.1 reduce cost of production (via target costing system, variance analysis, wastage control)
- (3) reinforce marketing and sales strategies -
  - 3.1 make use of 4Ps' strategies
    - 3.1.1 product strategy
    - 3.1.2 pricing strategy
    - 3.1.3 place (distribution) strategy
    - 3.1.4 promotion strategy
    - 3.2 in order to achieve
      - 3.2.1 expand the export markets
      - 3.2.2 penetrate the national markets
      - 3.2.3 increase turnover by own sales personnel
      - 3.2.4 decrease the collection period
      - 3.2.5 40% national sales, 30% export sales, 30% sales by agents
- (4) deepen the enterprise reform and promulgate modern enterprise system
- (5) enhance the daily operation efficiency and safety management
- (6) emphasize employee's education and training

Based on this planning policy to start the planning process, the factory manager evaluates the internal and external environmental factors and then discusses with his deputy managers and chiefs in order to determine the annual sales and profit targets for 1993. Based on these preliminary targets, some guidelines are provided to the workshop managers and other department heads for them to initiate their own plans or budgets for the next year. Much emphasis is placed on the production targets for the four production workshops which annual plans contained the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

At the end of November, all the workshops and departments submit their annual plans to the Enterprise Management Office for consolidation before review and discussion by the factory manager with the deputy managers and the two chiefs. The first annual planning meeting is held in December mainly to discuss the gaps between the submitted plans with the targets perceived by the top management. The top management try to help the production workshops solving their technical, financial and other problems in order to close the gaps as far as possible. Then, further formal and informal meetings and discussions are held between the factory manager, deputy-factory managers and department heads either collectively or individually. This iterative exercise carries on until all the annual plans and contracts (about 4 to 5 verions) are mutually agreed and approved in the AGM (all the employees can attain) held during February.

There is no consolidated financial or master budget prepared because the AGM only concerned on the total production, sales, profit and wages figures without going into the individual plans. The approved annual production plans are broken down into quarterly and monthly plans to cater for demand and holiday factors.

Before 1992, there was no such formal annual planning review process and the government and in turn the top management gave directions to the workshops and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, etc. Since 1992, under the legislative changes and market economy promotion, the government has delegated higher automomy to SMCW in formulating its strategic directions. As a result, all the workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan.

Therefore, the factory manager has less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In addition to the above review process, SMCW's factory manager started to issue an annual report (of 1994) in February 1995 for discussion during the "Enterprise Employee Representative Meeting" (AGM). The followings are the headings of this 1994 annual report:

- (1) financial performance;
- (2) change of management to achieve targets set;
- (3) adjust product mix to satisfy market demands;
- (4) focus on product development and facilitate technology renovation;
- (5) emphasize sales strategies and enlarge sales channels;
- (6) intensify mechanism transformation (management) reforms;
- (7) reinforce enterprise image and be a civilized enterprise;
- (8) enhance the supporting roles of the service departments; and
- (9) internal weaknesses (1-8 above are mainly strengths) -
  - 9.1 some management malpractice and inefficiency;
  - 9.2 long new product development lead time;
  - 9.3 inadequate management information system; and
  - 9.4 some redundant, inactive and irresponsible employees.

Obvervation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc. As far as strategic themes are concerned, the Shanghai Measuring Insturment & Cutting Tool Works (SMWC) has explicitly written the following on a wall at the main entrance of the factory.

- (1) Develop new product variety.
- (2) Improve product quality and maintain "Silver Prize" (a quality standard awarded by the government).
- (3) Enhance management and develop potentials.
- (4) Improve efficiency and increase profit.

Looking into the 1995 Planning Policy (refer to 5.2 above), the following requirements and themes were suggested:

- (1) required to observe the following laws and regulations -
  - 1.1 Labour Law (January 1995);
  - 1.2 Comapny Law (January 1994);
  - 1.3 Enterprise Law (May 1987);
  - 1.4 Enterprise Mechanism Transformation Regulations (July 1993); and
  - 1.5 Enterprise Assets Supervision Regulations; and
- (2) achieve the 4 highs and 4 news:
  - 2.1 high platform; 2.2 high standard;
  - 2.3 high quality; 2.4 high efficiency;
  - 2.5 new idea; 2.6 new strategy;
  - 2.7 new policy; and 2.8 new development.

The above strategic themes are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise.

SMCW has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets on the other hand. As far as hardware is concerned, SMCW has imported some modern manufacturing plant and equipment from the USA and Europe to replace the old ones since the 1990s.

The Quality Control Department is responsible for designing policies, setting production and product standards, testing new products and providing training. The Inspection Department is responsible for controlling the input materials and output products quality, and enforcing the compliance of quality procedures in production. Furthermore, each production workshop has its own inspection personnel to provide initial quality control. Since March 1994, the wages and bonus of these workshop inspectors are linked up with the quantity of checked items and passing rate which was increased from 65%-70% to 80%-85% in 1994.

Another strategic thrust emphasized by SMCW is "Production Efficiency" which has been measured in terms of "Equivalent Standard Hours" (ESH) since 1993. Based on the previous statistics and work study, each type of product has assigned an ESH. The actual daily output quantity of a certain product is converted into ESH and then compared with the actual daily man-hours spent in order to identify:

ESH of Actual Output (the higher the %, the Efficiency Ratio = ------ better the efficiency)
Actual Man-Hours

In addition, the ESH of actual output is used to determine the gross wages and bonuses for the production employees which is described in the IRC section below.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in SMCW still from time to time make suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. Despite this fact, the top management has given some freedom to the department heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

The top management follow the financial indicators and performance closely on monthly and quarterly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "High-Medium Corporate" since 1992.

### 5.4 Long-Term Plans (Resource Allocation)

Since the establishment of Shanghai Measuring Instrument & Cutting Tool Works (SMCW) in 1966, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system.

The commencement of the economic reforms in 1979 started to allowed SMCW to participate in the 5-year's planning with the Shanghai Mechanical Equipment and Instrument Bureau and the Shanghai Mechanical Equipment & Instrument Corporation but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse.

The changing role of bureau and the corporation since 1990 has encouraged SMCW, for the first time, to formulate their own long term strategic plan (1991-1995). However, many internal factors and uncertainties have affected the validity and reliability of this long term plan which has been subject to review and changes every year. Every department had participated in formulating its own long term plan and submitted to the Enterprise Management Office for review and consolidation.

Since then, the top management reviewed the long term plan at the end of each year. After lengthy discussion, another new 5-year plan will be emerged. In fact, a rolling 5-year plan is in operation. In the current 5-year plan (1993-1997 inclusive), the following strategic directions have been laid down.

#### (a) New Factory

A new factory called Chibao Factory located in a suburb development zone has been built since 1993. Phase 1 was completed in 1995 and production started in the same year. It was expected to produce 200,000 pieces of measuring tools valued at RMB11 million of production cost in the first year. Phase 2 and 3 will continue to be completed in the new few years in order to expand the production capacity of high quality measuring tools at lower cost of production, higher efficiency and greater variety. It is expected to increase the total production value from RMB100 million in 1994 to RMB400 in 2000.

#### (b) Product Mix

Under the market economy promulgated since 1993, SMCW has perform intensive and extensive market research to ascertain the actual needs of the end-users and then delete the out-dated products and development the demanding products. The macro-eoncomic measures installed by the government since July 1993 resulted in tight working capital and material supplies, nevertheless, SMCW's agressive product mix strategies and employee's perseverance efforts reached the sales target of RMB100 million at the end of 1994.

# (c) Production Development

In order to manufacture high precision and quality measuring instruments, SMCW has employed electronic measuring instruments and computer control equipment imported from the USA and Germany, in particular from 1990 to 1993. The modernisation of production hardware has been slowed down since 1994 because of lack of capital generated internally and borrowed externally.

#### (d) Market Development

To penetrate into the domestic market and capture higher market share, the sales personnel has been seggregated into geographic teams with different marketing strategies and tatics. The IRC signed with the Sales Department links up the remuneration directly with the sales volume and the accounts receivable (or cash collected) in order to motivate the sales and marketing effort. In addition, sales offices and agents were established in 9 big cities located in the Central China in 1994.

Furthermore, the pricing structure of various categories of products were adjusted (mostly downward) and used price differentiation geographically in 1994 in order to maintain or increase the market share.

### (e) Competitive Edge

To maintain at least the market share and competitive edge against the counterparts (two in Shanghai), SMCW has to enhance its product quality by various means as described in the strategic themes and thrusts section above. In terms promotion, SMCW produced a vedio in 1994 to promote the image and products through TV and other media. As far as the national markets are concerned, the followings strategies were determined in 1995:

- maintain the Northeast and Northwest markets in China;
- develop markets in the Northern provinces near the boarder with the Russia; and
- (iii) penetrate the markets in Central China.

In addition, the following tactics have been employed to enhance the competitive edge :

- (i) market research;
- (ii) forecasting and analysis;
- (iii) production promotion through various media;
- (iv) delivery services; and
- before- and after-sales services.
- (f) Product Development

Another means to enhance the competitive edge is to develop new products. SMCW successfully launched 4 new products in 1994.

Research and Development (g)

> Related to the competitive edge strategy mentioned above, SMCW has taken the following steps to enhance its R&D function:

- to renew and upgrade the production equipment and (i) facilities;
- (ii) to enhance the present product quality;
- (iii) to increase the product variety;
- (iv) to design and develop new products;
- (v) to investigate and improve the production technology;(vi) to strengthen the manpower and technical skills in the research and development department; and
- (vii) to provide more training in research and development.

#### (h) Overseas Markets

Currently, to export products, SMCW has to sell the products to an import and export enterprise of the Corporation at agreed US dollar prices which are lower than the resale prices to the foreign end users and also lower than the SMCW is equivalent national selling prices in Reminbi. working hard to negotiate with the government in obtaining the import and export right (also the foreign exchange usage right) so that they can determine the export prices and make higher foreign exchange and profit from the direct export sales. More than 200 products were exported to 10 foreign countries at the end of 1994 via the external import and export enterprise.

The marketing and sales strategies in 1995 are to (i) develop Eastern Europen and South American markets; and (ii) expand the USA and Thailand markets by setting agencies in Los Angelas and Bangkok.

#### (i) Joint-Venture

In mid 1995, SMCW entered into a 50:50 (RMB1.6 million capital) joint-venture with a Hong Kong Company to establish a production factory in Shenzhen to manufacture some components for the measuring tools, maily calipers, by purchasing most of the raw materials locally. In addition, this joint-venture purchases some of SMCW final products and resales them in the southern provinces.

The current 5-year plan was compiled after long discussion between the Bureau and the SMCW's top management. It was eventually agreed and reflected in the ERC signed with the municipal government. Although the department heads (middle management) have been involved in this planning process, they were playing a consultation role only. Furthermore, the department heads are mainly concerned with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the factory manager at least on a monthly basis. Therefore, the long term planning and review process are using a top-down approach in the belief that the factory manager has better experience and knowledge of the external environment and even the internal operations of the departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Bureau has devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the top management of SMCW is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short term planning policy adopted by Shanghai Measuring Instrument & Cutting Tool Works (SMCW) is "production determined by sales" and "sales determined by targeted income tax" which means income tax as agreed in the ERC with the government is the initial driving force of all the activities. However, under the fierce competition in this industry since 1993, in particular under the influence of market economy policy, the barrier of entry has almost been uplifted. Furthermore, most of the customer orders are coming in randomly, therefore, it is difficult to predict the sales volume in the next year or even next quarter. To perform the sales forecast, reference should also be made to the rolling 5-year plan especially to estimate what the sales potential will be for the new product and market situation in the next year. As from October 1992, SMCW has employed the following annual planning or budgeting process.

During October, the factory manager reviews the financial performance of the year and the accomplishment of the ERC with the chief accountant. He also discusses the market situations, both domestic and overseas, with the sales deputy-factory manager in order to predict the sales potentials for next year. Derived from the sales forecasts, production targets can be set and acted as guidelines for the production workshops to initiate their own plans and IRCs for next year. The other non-production department heads are also required to draft their annual plans including manpower, task descriptions and required standards, and expenditures.

At the end of November, all the workshops and departments submit their annual plans to the Enterprise Management Office for consolidation before review and discussion by the factory manager The first annual with the deputy managers and the two chiefs. planning meeting is held in December mainly to discuss the gaps between the submitted production plans with the targets perceived by the top management. The top management is trying to help the production workshops solving their technical, financial and other problems in order to close the gaps as far as possible. further formal and informal meetings and discussions are held between the factory manager, deputy-factory managers and department heads either collectively or individually. This iterative exercise carries on until all the annual plans and IRCs are mutually agreed and approved in the AGM (all the employees can attain) held during February. There is no consolidated financial or master budget prepared because the AGM only profit and most concerned on the total production, sales, important of all, the wages figures without going into the individual plans. The approval annual production plans are broken down into quarterly and monthly plans as shown below.

Production									Year	-	
Product											
	Qty	PV*	Qty	PV	Qty	PV	Qty	PV	Qty	PV	_

- \* PV means the "Production Value" at the standard cost of last year.
- # There is a consolidated production plan for the whole enterprise.
- @ The quarterly production budget is further broken down into monthly figures taking into account of demand, holiday, maintenance or other factors.

Since October 1992, the workshop managers have been involved intensively in this planning process which they believe to be important in setting and negotiating the internal responsibility contracts with the factory manager. The other department heads have also participated carefully in devising their expense budgets which they would be measured against as performance yardsticks.

In view of the rapid changing market conditions, the annual planning review period has been shortened from quarterly to monthly. The factory manager and his deputy managers hold a formal meeting at the beginning of each month to review the financial performance against the annual plans. Amendments or revisions are made two to four times a year according to the significance of the factors affecting the annual plan.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given SMCW more freedom to plan ahead. The government representatives, the bureau and corporation, have almost completely devolved the short term planning autonomy to SMCW, except to agree on the minimum sales target as agreed in the ERC. The top management have involved the middle management or even their subordinates (lower management) in the annual planning process which on one hand is a critical step in materializing the long term strategic plan or the ERC, and on the other hand, it is an important motivational factor for the workshop managers and department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

#### Internal Responsibility Contracts (IRC) 5.6

Shanghai Measuring Insturment & Cutting Tool Works (SMCW) established its IRC system in 1991 in order to motivate the efficiency, profitability and cost reduction in the production workshops.

The IRC of a production workshop is described below: (A)

Department : Production Workshop No.3

: 1993

Guidelines

Wages, bonuses, expenses and costs of wastage are determined and based on "Equivalent Standard Hours" of production transferred to finished goods.

# Basic Indexes :

Productive Labour Hours (Capacity) 80% Productivity Ratio 125% Production Loss\* 4.5%

Production scrap and wastage was reduced from RMB1.6 million in 1992 to RMB1.2 million in 1993 for the whole enterprise.

#### Economic Targets :

- (1) Each "Equivalent Standard Hour" (ESH) of planned production transferred to finished goods will be awarded RMB2.62# for wages and bonuses.
- (2)
- 100% completion of product mix/variety.
  Each ESH is allowed to incur RMB1.91 of expenditure\*. (3)
- Each ESH of production loss is allowed to incur RMB1.50 of (4) expenditure\*.

# This standard is calculated by dividing the actual total wages and bonuses by the actual total ESH in 1992. Similarly, the actual figures 1993 will determine the standard for 1994.

# Qualitative Targets

- New product pilot test is assessed according to Chief (1)Engineer's plan.
- Safety is assessed according to the standard set by the (2) Production Technology Department.

#### Incentive Scheme :

- (1) If actual production > planned production within 15%, then
  - (a) RMB1.20 of bonus for each excess ESH; and
  - (b) RMB3.50 basic wages increase for each excess ESH for all employees.
- (2) If actual production > planned production over 15%, then
  - (a) RMB3.00 of bonus for each excess ESH; and
  - (b) RMB3.50 basic wages increase for each excess ESH for all employees.
- (3) Bonus will be given for each successful trial test of new product as approved by the Chief Engineer.
- (4) If actual expenditure is less than the standards set per \* above, 20% of the savings will be awarded as bonus.

#### Penalties :

- (1) Equal amount of bonus (as stated in (3) of the incentive scheme above) will be deducted from the gross wages and bonuses for each failure of new product trial test.
- (2) If actual expenditure is greater than the standards set per \* above, 50% of the excess will be deducted from the gross wages and bonuses.
- (3) For any sub-standard products discovered by the government quality inspection, 10% of the previously awarded bonuses (according to ESH system) should be deducted from the gross wages and bonuses.
- (4) For any 1% (production quantity) shortfall of attaining the planned product mix, 0.1% of the gross wages and bonuses will be duducted.
- (5) Bonus will be deducted if "professional management standards" (as described in "Monitoring Results" (6.3) below) assessed by the Enterprise Management Office cannot be attained.

#### Evaluation :

This IRC is evaluated on monthly, quarterly and yearly bases. The Head of Department should submit the actual performance data to the Enterprise Management Office for auditing and consolidation (the Chief Accountant is also involved) before review and approval by the Factory Manager. The Manpower and Wages Department is responsible for calculating the bonuses according to the approved performance reports.

#### Bonuses Distribution :

The above methods are to calculate the total wages and bonus for the production department. The general rules for distributing the bonuses among the employees in the production department having had IRC are described under the "Rewards & Incentives" section (6.4) below.

(B) The IRC of the Sales Department is described below :

\_\_\_\_\_

Department : Sales Year : 1991

Guidelines :

The purpose of this IRC singed between the Factory Manager and the Sales Manager is to motivate the sales staff to achieve the mutually agreed sales targets which are linked up with the wages and bonuses of the sales employees.

#### Contracted Items & Targets :

- (1) Basic Targets
  - 1.1 Number of Staff : 47
  - 1.2 Accounts Receivable: RMB5 million

(Year-end Balance)

- (2) Evaluation Targets (based on 1990 selling prices)
  - 2.1 Self-Manufactured Products (SMP) Sales

Domestic Sales (Turnover) : RMB22 million Export Sales (Turnover) : RMB 8 million Total Sales (Turnover) : RMB30 million

2.2 Joint-Venture Products (JVP) Sales: RMB 7 million

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(3) Cash Collection Targets (from sales)

Quarter	SMP Sales (RMB'000)	JVP Sales (RMB'000)
1st	5,400	1,270
2nd	8,000	1,870
3rd	7,000	1,640
4th	8,000	1,870

#### Incentives & Penalties

- (1) Achieving the SMP Sales Targets (2.1 above)
  - 1.1 Domestic Sales:
    Bonus = RMB22 million x 0.16% = RMB32,500
  - 1.2 Export Sales :
    Bonus = RMB 8 million x 0.17% = RMB13,600
- (2) Exceeding the SMP Sales Targets (Bonuses Calculation)
  - 2.1 RMB30 million < Actual Sales < RMB40 million :
     Bonus = Every RMB1 million x 0.50% = RMB5,000</pre>
  - 2.2 RMB40 million < Actual Sales < RMB50 million : Bonus = Every RMB1 million x 0.60% = RMB6,000
  - 2.3 RMB50 million < Actual Sales < RMB60 million :
    Bonus = Every RMB1 million x 0.70% = RMB7,000
  - 2.4 RMB60 million < Actual Sales < RMB70 million : Bonus = Every RMB1 million x 0.80% = RMB8,000
  - 2.5 RMB70 million < Actual Sales
    Bonus = (Actual Sales RMB70 million) x 0.85%</pre>
- (3) Below the SMP Sales Targets (Penalties Calculation)
  - 3.1 RMB29.50 million < Actual Sales < RMB30 million : Penalties = RMB0.50 million x 2.7% = RMB13,500
  - 3.2 RMB29.00 million < Actual Sales < RMB29.50 million : Penalties = RMB0.50 million x 2.9% = RMB14,500
  - 3.3 RMB28.50 million < Actual Sales < RMB29.00 million : Penalties = RMB0.50 million x 3.1% = RMB15,500
- (4) Cash Collection Penalties
  - 4.1 No bonus will be awarded for achieving the "Cash Collection" quarterly targets (stated in (3) above)
  - 4.2 0.02% of the amount below the "Cash Collection" quarterly targets will be deducted from the bonuses

### Evaluation Methods

- (1) All the above agreed targets should be evaluated on quarterly basis. Actual performance data and calculated bonuses and penalties should be supplied by the Accounting & Finance Department, audited by the Internal Audit Department, reviewed by the Enterprise Management Office, approved by the Factory Manager and acted upon by the Manpower & Wages Department.
- (2) The bonuses and penalties for achieving the JVP sales are determined separately by the Enterprise Management Office.

- (3) If the actual sales manpower exceeds the target (i.e. 47), the extra wages, allowances and bonuses should be borne by the Sales Department itself.
- (4) For any uncontrollable factors affecting the achivement of the above targets, adjustments for the bonuses calculation can be made with the approval of the Enterprise Management Office and the Factory Manager.
- (5) The Sales Department should also enhance the general management standards and the work safety.
- (6) Distribution of the group wages and bonuses to individual sales employee is determined by the Sales Manager according to individual performance.
- \* Since 1994, the sales targets of this IRC have been seggregate down to individual saleman in order to motivate individual's effort. As a result, the turnover was increased by 40% compared with 1993.

It took a few months for the factory manager, workshop managers and sales manager to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval by the annual general meeting in February 1993. This long process indicated that the setting of IRC was not a top-down approach and the workshop managers are very eager on this issue upon which they would be measured against and rewarded thereupon. The 1993 IRCs were subject to at least quarterly review but no adjustments had been made since agreed.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the factory manager has delegated more freedom to the workshop managers in initiating and negotiating their own IRCs, and also involved the finance division intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

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## 5.7 Management of Interdependencies (Transfer Pricing)

Management of interdependencies means the central influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the workshops, and exploitation of a shared resource are examples that happen in Shanghai Measuring Instrument & Cutting Tool Works (SMCW) that need headquarters' intervention.

Since 1992, the Production Support Workshop has been a profit centre which provide repair and maintenance services to both the internal production departments as well as the external customers. Of course, this workshop must satisfy the internal demands first before it can accept outside business. This involves the transfer prices which are slightly lower than the market prices charged to the outside customers. The transfer prices for the repair and maintenance services, including materials and labour hours, are mutually pre-determined by the top management and the workshop on an annual basis. But the transfer prices might not be increased significantly in order to push the workshop to reduce cost of service consistantly.

The material preparation, heat treatment and electroplating work provided by the Production Support Workshop for the other four production workshops also involve the internal transfer prices which are based on the standard costs mainly determined by the top management without involvement by the supplier and the end users. These transfer prices are pre-determined on an annual basis.

Observation of Planning Influence: Shift from "Very High-High Corporate" to "High Corporate" since 1992.

Section 6 : Control System

# 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Shanghai Measuring Instrument & Cutting Tool Works (SMCW) has three distinct levels of management hierarchy:

- (1) Top Management (factory, deputy-factory managers, chief accountant and chief engineer)
- (2) Middle Management (workshop managers and department heads)
- (3) Lower Management (foremen and supervisors)

The deputy-factory managers and the two chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task which will be explained in the rewards and incentives section.

The major control mechanisms employed by the top management to control the performance of the workshops and departments are by using annual plans and IRCs. As described in section 5.6 above, the most important measurement criteria are production efficiency (ESH) and new product manufacturing set in the IRCs, although some other qualitative targets, such as quality and safety, are employed. However, these are subsidiary ones which have lower weightings in calculating the group wages and bonus.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of SMCW.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.2 Agreeing Objectives

Shanghai Measuring Instrument & Cutting Tool Works (SMCW) sets similar objectives for its production workshops: workshop managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions. The critical occasion, therefore, is the annual planning review. In view of the fierce competition within this industry, the production workshops sometimes feel passive in setting their objectives or targets in the annual plans or IRCs because their activities are depending on the sales demands and the derived production volumes.

A high pressure to achieve the planned production quantity and efficiency is put on the workshop managers at the quarterly or monthly review. They fully understand that their group wages and bonus are tied in with the annual plans or IRCs and it also depends on the overall performance of the enterprise as a whole. In terms of expenses, control is in terms of output efficiency or ESH. Although the other departments do not have the IRCs, they have agreed specific objectives or targets with the factory manager. The promotion, salary and bonus of these functional staff are correlated with these quantitative and some non-financial targets. (Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Shanghai Measuring Instrument & Cutting Tool Works (SMCW) implemented the following "Professional Management Standards" in 1991 to provide some guidelines in order to enhance every management aspect, product quality, work quality, and to fulfil the targets as agreed in the ERC (external) and the IRC (internal).

- (1) Scope
- 1.1 Every fundamental management aspect in order to improve the internal operational efficiency of the enterprise.
- 1.2 Every ad hoc and urgent assignment requested by the top management in relation to product quality, work quality and quality control.
- 1.3 Any other specific tasks as ordered by the Factory Manager.
- (2) Principles
- 2.1 The setting of professional management standards in this guideline is the responsibility of the Factory Manager, Enterprise Management Office, Chief Engineer and Chief Accountant.
- 2.2 Technical and quality standards are managed by the Chief Engineer.
- 2.3 General and professional standards are managed by the Enterprise Management Office and the Chief Accountant.
- 2.4 The standards of all the other ad hoc and special assignments are managed by the Factory Manager.
- 2.5 The standards (except some of 2.4 above) should be pre-determined in the Annual Plan and which department responsible for managing each standard should be stipulated.
- (3) Method
- 3.1 The standards should be mutually agreed by the top management and the employees before final approval given in the Annual Plan.
- 3.2 Method of assessment should be stated together with the pre-determined standards established in the Annual Plan.

- 3.3 The agreed standards should be achieved in time as planned.
- 3.4 After the attainment of a standard, the details of accomplishment or the ways to solve the problems should be reported to the top management via the department head.
- 3.5 If any unforeseeable events, factors or uncertainties affecting the achievement of standards in time, advanced notice should be reported to the top management via the department head. Any adjustments or corrective actions to be taken must be approved by the top management.
- (4) Evaluation
- 4.1 A "Pointing System" is used as shown in (5) below. Points will be deducted for any failure to achieve the standards.
- 4.2 For each failure of standard, RMB5 to RMB20 will be deducted from the salary of the employee who is directly responsible for the standard. The Enterprise Management Office is responsible for the assessment and deciding the amount of penalty for the Manpower and Wages Department to implement.
- (5) Standards for Performance Evaluation of Production Department.
- 5.1 The Pointing System

	Evaluated Standard	Points	Evaluation Department
2. 3.	Production Value (Quantity) Production Mix Production Rate Quality (a) Scrap & Wastage	5 10 5 30	Production Planning Production Planning Production Planning Quality Control & Inspection
	<ul><li>(b) First Class Product %</li><li>(c) Inspection Passing Rate</li></ul>		
5.	Safety Production	5	Safety & Technology
6.	Equivalent Standard Hours	5	Manpower & Wages
7.	Materials Consumptions	5	Purchasing & Supply
8.	Energy Savings	5	Energy & Facility
9.	Professional Management Standards	10	Enterprise Manage- ment Office
10.	Scrap & Wastage Loss	5	Accounting & Finance
	Export Sales	5	Enterprise Manager- ment Office
12.	Training & Education	10	Enterprise Manage- ment Office
	Total :	100	

===

# 5.2 Assessment Criteria & Methods

- Production Value (Quantity)
  - 1.1 +1 point for exceeding the standard
  - 1.2 -1 point for under the standard
  - 1.3 evaluate once per quarter
- 2. Production Mix
  - 2.1 -1 point for every 1% below the standard production mix value
- 3. Production Rate
  - 3.1 -0.3 point for every 1% below the standard daily production rate of 85% in every month
  - 3.2 -2 points for failure the 10-days' ratio of 2:3:5 in every month for Production Department No.4
- 4. Quality
  - 4.1 Scrap & Wastage : -1 point for every 0.1% exceeding the standard
  - 4.2 First Class Product % : +1 point for every 5% exceeding the standard % and -1 point for every 5% below the standard %
  - 4.3 Inspection Passing Rate : -1 point for every 5% below 100%
- 5. Safety Production
  - 5.1 -1 point for every minor injury incidence
- 6. Equivalent Standard Hours (production transferred to finished goods)
  - 6.1 -0.5 point for every 1% below the standard hours
- 7. Materials Consumptions
  - 7.1 -1 point for every 5% exceeding standard consumptions of tools and indirect materials
- 8. Energy Savings
  - 8.1 -0.5 point for exceeding standard consumptions in water or electricity within 3%
  - 8.2 -1 point for exceeding standard consumptions in water or electricity over 3%
- 9. Professional Management Standards
  - 9.1 -2 points for failing each item of standards; or
  - 9.2 for failing each item of standard, deduct RMB5 to RMB20 of the responsible employee's wages
- 10. Scrap & Wastage Loss
  - 10.1 -0.5 point for every 1% exceeding the standard allowance (based on last year actual rate)

- 11. Export Sales
  11.1 -5 points for failing the agreed standard
- 12. Training & Education
  12.1 deduction of points is recommended by the Enterprise
  Management Office and approved by the Factory Manager

Shanghai Measuring Instrument and Cutting Tool Works (SMCW) regards it as essential to catch variances from annual plan or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the workshops and departments submit monthly results on standard forms to their respective divisional heads and also to the chief accountant for vetting and comparison with budgets and IRCs. The production workshops are also required to submit production figures to the top management on a weekly basis.

The monthly report format is unique for each department. The contents are mainly corresponding with the annual plan from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the targets. The qualitative targets are measured according to 5.1 above and written in the monthly reports as well. Any significant variances (without specifying tolerance limits) are highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the factory manager for review.

For any serious adverse variances shown on any report, the factory manager contacts with the respective deputy managers, workshop managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the top management with the middle management, the factory manager puts forward the monthly results for open discussion. The workshop managers and the department heads may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a workshop manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results are passed back to the wages and manpower department for calculating the group wages and bonus of each workshop or department for last month. Then the accounting department processes the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization is not well recognised by the top management even though a few stand-alone personal computers have been used for calculating payroll, compiling plans and performing financial analysis. There is no plan for implementing a comprehensive integrated management or accounting information system. Perhaps the lack of capital for investment in computer hardware and software and the urgent needs to focus on the marketing strategies put computerization at the bottom of the priority list.

Now, SMCW views the annual plan or IRC as a contract between the top management and the workshop or department. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from plan.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

#### 6.4 Rewards and Incentives

Since 1992, SMCW had the autonomy to recruit employees from the labour market without getting the Shanghai Manpower Bureau involved which is in compliance with the Mechanism Transformation. Furthermore, since 1993, all the employees have signed employment contracts which include the "employee contract" and the "in-post contract". The employee contract signed between the factory manager and an employee signifies that he or she has been employed by the enterprise. Whereas, the in-post contract means a formal assignment of a certain post to an employee who is expected to be capable for the job. For the employees without in-post contracts, they may be transferred to the Tertiary (Service) Enterprises which are fully-owned by SMCW and are self-financed. The effectiveness of implementing the employment contracts is reflected in the increase of production value of RMB40M in 1992 to RMB70M in 1993 and expected to be RMB100M in 1994. This significant improvement in efficiency is due to the fact that bonuses are linked up with efficiency and productivity.

In parallel with the implementation of the IRC system, Shanghai Measuring Insturment & Cutting Tool Works (SMCW) designed the following general rules for calculating and distributing bonuses among the employees in every department.

- (1) If any designated duties or special assigned duties by the department head or supervisor cannot be completed, no bonus for the month should be awarded.
- (2) If any unsatisfactory performance which causes monetary loss of RMB500 or above, the monthly bonus should not be awarded.
- (3) For any serious problems occured, such as quality, facility or equipment, safety, health, food poisoning, fire etc, not only the group bonus will be deducted from the department, the respective involved section leader, supervisor, department head or deputy factory manager should not be awarded the monthly bonus as well.
- (4) For absent of work due to sickness, injury, marriage, causal, maternity, condolence etc., RMB2.5 of bonus per day should be deducted. No bonus should be awarded if absent of work exceeds 5 days.
- (5) For any study leave over 1 year, no bonus should be awarded. For any study leave over 4 days in a month, RMB1.5 of bonus should be deducted per day of excess. If monthly study leave exceeds 12 days, only 50% of the bonus should be awarded.
- (6) Any employee transfer from another department can entitle to two-third of the bonus if he or she works for over 20 days in the month.
- (7) No bonus should be awarded to any trainee for the first 6 months. 50% and 70% of bonus can be awarded to a trainee for working over 6 months and 2 years respectively.
- (8) Any employee whose workload is reduced due to sickness or other valid reasons as approved by the department head shall not receive bonus in the first 3 months and can be awarded 50% of bonus after 3 months.
- (9) Group bonues will be awarded to a department according to the attainment of the financial, technical and management standards as agreed under the IRC. The department head has the right to distribute the bonues to individual staff according to individual performance and the rules as stated above.
- (10) Late arrival to work and early dismissal without valid reasons may receive no bonus for the month.
- (11) Any absent from work without valid reasons may cause no bonus for the month. If accumulated days of absence from work over 3 days, no year-end bonus will be awarded.

- (12) For any administrative warning due to misconduct or wrongdoings, no bonus will be awarded for 2 months. For serious mistakes or wrongdoings, no bonus will be awarded for 3 months.
- (13) No bonus will be awarded to any employee during the period of detainment under charges of the police.

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the SMCW is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. The take-home pay of each employee in SMCW is mainly composed of three elements as broken down below:

(1) Basic Wages 55% - 60% (2) Bonus 20% - 25% (3) Allowances 25% - 15%

The average annual gross wages per employee was around RMB8,080 in 1993. Under the current high inflation rate (overall average 23% and 21% in China in 1993 and 1994 respectively), SMCW increased the average annual gross wages to RMB10,854 in 1994. It was expected that this figure would reach RMB12,000 in 1995 depending on the enterprise performance per the terms and conditions of the third ERC.

According to the general national standard adopted by most of the state-owned enterprises, SMCW's production workers are classified into 8 classes and within each class there are two to three sub-classes. Promotion from one class (or sub-class) to the next higher class (or sub-class) mainly depends on seniority, knowledge of work, technical skill and training. Usually, there is an annual assessment or test of every worker to determine his or her promotion. The pay scale of monthly basic wages to workers ranges from RMB60 to RMB180. Therefore, the wages difference between two successive classes is only about RMB15 to RMB20 and it may take over 20 years rising from the lowest class to the highest class. The annual wages increment can never catch up with the inflation.

There is another basic salary pay-scale divided into 16 classes (2 to 3 sub-classes in each class) for the technical and management staff and its range is from RMB80 (Class 1) to RMB300 (Class 16) per month. For example,

Management Staff		Technical Staff	
Post	Classes	Post	Classes
Factory Manager	15 - 16		
Deputy Factory Mgr.	13 - 14		
Chief Accountant	13 - 14		
Chief Engineer	13 - 14		
Department Head	10 - 12	Senior Engineer	10 - 12
Deputy Dept. Head	8 - 10	Engineer	8 - 10
Supervisor	6 - 8	Senior Technician	6 - 8
Section Leader	5 - 6	Technician	5 - 6
Senior Clerk	3 - 4	Junior Technician	3 - 4
Junior Clerk	1 - 2	Trainee	1 - 2

There are two portions for the "allowance". The first part is determined by the Manpower and Wages Bureau of the Shanghai Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity. This part of allowance was increased from RMB119 (per month) in 1994 to RMB143 (per month) in 1995. The second part is decided by the SMCW which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowance" is about RMB115 to RMB140 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees. SMCW has been trying to build and purchase apartments for employee's quarters but retained profit and cash availability are the limiting factors. As a result, some employees are still living in a space of less than 4 square metres per person in 1995. They have registered with the government housing authority in charge of solving this headache problem in Shanghai.

The calculation of "bonus" for the employees in the workshops, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the factory manager and a workshop manager decides what level of group bonus will be given to the department. Of course, it is up to the workshop manager to award that lump sum of group bonus to his or her subordinates according to invidual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) is retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

How is the bonus determined for the management and administrative staff in the other departments? It can be described in the following steps:

- (1) Calculation of management score
  - (a) Performance according to targets set
  - (b) Discipline according to rules and regulations
  - (c) Management methods and styles
  - (d) Security and safty
- (2) Calculation of average bonus

Management score % (1) x Monthly average production bonus

(3) Calculation of individual bonus

Average monthly bonus (2) x Individual index\*

\* Different indexes for different grades of staff, i.e.

Factory Manager = 1.50
Deputy-Factory Manager = 1.40
Department Head = 1.35
Deputy Department Head = 1.30
Supervisor = 1.25

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the government will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management).

If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

According to the social welfare legistlation implemented in 1993, SMCW has been contribution 25.5% of the total wages to the government for the central pension fund. Then the government is responsible for the pension payments to the present 650 and future retired employees of SMCW. On the other hand, SMCW has to provide about 14% of the total payroll for other employee's benefits such as unemployment, medical, insurance etc. A central social welfare fund similar to the pension has been resolved and will be fully implemented across all the state-owned enterprises before the end of 1997.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of redundant employees may cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

SMCW has fully implemented both the "employment contracts" and "in-post contracts" with all the employees for periods from one to five years since 1994. The latter contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages (according to class in pay-scale), allowance and bonus. Without such a contract, that employee is out of job but he or she is still an employee of SMCW and is allowed to received a basic monthly subsidy of about RMB150. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, SMCW believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Measuring Instrument & Cutting Tool Works (SMCW) belonged to before and after 1992.

	·	
Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	Very High to High Corporate	Medium Corporate
Review Process*	High Corporate	Medium to Low Corporate
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High to Medium Corporate	Low Corporate
Internal Responsibility Contract	High Corporate	Medium to Low Corporate
Management of Interdepen- dencies* (Transfer Pricing)	Very High to High Corporate	<del>-</del> .
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence			
	Tight Strategic	Tight Financial		
High Corporate	(Strategic Programming)	(Financial Programming)		
Medium Corporate		[Pre-1992]     \/ [Post-1992]		
Low Corporate	(Strategic Control)	(Financial Control)		

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Measuring Instrument & Cutting Tool Works (SMCW) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

Revised: 4 February 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

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Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 7
Report Date : 30 April 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate	Tight Strategic	Strategic Programming(1)
High Corporate	Tight Financial	Financial Programming(2)
Low Corporate	Tight Strategic	Strategic Control (3)
Low Corporate	Tight Financial	Financial Control (4)

\_\_\_\_\_\_\_

Name of SOE : Guangzhou Nan Fang Flour Mill (GNFF)

Staff Interviewed : Mr Cheng Qi Chang/Chief Accountant

(No. of years in this enterprise : 26 years)

Mr Lai Ping/Managing Director

(No. of years in this enterprise : 11 years)

Dates of Visits : First Visit - 11 December 1993

Second Visit - 11 August 1994

# Section 1 : History & Background

Guanagzhou Nan Fang Flour Mill (GNFF) was established in 1960 and was converted into a shareholding enterprise in October 1992 having a paid-up capital of RMB82 million (13 million shares). It is one of the largest flour mills in China with a total factory area of 120,000 square metres and 934 employees including 180 management staff at the end of 1993.

Presently, GNFF has four flour manufacturing workshops, one processed food plant and three supporting workshops. It also has its own shipping port (for 10,000 tons of ships) and railways system for transporting the raw materials in and finished products out respectively. GNFF has imported two automated production lines from Switzerland (one in 1989 and one in 1993) which can process 30 types of products and 400 tons of wheat per day. In addition, GNFF has installed over 30 automatic flour inspection machines imported from the USA, Germany, Japan and Sweden. The total output capacity is 300,000 tons per annum. The output volume was 240,000 tons in 1993 and supplied 40% of the flour required in Guangdong province.

GNFF produces high quality of flour for manufacturing noodles, cakes, bread, biscuits, etc. Over 95% of the processed flour is sold domestically and less than 5% exported to Vietnam, Macau and Hong Kong. GNFF always promulgates high quality and customer satisfaction as its main business themes. To achieve these aims, quality management should be emphasised, in terms of imported modern prodcution technology and stringent quality control system, in order to maintain 100% passing rate consistantly.

On the marketing and selling side, GNFF has maintained a customer information filing system and visited the existing and potential customers periodically to obtain feedback on quality and services in order to increase the sales outlets and market share.

Staff development is another important thrust of GNFF. In the past 10 years, it has recruited over 30 qualified engineering personnel and 150 university graduates to strengthen the management calibre. GNFF has fully implemented the "employment contracts" for all the employees and improved the social welfare, insurance, medical, housing, wages and bonus benefits in order to enhance the motivation of all the employees and the development and operation of the enterprise as a whole.

Apart from the core business of flour manufacturing, GNFF has diversified into processed food, import and export trade (with one subsidiary in Hong Kong), resort facilities and auction businesses. On 25 June 1993, GNFF was granted the "import and export right" by the Guangdong Foreign Trade and Economic Bureau so that it can further explore the overseas markets, such as Russia and Hong Kong, in the near future.

Under the more competitive market, GNFF has grown steadily from a medium size state-owned enterprise into a large enterprise in the flour industry. Financially, the compounded growth rate of net profit and fixed assets from 1981 to 1992 were over 20%. The net income before tax in 1992 was RMB30 million which was 13 times of the profit level before 1980. GNFF has been awarded as one of the top ten most economic efficient state-owned enterprises in Guangzhou and one of the hundred top quality control state-owned enterprises in China.

GNFF is currently producing the following three classes (12 brand names of products) of flour, 95% of which are sold domestically and less than 5% exported to Vietnam, Macau and Hong Kong.

- (1) Higher Class for making high quality bread and noddle.
- (2) Middle Class for making bread, bun, noddle and cakes.
- (3) Lower Class for making sauce, battery and pastry.

Five brand names of flour have been awarded as "quality products" by the Guangdong government.

Apart from the above three classes of flour products, GNFF has a production line imported from Italy manufacturing 1 tonne of bread per day mainly to test the quality of the flour produced on one hand and diversify the business and sales on the other hand.

The by-product is the shell of the wheat which, after grinding, is a kind of high demanding foodstaff for the livestock e.g. chicken and pig. It is sold to the government designated livestock farms.

#### Section 2 : Legal Form & Organisation Structure

Guangzhou Nan Fung Flour Mill (GNFF) has been a wholly state-owned enterprise since 1960 and it was converted into a private shareholding enterprise in October 1992 by issuing 16% of the authorized shares to the employees. The local government is the majority shareholder by holding 84% of the shares. GNFF is trying very hard to list its shares in the Shenzhen Stock Exchange in order to raise fresh funds for capital investments, explore the overseas markets and repay the bank loans. It is one of the ten recommended state-owned enterprises to be listed in Guangdong province. In fact, five enterprises have been listed and GNFF has been expected to be the next one in 1994. However, due to the unfavourable market conditions and significant drop in financial performance in 1994 (see Section 3 below), GNFF has to postpone the listing plan to 1995 or 1996.

The conversion of shareholding enterprise has improved the overall economic efficiency and employee motivation of GNFF. For example, because of the insufficient supply of electricity in Guangzhou, most of the enterprises have to stop production one day in every week. In the old days, workers and staff were very happy to have one day time-off due to no electricity supply, but when they have become shareholders, they prefer to keep the production running seven days a week. Furthermore, most of the workers are willing to maintain three shifts a day and 24 hours around the clock.

Since GNFF is a state-owned enterprise, it is under the administration of the Guangzhou Food and Oil Bureau. Since the economic reforms started in 1979, the government and bureau have delegated the following autonomy to GNFF.

- 1981 instead of following strictly the orders and directives from the bureau and acting as a production cost centre, GNFF obtained its own production autonomy and retained profit after tax for development purposes.
- 1983 started the economic responsibility targets system and employees' remuneration was linked up with economic performance and individual performance.
- 1985 started the "Factory Manager Responsibility System" and delegated more operation and management autonomy to the factory general manager.
- 1990 signed the ERC with the local government and integrated the responsibilities, rights and benefits of the enterprise.

In responding to and implementing of the "SOE Operation Mechanism Tranformation Regulations" enacted by the People's Congress in July 1992, the bureau has delegated the planning and control responsibilities to the top management of GNFF to run their own business. Furthermore, the investment autonomy has been delegated and raising capital for project investment can be arranged by the bureau and GNFF together. However, the bureau is still in control of:

- (1) appointing general manager and party secretary;
- (2) compromising profit before tax target;
- (3) setting some selling prices under certain circumstances (i.e. flooding) to secure the purchasing power of general public; and
- (4) reviewing major capital investment projects.

Since early 1990s, GNFF's party secretary has inserted less and less influence on the planning and control systems. Basically, the roles played by the party secretary are as follows:

- (1) to assist the factory general manager in the operation and management but not to interfere his leadership;
- to be consulted by the factory general manager in making (2) long term investment decisions; and
- (3) to help the factory general manager in implementing the determined plans and policies.

GNFF's Board of Directors composed of the following members :

Chairman (also the Managing Director)

Vice-Chairman - General Manager

- Party Secretary

Directors - Deputy-General Manager (Chief Engineer) Deputy-General Manager (Chief Economist) Finance Manager (Chief Accountant)

A Government Representative (Guangzhou Food & Oil Bureau)

Under the Factory General Manager, who has an Enterprise Management Office (also in charge of the listing or floatation plan), the organisation structure of GNFF is as follow:

- Production Department (headed by Chief Engineer)
  - No.1 Flour Workshop\* @ 1.1
  - 1.2 No.2 Flour Workshop\* @
  - 1.3 No.3 Flour Workshop\* @
  - 1.4 No.4 Flour Workshop\* @
  - 1.5 Pastry Workshop\* @
  - 1.6 Raw Material Workshop@
  - 1.7 Repair & Maintenance Workshop@
  - Energy & Power Workshop@ 1.8
  - 1.9 Production Planning
  - 1.10 Research & Technology
  - 1.11 Quality Control
  - 1.12 Inspection
- Sales Department (headed by Chief Economist) (2)
- Accounting & Finance Department (headed by Chief Accountant) (3)
- Purchasing Department
- (5) Personnel Department
- General Affairs Department (6)
  - 6.1 Safety & Security
  - 6.2 Transportation@
  - 6.3 Education & Training
  - 6.4 Medical
  - 6.5 Canteen
  - 6.6 Housing
- (7) Planning & Development Department
  - 7.1 Information
  - 7.2 Computer
  - 7.3 Filing
- Communist Party Office (8)

- (9) Fully-Owned Subsidiaries#
  - 9.1 Guangzhou Anshin Transportation Company
  - 9.2 Guangzhou Yuanchun Food Godown
  - 9.3 Guangzhou Livestock Foodstaff Factory
  - 9.4 GNFF Research & Development Laboratory
- (10) Other Subsidiaries & Associate Companies#
  - 10.1 Guangzhou Commercial Import & Export Trading Company Limited
  - 10.2 China Jia Guangzhou International Auction Company Limited
  - 10.3 Fanyu Lijiang Resort Garden (Hotel)
  - 10.4 Guangzhou Noodle Product Factory
- (11) Joint-Ventures
  - 11.1 Hong Kong Nanxin Trading Company
  - 11.2 Guangzhou Nanfang (Hong Kong) Flour Company Limited\*
  - 11.3 Spainish Lasi Islands Flour Company Limited
- \* The four production workshops (except No.4 Flour Workshop which is a joint venture with 11.2 above) are treated as cost centres having a workshop manager, a deputy manager, a few technicians and clerical staff. There are three 8-hour production shifts in each workshop. Each shift has a leader, deputy leader, group leaders and workers who are all concerning the production target setting very much. No.2, No.3 and No.4 Flour Workshop have been using imported Swiss plants and machinery since 1993 which can reach daily production of 400 tons in each workshop. Non-production overheads are apportioned among the 5 workshops for performance measurement of the whole cost centre.
- # Most of the subsidiaries and associate companies are similar to the "tertiary enterprises" or "third enterprises" which are conducting businesses other than the core business of flour manufacturing.
- @ Only the production workshops, supporting workshps and transportation fleet have entered into internal responsibility contracts (IRC) with the general manager.
- GNFF had a total of 940 working (all in posts) and 300 retired employees at the end of 1993. It is classified as a "medium size state-owned enterprise" in China. All the employees have signed "employment contracts" with duration from one to ten years since 1993.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

### Section 3 : Financial Indicators

RMB 260M (1994)@

Income before tax : RMB 30M (1992) - 9.4% of sales

RMB 33M (1993) - 8.9% of sales\* RMB 15M (1994) - 5.8% of sales@

Income tax rate : 55% (before October 1992)
15% (from October 1992)#

\* In light of high inflation in Guangzhou (30% in 1993 and 20% in 1994), GNFF expects the profit margin will continue to be declined.

# Since GNFF is a shareholding enterprise located in one of the 14 economic development cities, it can enjoy a reduced income tax rate of 15% instead of 33% applied to the other state-owned enterprises.

@ The significant financial performance decline in 1994 (vs budgeted sales of RMB400M) was mainly due to the effects resulted from the macro-economic control policies implented by the government in July 1993, and also the high input inflation i.e. wheat (27%), electricity (18%), wages (30%) and packaging (40%). In addition, before 1994, GNFF was exempted from sales tax, but as from January 1994, GNFF sales has been subject to 13% of VAT. As a result, pricing policy have not been well planned to capture the changes in sales demand and supply. Another implication of poor financial performance may affect adversely the listing plan in Shanzhen Stock Exchange.

@@ The total assets (fixed + current) have been revaluated once when changing into shareholding in October 1992.

# Section 4: Economic Responsibility Contract System (ERCS)

Guangzhou Nan Fung Flour Mill (GNFF) signed the first 3-year (1988-1990) ERC with the Guangzhou Finance Bureau. Based on the profits of the previous three years and substantial negotiation, the first year target profit was set RMB13.5 million with an annual growth rate of 7%. The income tax for the target profit level was 55% and any excess profit over the target would be subject to 35% income tax.

The adoption of ERCS seperated the management autonomy out from the government and defined the duties, rights and benefits between the government and the enterprise. It made GNFF to be really a self-operating, self-financing, self-developing and self-regulating enterprise and to initiate the motivation of the management and workers.

In 1987, GNFF implemented the "Factory Manager Responsibility Contract" system. After signing the 3-year ERC with the local government, the factory general manager has become the agent or representative responsible to the government (principal), the bureau and all the employees. The ERC set the following quantitative targets over the 3 years:

- (1) total flour production quantities with annual growth rates;
- (2) industrial output values with annual growth rates;
- (3) net profit before tax with annual growth rates; and
- (4) net asset value increase with annual growth rates.

The ERC also stipulated the following management (qualitative) targets as well :

- (1) enterprise grading promotion awarded by the government (i.e. from third class to second class);
- (2) labour production efficiency (i.e output value per worker);
- (3) net profit before tax per employee;
- (4) quality product awards;
- (5) new products development;
- (6) energy and material consumptions;
- (7) technology improvement;
- (8) safety production;
- (9) management techniques;
- (10) manpower training; and
- (11) employees remuneration and welfare improvement.

To facilitate the attainment of the above targets, GNFF has set up regular meetings between the top and middle management; and also guidelines for decision-making procedures.

Subsequently, the second 3-year ERC (1991-1993) was signed with similar terms and conditions as shown above. This second ERC was ceased in October 1992 when GNFF was transformed into a shareholding enterprise and subject to income tax of 15%. Now the only major target agreed with the Guangzhou Food & Oil Bureau is the annual profit before income tax which is also the measuring yardstick for the factory manager under the "Factory Manager Responsibility System".

Compared the present Shareholding system with the previous ERC system, which one is better from the standpoint of the enterprise and the employee? The following scenario can explain the general opinion within the top management of GNFF:

Assume (RMB'000) :	ERC System	Share System
Actual profit before income tax -		
Target Surplus	20,000 10,000	20,000 10,000
•	20 000	20 000
Income tax - ERC (Target 55%) (Surplus 35%)	30,000 (11,000) ( 3,500)	30,000
Share (15%)	, ,	4,500
Profit after income tax Bonus from PAT (15,500 x 23.2%) Dividend pay-out (100%) -	15,500 3,600	22,500
Employees (16%)		3,600
Retained earnings	11,900	
·	=====	
Government dividends retained as lo	18,900	
Loan interest (10.98% $\times$ 80% = 8.784	왕)	1,660
	•	
Total liability to government	•	20,560
	•	=====

#### Observations :

- (1) Assume the employees receive the same monetary benefit of RMB3,600,000 (i.e. ERC system in a form of bonus and Shareholding system in a form of dividend pay-out).
- (2) Government receives less tax in the Shareholding system.
- (3) Under the ERC system, GNFF has RMB11,900,000 retained earnings for future development.
- (4) Under the Shareholding system, GNFF has a total liablility of RMB20,560,000 in which the preferential loan interst (i.e. RMB1,660,000) has to be paid in cash annually, whereas the retained dividend portion will be payable any time upon demand by the government.
- (5) It seems that under the Shareholding system, GNFF has more capital (in the form of loan) or cash to use, but bear in mind that it is a liability to the government and may be repaid upon demand. However, under the ERC system, GNFF has the full autonmy to use the retained earnings left behind.
- (6) For the long term growth, development and security, GNFF's top management prefer to the ERC system rather than the present Shareholding system.
- (7) Under the present Shareholding system, GNFF can transfer more profit after income tax to the "statutory capital reserve" and "general capital reserve", so that less dividend will be paid out and less government loan and interest will be incurred. However, in view of listing potential, high dividend pay-out can paint a rosy picture.

# Section 5 : Planning System '

### 5.1 Organisation Structure

The guiding theme of the organisation structure of Guangzhou Nan Fang Flour Mill (GNFF) is simplicity and accountability. It went to some length in 1992 to create stand-alone business units e.g. the 7 production workshops as semi-independent responsibility centres that are controlled by individual workshop managers with clear lines of authority and responsibility.

Each production workshop is manufacturing different product lines and the production support workshops are providing material preparation, repairs and maintenance, energy and power to the production workshops. Other than these 7 production and supporting workshops, all the other departments are classified as expense centres as well.

Since 1992, GNFF has been decentralizing some planning responsibility to each workshop and department such as formulating their annual plans or budgets and negotiating the internal responsibility contracts. The production and cost control responsibilities primarily lie with the workshop manager but the top management keep a surveillance quantity and quality control on each production workshop through monthly or weekly report.

The selection and appointment of the factory manager and party secretary is still decided by the Guangzhou Food & Oil Bureau and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a predetermined lump sum bonus at the year end (see section 4.5 above).

Since 1992, the factory manager has full autonomy to appoint the chief economist, chief engineer, chief accountant (the three chiefs are equivalent to deputy-general managers) and the other departmental managers. Any major changes of the organisation structure in each division should be initiated by the deputy-general managers and approved by the general manager. However, more autonomy of internal management and operation has been delegated to the deputy-general managers and the chiefs since 1992. And in turn, the deputy-general managers and chiefs have involved their department heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, GNFF has a decentralized structure in which the individual department heads report directly to the general manager, and they play a linking and control role between the departments and the general manager.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

### 5.2 Review Process

In order to promote a democratic and participative management style, GNFF has established a "Staff and Worker Representatives Committee" which holds regular meetings to make the following important decisions:

- long and medium term strategic plans;
- 2. operation and administration policies;
- 3. remuneration and incentive schemes; and
- 4. employees' welfare and benefits.

After operational quality inspection by the middle management and labour union representatives, the committee evaluates the operation and performance of the production function twice every month and recommends remedies and improvements to the factory general manager. In addition, the committee has formed a "Quality Circle" sytem to discuss and implement methods to improve the product quality.

Since changing into shareholding enterprise in October 1992, Guangzhou Nan Fang Flour Mill (GNFF) has implemented a formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). Before the annual planning process starts in October, the board of directors will discuss with the Guangzhou Food and Oil Bureau to ascertain the "profit before income tax" target which is the driving factor for the board and other senior staff to evaluate the internal and external environmental factors in order to determine the annual sales for next year. Based on these preliminary targets, some guidelines are provided to the workshop managers to initiate their own production plans or budgets. Much emphasis is placed on the production targets for the four production workshops which annual plans contained the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

At the end of the calender year, all the workshops and departments submit their annual plans to the Accounting and Finance Department for compiling the "financial plan" or "master budget" before submitting to the Enterprise Management Office for review and discussion by the general managers with the deputy managers and the three chiefs. The "Staff & Workers Representatives Committee" (see below) holds a meeting in January mainly to discuss the gaps between the submitted plans with the targets perceived by the top management. The top management tries to help the production workshops solving their technical, financial and other problems in order to close the gaps as far as possible. Then, further formal and informal meetings and discussions are held between the general manager, deputy-general managers and workshop managers either collectively or individually. This iterative exercise carries on until all the annual plans and contracts are mutually agreed by the board of directors and approved in the AGM (all the employees can attain) held during February. The approved annual production plans were broken down into quarterly and monthly plans to cater for demand and holiday factors.

Before 1992, there was no such formal annual planning review process and the government and in turn the top management gave directions to the workshops and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material and energy consumption, etc. Since 1992, under the legislative changes and market economy promotion, the government has delegated higher automomy to GNFF in formulating its strategic directions. As a result, all the workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan. However, the compromised "profit before income tax target" with the bureau is the primary objective to be accomplished even though directives have to be given from the top to lower levels of management.

Therefore, the board of directors and general manager has inserted less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

In 1990, GNFF has engaged Guangzhou Scientific Reasearch Laboratory to suggest means to improve the operation and management systems. Finally a policy-book was published in October 1991. In this authoritative publication, the following four strategic themes are described in great detail:

- (1) Wholistic improve all the sub-systems (personnel, finance, resources, production, supply, sales etc.) and integrated them as a whole to enhance the economic efficiency. Quality enhancement is the aim, technology improvement is the tool, continuous reforms is the driving force, factory manager responsibility system is the core of management and to seggregate the responsibility down the hirarchy by using IRC.
- (2) Stringent tight management control through enterprise's rules and regulations, technology, management, job standards setting and assessment, remuneration link up with economic effectiveness and efficiency.
- (3) Advancement in business thinking and strategy. The motto is "have somethings which the competitors do not have; have somethings better than what the competitors have" in terms of:
  - 3.1 products high product quality i.e. super refined flour by pursuing the international sandards;
  - 3.2 technology and facilities by improvement and import modern plants and equipment; and
  - 3.3 human resources and expertise recruit young and well educated management personnel and provide them with intensive training.
- (4) Harmony working environment and human relationship, dedicated employees, "humun resource" oriented management style, to motivate employees' sense of belongings and dedication to the enterprise.

GNFF has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets on the other hand. As far as hardware is concerned, GNFF has imported some modern manufacturing plant and equipment from the USA and European countries to replace the old ones since the 1990s. Furthermore in 1988, GNFF established a "Total Quality Management Committee" to oversee the following activities:

- 1. to formulate quality management policies;
- 2. to plan for product quality innovation;
- 3. to design quality responsibility system;
- 4. to collect quality control and cost information; and
- to perform quality audit.

The Quality Control Department is responsible for designing policies, setting production and product standards, testing new products and providing training. The Inspection Department is responsible for controlling the input materials and output products quality, and enforcing the compliance of quality procedures in production. Furthermore, each production workshop has its own inspection personnel to provide initial quality control.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in GNFF still from time to time make suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix in order to ensure the "profit before income tax" as agreed with the bureau can be achieved. Despite this fact, the top management has given some freedom to the workshop managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

The top management follow the financial indicators and performance closely on weekly and monthly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

### 5.4 Long-Term Plans (Resource Allocation)

Since the establishment of Guangzhou Nan Fang Flour Mill (GNFF) in 1960, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system.

The commencement of the economic reforms in 1979 started to allowed GNFF to participate in the 5-year's planning with the Guangzhou Food & Oil Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse.

The changing role of the bureau since 1990 has encouraged GNFF, for the first time, to formulate their own long term strategic plan (1991-1995). However, many internal factors and external uncertainties have affected the validity and reliability of this long term plan which has been subject to review and changes every year. The long term plan was formulated by GNFF's top management without much participation from the middle or lower management although they are consulted during the "Staff and Workers Representatives Committee".

Since then, the top management or board of directors subsequently reviewed the long term plan at the end of each year. Amendments have to be made in view of significant changes in the external environmental factors. Since the early 1990s, the following strategic directions have been laid down.

### (a) Joint-Venture

Other than the import and export trading cooperation with a Hong Kong company, the major direction of joint-venture business is flour manufacturing and export such as the current one with a Hong Kong company (No.4 Flour Workshop) and another one in Spain to supply flour products to the European countries.

## (b) Production Capacity

Relative to the other three workshops, the production plant and facilities of No.1 Flour Workshop were inefficient because they were built in the late 1950s. Since the No.4 Flour Workshop's production started in early 1994, the No.1 Flour Workshop was closed down in mid-1994, and as a result, the maximum production capacity can be maintained at 300,000 tons per annum as from 1995 to 2000. The original workers in No.1 Flour Workshop have been transferred to the other 3 flour workshops by adding one more shift in each workshop.

#### (c) Market Development

To penetrate into the domestic market and capture higher market share, GNFF has established many sales agencies in the major cities in China. In addition, the sales personnel have been seggregated into geographic teams with different marketing strategies and tatics.

The IRC signed with the Sales Department links up the remuneration directly with the sales volume and the accounts receivable (or cash collected) in order to motivate the sales and marketing effort. To explore the overseas markets, selling top quality products to Hong Kong is the first choice after some market research and testings have been done by the joint-venture partner in Hong Kong. Other preferred overseas markets will be the Southeast Asian countries such as Vietnam and also African countries.

The GNFF's top management recognises that market development is the most crucial strategy to revive and sustain the financial performance in 1995 and beyond. Therefore, more market reseach, advertisement and promotion would be undertaken.

### (d) Product Development

Since the present three flour production lines have geared up to the 1990s international standards, GNFF is changing the product mix and more bias to the high end to produce better quality products to satisfy not only the changing demand in Guangdong province, but also export to Hong Kong used by the hotels and high-class restaurants. On the other hand, GNFF has developed a "wheat essense" capsule which is a kind of health food selling domestically at the moment. Another developing product is wheat or barley instant cereal which is getting popular in Guangzhou.

### (e) Sources of Capital

To finance the renovation of production facilities and importation of foreign-made plants and machines require substaintial amount of capital. Apart from joint-venture capital, GNFF has relied very much on bank loan to support mainly the quick return investment (i.e. two to three years). Nevertheless, public listing should be another means to acquire long term capital for business expansion and diversification which are restricted for the time being.

# (f) Computerisation

Personal computers have been used intensively for production planning and control, and also for statistics and filing purposes. However, most of the accounting functions are still performed manually because the major problems are the difficulty to choose a user-friendly accounting software and insufficient training for staff. During the recent visit to Hong Kong, the accounting and finance personnel have learnt a lot from the Hong Kong Polytechnic University and also a few companies. GNFF is planning to computerise the whole accounting and finance department.

But the top management do not have a committed plan to use mini-computer to implement any networking system. Perhaps source of capital and human expertise are the major hurdles.

### (g) Manpower Development

During 1991, GNFF introduced the "Professional and Technical Staff System" which is an open and competitive system for the employees to be assessed for promotion. As a result, 2 employees have been qualified as senior professional staff, 10 as professional staff and 74 as junior professional staff. Furthermore, a policy called "The Best Employee Combination" was promulgated to encourage each individual in a workshop, shift, group, department and team contributing to their best and be fully cooperative. For example, with the consent of top management, an unsatisfactory team member may be transferred out to other teams or suspended working for a period of time for training.

### (h) First Class Enterprise

In 1989, GNFF established an "Organisation Reform Committee" to restructure the whole organisation and prepare for the upgrading from third-class to second-class enterprise awarded by the government. This aim was achieved in 1990 and GNFF is planning to be qualified as a "first-class" enterprise and its accounting system is second class before 2000. To this end, GNFF has laid down strigent guidance in a policy-book which core contents are described after the end of this section below.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Bureau has devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the top management of GNFF is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

#### 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short term planning policy adopted by Guangzhou Nan Fang Flour Mill (GNFF) is "production determined by sales" and "sales determined by targeted profit before income tax" which means that profit before income tax, as agreed in the ERC or even under the present shareholding system, with the Guangzhou Food & Oil Bureau is the initial driving force of all the activities. After transforming into a shareholding enterprise, reference has also been made to the 5-year plan especially to estimate what the sales potential will be from the new product and market situation in the next year. As from October 1992, GNFF has employed the annual planning or budgeting process as described in Section 5.2 above.

Since October 1992, the workshop managers have been involved in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the general manager. However, apart from the sales department, the other non-production department heads do not take part in the annual planning except to be consulted only.

The two most important annual plans are consolidated production and finance budgets of which the latter one is a mean to ensure that the target profit before income tax can be met. Nevertheless the financial or master budget does not involve too much participation from the other non-production departments, but largely based on the guidelines from the top management and the experience of the finance manager. Eventually, the other departments or cost centres are constrainted by their allocated expense budgets. Therefore, it is quite a top-down process in terms of expense budget and also capital budget as well.

In view of the rapid changing market conditions, the budget review period has been shortened from quarterly to monthly. The general manager and his deputy managers and chiefs hold a formal meeting at the beginning of each month to review the financial performance against the master budget and individual departmental budgets. Amendments are made when there are significant factors affecting the overall production, sales and profit targets.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy promulgations have given GNFF more freedom to plan ahead. The government have bureau have completely devolved the short term planning autonomy to GNFF except to agree on the overall profit before income tax target.

The top management have involved the middle management, especially the sale and production functions, in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan or the ERC, and on the other hand, it is an important motivational factor for the workshop managers and department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.6 Internal Responsibility Contracts (IRC)

Guangzhou Nan Fang Flour Mill (GNFF) started the Internal Responsibility Contract (IRC) System in 1989. Before the IRC, GNFF had set production quantity, input/output ratio and electricity consumption targets for the production workshops.

The followings are examples of some IRCs adopted by GNFF:

Department : No.1, No.2 & No.3 Flour Workshops

Year : 1992

Guidelines :

Provided the output quality can attain the prescribed standard, the ultimate performance target to be measured on the three flour manufacturing workshps is "Monthly Internal Profit" which is calculated by deducting actual cost of production from the standard sales revenue. The actual production mix multiplied by the respective standard or market selling prices equals to the standard sales revenue. The monthly group bonus for the whole workshop is determined according to the internal profit achieved every month.

Monthly Internal Profit : (based on target production mix)

Flour	Manufacturing	Factory
No.1	No.2	No.3
6,502	7,220	8,660
6,441	7,110	8,460
61	110	200
x100%	x 72%	x 27%
= 61	= 79.2	= 54
x 11%	x 11%	x 11%
=6.71	=8.71	=5.94
	No.1 6,502 6,441 61 x100% = 61 x 11%	6,502 7,220  6,441 7,110 61 110 x100% x 72% = 61 = 79.2 x 11% x 11%

	c	Flour	Manufacturing	Factory
(RMB'000)	•	No.1	No.2	No.3
# Including :				
Cost of Materials		946	946	1,000
Depreciation		130	203	224
Electricity	(RMB0.37 per KWH)			
Consumables		(standard prices)		
Wages		(budgeted wages)		
Overheads		(direct and indirect)		

@ Because of different production efficiency and mix and selling prices among the three workshops, therefore, the "profit share" is to balance the group bonus to be awarded.

\* Standard or market selling prices are listed below :

				RMB per Ton
Upper Class	-	Blend	A	1,591
		Blend	В	1,474
		Blend	C	1,410
Middle Class	-	Blend	D	1,371
		Blend	E	1,276
		Blend	F	1,207
Lower Class	-	Blend	G	1,020
		Blend	H	618
Wheat Shell				438

The above internal profit targets are based on budgeted production mix and standard costs. The actual monthly internal profits are determined according to actual production mix and actual costs.

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Department : Pastry Workshop

Year : 1989

Guidelines :

In order to further enhance the enterprise reform, improve the production management, and increase the incentives for employees, GNFF has decided to enter into the following internal responsibility contract with the Pastry Workshop as from 1 January to 31 December 1989.

#### Format:

Under the leadership of Factory General Manager (contractor) and according to the targets of the long term plan (1986-1990), the Pastry Workshop Manager (contractee) has the autonomy to self-manage and self-finance its operation, and the performance bonus is linked up with the internal profit actually achieved.

#### Scope :

The major business of the contractee is to manufacture bread and develop new pastry products in order to satisfy the needs of the market, and to improve the economic efficiency of the enterprise.

# Economic Targets :

The following agreed economic targets are based on the actual performance attained in 1989.

(1) (2)	Total pastry production quantity Input (flour) : output (pastry) ratio		294 tons 1.3 : 1.0
(3)	Output passing rate	-	98.5%
(4)	Total sales revenue	-	RMB1.0336M
(5)	Total cost of production	-	RMB0.8997M
(6)	Total selling expenses	-	RMB23,000
(7)	Total sales tax (i.e. VAT)		RMB52,900
(8)	Total annual profit before income tax	-	RMB58,000
	Or monthly profit before income tax	-	RMB 4,833

### Incentive Scheme :

### (1) Basic Wages

The employee establishment of pastry workshop should be 48 (including 8 temporary workers). According to the total wages and economic efficiency linkage system, the monthly gross wages for this workshop should be RMB8,890 (or RMB185 per employee) and could be charged to the cost of production. Then the actual basic wages, overtime premium and meal allowance paid are compared with the standard gross wages (i.e. RMB8,890) and any variance is treated as internal profit or loss to the workshop.

#### (2) Group Bonus

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Let P = actual monthly internal profit before income tax B = actual monthly group bonus to be paid
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If P < RMB4,833, then B = 0 or negative P = RMB4,833, then B = 4,833 \times 75\% = RMB3,625 P > RMB4,833, then B = (P - 4,833) \times 15\% + 3,625 i.e P = RMB6,000, then B = (6,000-4,833)\times15\%+3,625 = RMB3,800
```

#### Others:

According to separate regulations, the following factors may reduce the group bonus to be awarded :

production safety;

production facilities maintenance; (2)

- (3) financial management and evaluation;(4) shortfall of target internal profit; and

political education.

Department Repair & Maintenance Workshop

Energy & Power Workshop

1993 Year

Guidelines

The purposes of this internal responsibility contract are to further enhance the enterprise reform, motivate the creativeness and increase the incentive of the employees.

### Incentive Scheme :

- 50% of the total wages (basic + bonus) is determined (1)according to the performance of the flour production workshops and the workload of the contractee's workshop.
- (2) After satisfying the internal required assignments and duties, the contractees can accept business from outside customers in order to increase revenue and profit.

#### Scope :

- (1) To provide various repair and maintenance (including regular, annual and on-call) services to the manufacturing and raw material preparation workshops.
- (2) To provide and supervise the supply of electricity, gas and water for the whole enterprise.
- Mechanical problems are dealt with by the repair and maintenance workshop, while the electrical problems are (3) dealt with by the energy and power workshop.
- (4) To improve the production technology, renovate the production facilities, and produce and repair spare parts.
- To undertake other jobs as assigned by the headquarters (5) (contractor).

### Wages (Basic + Bonus) :

50% of the total wages (basic + bonus) is determined (1) according to the performance of the flour production workshops and the working hours of the contractee's workshop.

- (2) Monthly budgeted working hours :
   Repair & Maintenance Workshop = 3,000 hours
   Energy & Power Workshop = 2,000 hours
- (3) If the total actual working hours derived from the flour production workshops are less than the budgeted hours, then the budgeted hours are used to determined the wages and bonus.
- (4) If the total actual working hours derived from the flour production workshops are greater than the budgeted hours, then the actual hours will be used to determined the wages and bonus.
- (5) Let S = Monthly average income of flour making employees

  Actual income of all flour production workshops

  No. of employees of all flour production workshops
- (6) Linkage Wages (repair and energy workshops)
  - = S x Budgeted no. of employees x 60%
- (7) Working Hours Wages (both workshops)
  - = RMB0.5 x Actual working hours
- (8) External Work Wages (both workshops)
  - = (Incomes material costs) x 40%
- (9) Total wages = (6+7+8)

### Others :

- (1) All the repair and maintenance works other than the flour and raw materials workshops are arranged by the Production Department. If an individual project requires more than 10,000 working hours, a separate contract should be designed.
- (2) Accepting external assignments should be approved by the Production Department and the incomes should be received by the Accounting Department.
- (3) Due to the time lag between performance measurement and payroll, the above wages are prepaid in the current month and then adjusted in the following month after detail calculations.

- (4) According to the <<Enterprise Internal Wages Distribution Management Regulations>> [Q/(LZ)NFG 9.12], the workshops have the autonomy to distribute the awarded total wages to their individual employees.
- (5) The Production Department should undertake corresponding policies in order to implement the terms and conditions of this contract.

(6) This contract commences from September 1993.

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Department : General Affairs/Transportation Vehicle Fleet

Year : 1993

Guidelines :

Because of inflation and changes in the vehicle fleet, the original internal responsibility contract for 1993 has been revised as follow.

#### Terms & Conditions :

- (1) Due to reduction of number of vehicles, the total targeted milage is reduced from 316,600 km to 300,000 km.
- (2) Due to inflation, the operating, tyres, insurance and other expenses are being increased. Therefore, the total budgeted cost is revised to RMB560,000.
- (3) The delivery charge (internal and external) is increased from RMB0.56 to RMB0.66 per ton-km.
- (4) The targeted profit before income tax i.e. RMB60,000 remains unchanged. If actual profit exceeds the target, the fleet can retain 25% of the surplus instead of 15% as previously agreed. For example, if actual profit is RMB80,000, then RMB75,000 (i.e. RMB20,000 x 75% + RMB60,000) should be handed over to contractor (or headquarters) and the fleet can retain RMB5,000 (i.e. RMB20,000 x 25%) as bonus. If actual profit is less than the target, 25% of the shortfall will be deducted from the wages.
- (5) The above amendments are retrospective to January 1993.

It takes a few months for the general manager, workshop managers, general affairs manager and sales manager to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval endorsed by the annual general meeting in next February. In this negotiation process, the top management do insert influence and suggestion in order to ensure that the ultimate profit before income tax target agreed with the Guangzhou Food & Oil Bureau can be achieved.

The workshop managers and even their shift and group leaders are very eager on this issue upon which they are measured against and rewarded thereupon. The IRCs are reviewed quarterly and revised if necessary in order to enhance the production management such as cost control, quantity, quality etc.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the workshop managers in initiating and negotiating their own IRCs, and also involved the accounting and finance department intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

### 5.7 Management of Interdependencies (Transfer Pricing)

Since each flour production workshop of Guangzhou Nan Fang Flour Mill (GNFF) is independent in manufacturing its own products without any transfer to other factories, the transfer pricing is not applicable. The transfer of some flour products to the pastry workshop for manufacturing bread, the services provided by the supporting workshops (i.e. raw material treatment, repair and maintenance, energy and power), and the transportation services provided by the vehicle fleet do involve transfer prices which are all determined according to the standard or market prices as fixed by the Enterprise Management Office and Accounting Department on a quarterly basis.

### Section 6 : Control System

### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Guangzhou Nan Fang Flour Mill (GNFF) has four levels of management hierarchy:

- (1) Board of Directors (many overlaps with top management)
- (2) Top Management (general manager, deputy-general managers three chiefs)
- (3) Middle Management (workshop managers and department heads)
- (4) Lower Management (foremen and supervisors)

The deputy-general managers and the three chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task which will be explained in the rewards and incentives section at the end.

The major control mechanisms employed by the top management to control the performance of the workshops and departments are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are internal profit and production volume set in the IRCs, although some other qualitative targets (non-financial) are employed. However, these are subsidiary ones which have lower weightings in calculating the group bonus.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of GNFF.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.2 Agreeing Objectives

Guangzhou Nan Fang Flour Mill (GNFF) sets similar objectives for its production workshops: workshop managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. In view of the fierce competition within this industry and the bottom line (profit before income tax) imposed by the top management, the production workshops sometimes feel passive in setting their objectives or targets in the budgets or IRCs because their activities are depending on the sales demand.

A high pressure to achieve the budgeted production and internal profit is put on the workshop managers at the monthly review. They fully understand that their group bonus are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. In terms of expenses, control is tighter and a system of standard cost is going to be implemented. Although the other departments do not have the IRCs, they are constrained by the allocated capital and revenue expense budgets by the top management. In addition to the formal monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

## 6.3 Monitoring Results (Reporting & Performance Measurement)

Guangzhou Nan Fang Flour Mill (GNFF) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly and even weekly basis. All the workshops and departments submit monthly results on standard forms to their respective divisional heads and also to the chief accountant for vetting and comparison with budgets and IRCs. The production workshops are also required to submit production figures to the top management on a weekly and daily basis.

The monthly report format is unique for each department. contents are mainly corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The weekly and monthly actuals are compared with the budgets and IRCs. The qualitative targets are usually subjectively measured by the divisional heads and enterprise management office, and written in the monthly reports as well. These monthly reports are compiled, some of them through the computer, by the accounting department and enterprise management office. Any significant variances (without specifying tolerance limits) are highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the general manager for review. For any serious adverse variances shown on any report, the general manager will contact with the respective deputy managers, chiefs, workshop managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the Monthly Performance Evaluation Meeting of the top management with the middle management, the workshop managers put forward the monthly results for open discussion. The workshop managers and the department heads may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a workshop manager, probably he may be replaced by somebody else. On the other hand, the favourable results are openly praised by the top management.

After the monthly meeting, all the approved results are passed back to the accounting department for calculating the group bonus of each workshop or department for last month and verified by the personnel department. Then the accounting department will process the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization is not well recognised by the top management even though a few stand-alone personal computers have been used for production control, statistics, filing and payroll. There is no plan for implementing a comprehensive integrated management or accounting information system. Perhaps the lack of capital for investment in computer hardware and software and the urgent needs to focus on the marketing strategies put computerization at the bottom of the priority list.

Now, GNFF views a budget or IRC as a contract between the top management and the department or workshop. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

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### 6.4 Rewards and Incentives

Since 1988, GNFF has classified its salaries and wages scale into 8 classes (with points in each class) according to responsibilities, skills and efforts. The monthly salaries or wages, including the bonuses, are floating within the points according to individual performance. The gross salaries and wages are linked up with the targeted profit set in the Economic Responsibility Contract (ERC) in the following manner:

- The target profit in 1988 was RMB12.45 million, then the (1) allowable gross salaries and wages would be RMB2.87 million (23% of profit).
- For 1% increase in profit, gross salaries and wages could be (2) increased by 0.9%.
- If product passing rate was below standard (usually 100%), 50% of any excess gross salaries and wages (i.e. the amount over RMB2.87 million ) should be deducted.
- (4)For every 1% of input/output (wheat/flour) ratio below standard (i.e. 84%), 1% of any excess gross salaries and wages (i.e. the amount over RMB2.87 million) should be deducted.
- (5) For every 10% of electricity consumption over standard (i.e. 65Kwh per ton of flour), 1% of any excess gross salaries and wages (i.e. the amount over RMB2.87 million) should be deducted.
- (6) For every 1% of productivity (i.e. ton of flour per employee) below the last year actual, 1% of any excess gross salaries and wages (i.e. the amount over RMB2.87 million) should be deducted.

The "Basic Salaries and Wages" are determined according to :

- (1)
- seniority (i.e. years of service)
  allowance (i.e. meal, housing, attendance, travelling etc.)
  job skill (i.e. the weighting of job skill and efficiency) (2)
- (3)
- efficiency (this component has increased from 30% to 40%)

Some jobs, such as the packing workers in the flour production workshops and the dock carriers, have employed the "piece rate" wages system. Furthermore, canteen staff's wages are based on its own operating income.

The above wages reforms have the following advantages :

- remuneration is linked up with economic efficiency (i.e. productivity);
- remuneration is according to effort and individual (2) motivation is stimulated;
- remuneration is according to individual performance and "big (3) rice pot" concept has been broken;
- staff are more concerned on production, management and efficiency in order to increase their remuneration; and (4)
- short term behaviour can be avoided. (5)

Furthermore, since 1994, GNFF has unified the basic wages and bonus together which is determined by two elements i.e. post wages (include allowance) and ability wages. Each post has five to six grades according to technical skill assessed annually. The ability wages include the actual performance which may be assessed according to the IRC on a monthly basis. The poor performance of an individual in a group may be transferred out for education and training or other assignments or even leave the enterprise.

Since 1992, GNFF has obtained the autonomy to recruit employees from the labour market without getting the Guangzhou Manpower Bureau involved (in accordance with the Mechanism Transformation Regulations).

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the GNFF is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. If GNFF actually paid wages and bonus above the ceilings, the excess will not be income tax deductable.

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the Guangzhou Food & Oil Bureau will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management). If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of redundant employees may cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Since 1993, GNFF has fully implemented the employment contract system and also the "In-Post Contracts" with most of the employees for periods from one to ten years. This in-post contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages, allowance and bonus.

Without such a contract, that employee is out of job but he or she is still an employee of GNFF and is allowed to receive a basic monthly subsidy of about RMB200. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better. The number of employees have been reduced by 20% since 1992. One way was to transfer some administration staff down to the production workshops to fill some vacancies.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, GNFF believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Finance Control" to "Moderate Financial Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Nan Fang Flour Mill (GNFF) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	High/Medium Corporate	Medium/Low Corporate
Review Process*	High/Medium Corporate	Medium/Low Corporate
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High/Medium Corporate	Medium/Low Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	Medium Corporate	Low Corporate
Internal Responsibility Contract	High Corporate	Medium/Low Corporate
Management of Interdepen- dencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

 $<sup>\</sup>star$  Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992]   	
Low Corporate	(Strategic Control)	(Financial Control)	

### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Nan Fang Flour Mill (GNFF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

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In 1990, GNFF has engaged Guangzhou Scientific Research Laboratory to suggest means to improve the operation and management systems. Finally in October 1991, a book was published laying down the long term (1991-2000) policies to upgrade GNFF into a "first class enterprise" in China. The following is a description of the "Wholistic Management System" which is the core of the whole book.

### (1) Enterprise Management System

This includes operation mechanism, leadership style, organisation structure, personnel affairs and remuneration system. They are tools for strategic formulation and means to enhance the economic efficiency. GNFF's management style is using the "economic responsibility system" which is an important control mechanism to integrate the duties, rights, evaluation and incentive together in order to improve the economic performance. Detials refers to Organisation Structure (Section 2) above.

# (2) Basic Management Jobs

GNFF's Basic Management Jobs are to ensure the proper operation of each management position, to achieve the enterprise objectives and to implement the strategies and decisions laid down by the top management. In fact, GNFF's Basic Management Jobs are the corner stones of the Wholistic Management Concepts. They are the tools for internal operation reforms, production management and modernisation of management techniques. There are seven elements of Basic Management Jobs.

### 2.1 Internal Rules and Regulations

The purposes of designing various internal rules and regulations in GNFF are :

- (a) to facilitate the responsibility system of integrating the duties, rights and incentive together;
- (b) to ensure the realisation of the Factory Manager Responsibility System; and
- (c) to enhance the quality of Wholistic Management Concepts.

These internal rules and regulations cover :

- (a) Factory Manager Responsibility System;
- (b) Basic and Professional Management System;
- (c) Enterprise Management Office (Top Management) Meeting;
- (d) Job/Post Responsibility (Description) System;
- (e) Quality Management System;
- (f) Quality Inspection System; and
- (q) Customer Service System.

The above internal rules and regulations enhance :

- (a) enterprise management standard;
- (b) economic efficiency;
- (c) operation efficiency and quality;
- (d) organisation structure and design; and
- (e) participation, motivation and creativity of employees.

### 2.2 Standardisation System

The initiation behind the formation of a Standardisation Committee led by the Factory Manager since early 1990s was to apply for the Enterprise Graidng Promotion (from third class to second class) as assessed by the government for the state-owned enterprises. GNFF's standardisation system covers the workflows from raw materials input (i.e. wheat) to selling the products to customers. This system is divided into the following three levels:

- (a) management, technical and job standards;
- (b) functional standards to realise the standards in (a) above, for example, management standards include target management, production management, technology management, facility management, energy management; and
- (c) yardsticks to measure the standards in (b) above, for example, energy management is measured by electricity consumed by workshop, shift, group or product.

In the standardisation process, GNFF emphasizes on the "coverage" and "consistancy" characteristics. In 1992, there were 93 management standards, 25 technical standards and 12 job standards.

### 2.3 Quantititive Management

GNFF applies the quantitative management in production, operation and research aspects in order to improve product quality, material and energy consumptions and economic efficiency. A "Quality Management Committee" has been formed and chaired by the Factory Manager. Each production workshop and department has a part-time quantitative controller responsible for implementing the policies and procedures and reporting the actual performance. GNFF has operated a "Quantitative Management Implementation Regulations", having 26 measurement items, to standardise the original records, technical files and measuring instruments. This system focuses on the following six management aspects:

- (a) energy consumption;
- (b) business operation;
- (c) production technology;
- (d) quality control;
- (e) production inspection; and
- (f) safety and environment protection.

The following are some examples of this system :

- (a) apply the ABC theory in classifying 1,000 measuring instruments into 3 categories for recording and control;
- (b) fully inspect the measuring instruments before repair, scrap and replacement; and
- (c) invest nearly RMB1 million in purchasing new and advanced measuring and inspecting instruments to improve the new product testing and trial run, production control, product packaging, quality control and energy control.

GNFF was qualified as "Advanced Quantitative Management Enterprise" by the government in 1991.

### 2.4 Target Management

GNFF's Target Management System is similar to a set of production budgets which are mainly derived from sales forecast based on market demand and government guidance. There is a "Production Target Management Regulations" to govern the procedures in setting the production targets for workshops, shifts and groups taking into account production facilities and technologies of individual units. It also determines the product mix, input/output rate and production quantities. Other target management includes headcount, materials and energy.

### 2.5 Information Management

GNFF has set up an "Information Network System" which is managed by an office with full-time staff handling information collection, recording, analysis and feedback. In addition, each production workshop and some departments have part-time staff responsible for similar information handling procedures. This information covers nearly all operation aspects. It can also collect and report the information on production quantities, input/output rates, energy consumptions, inventory movements, and sales figures on a daily basis.

### 2.6 Recording and Filing System

GNFF has implemented the "Consolidated File Management System" and "Recording Coding System" which are managed by the Filing Section according to the requirements of Second Class Enterprise laid down by the government. The system is divided into the following files:

- (a) product
- (b) plant & equipment
- (c) building & facility
- (d) research & development
- (e) administration

- (f) operation management
- (g) communist party work
- (h) personnel
- (i) accounting
- (j) audio/video information

Some of the above filing 'systems i.e. personnel have been computerised.

### Shifts and Groups

Shifts and groups are the basic production units within a production workshop. Production management should be started from the shifts and groups, and the selection and training of leaders are very important.

GNFF has 72 shifts and groups with one leader and a few supervisors in each of them. Each leader should possess the following five qualities :

- assertive and responsible; (a)
- ambitious and good management skills; (b)
- thorough understanding of production management; (c)
- (d) good interpersonal skills; and(e) at least secondary school academic qualification and rich working experience.

The leader is elected by members of the shift or group and approved by the Production Manager (Chief Engineer). The few supervisors are responsibles for facility, safety, sanity, evaluation, discipline and party work.

Product Quality Assurance System (3)

GNFF always emphasizes product quality in the first place before any other management systems. Product quality should be enhanced continuously which is the prerequisite for economic efficiency, survival and development. The top three quality flour products, accounting for 75% of the total output values, have always been qualified as quality products by the government. Furthermore, they have won quality prizes in many national exhibitions.

The GNFF's Total Quality Control (TQC) System consists of the following four components.

# 3.1 Education and Training

The slogan of "Quality is No.1" is the core of TQC education and training in GNFF. The guiding principles are quality for business development, quality for brand name promotion, quality for economic efficiency. GNFF has been promoting the following "four combined efforts and three channels" in TQC.

combine the "Quality is No.1" concept into the quality (a) management education and training;

combine the general (all staff) and professional (senior (b) staff) education and training in terms of quality control;

- (c) combine the quality control and technical education and training; and
- (d) combine the theory and practice education and training in terms of quality control.

#### The 3 channels are :

- (a) make use of the annual staff and worker meeting (i.e. AGM), workshop, shift and group meetings to promote TQC;
- (b) make use of various kinds of notice boards, newsletters, walls and banners to promote TQC; and
- (c) organise internal and external full-time and part-time TQC training courses for all levels of staff and workers.

From 1987 to 1992, 28 TQC training courses have been conducted and 96% of employees have undertaken these courses with 100% passing rate.

### 3.2 Network System

GNFF has used the following "one network and three systems" to implement the TQC system.

The one network concept means a combination of self-inspection, peer-inpsection and specific-inspection. There are 24 full-time and 12 part-time quality inspectors responsible for quality control in production workshops, shifts and groups, and also some other departments. The production shifts and groups have part-time quality inspectors, whereas the production workshops and Quality Control Department have full-time professional quality control staff. Therefore, the shifts and groups are responsible for the self-inspection, the workshops are taking the peer-inspection, and the QC Department is carrying out specific-inspection on both the products and the production facilities. Furthermore, GNFF invites the Guangzhou Health and Sanity Department and Guangzhou Industrial Product Quality Assurance Bureau to inspect their products on a quarterly basis.

The three systems are organisation assurance system, production process quality assurance system and work quality assurance system which are centered around the product quality assurance.

# (a) Organisation Assurance System

The Total GNFF's Total Quality Management (TQM) Committee is chaired by the Factory Manager and the head of Total Quality Control (TQC) Department. The TQM Committee is responsible for formulating plans and strategies relating to quality management, product quality, quality responsibility, quality information and quality circles.

The TQC Group in each production workshop is responsible for operating the quality control activities according to the plans and standards laid down by the TQM Committee and TQC Department. In 1992, GNFF had 20 registered Quality Circles (QC) of which two of them (No.2 and No.3 Flour Workshop) have been awarded the "Guangdong Province Outstanding Quality Circles".

(b) Production Process Quality Assurance System

There are 6 systems of this Quality Assurance System, namely,

- (i) Quality Information Feedback Network;
- (ii) New Product Trial Run Guarantee System;
- (iii) Production Process Quality Guarantee System;
- (iv) Production Support Quality Guarantee System;
- (v) Consumption Process Quality Guarantee System; and
- (vi) Quality Inspection Guarantee System.

The above sub-systems impose stringent procedural requirements on product/market demand, new product development, product manufacturing, product inspection and product sales.

(c) Work Quality Assurance System

This system is a combination of work procedures, work standards and work assessments to implement the job responsibility system in order to fulfil the operational plans and objectives. The quality performance of all workshops and departments, which is linked up with the incentive scheme, is evaluated in the Monthly Quality Assessment Meeting chaired by the General Manager.

3.3 Rules and Regulations

GNFF has set up a complete set of rules and regulations in order to ensure the operation of the "one network and three systems" as described in 3.2 above. Typical rules and regulations are :

(a) Internal Quality Control Standards

With reference to the assessment criteria for quality products as required by the Ministry of Commerce, GNFF has established the "Flour Internal Quality Control Standards" which are even higher than the national standards. The major objective is to avoid the happening of the following "three rejects":

- (i) sub-standard materials must be rejected;
- (ii) sub-standard work-in-progress must not be transferred to the next process; and
- (iii) sub-standard final products must not be sold.

These stringent standards eventually enhance the product quality and increase the market shares.

#### Monthly Quality Assessment System (b)

In the monthly Quality Assessment Meeting chaired by the General Manager, the quality performance of all workshops and departments is evaluated by a marking system which results are linked up with the incentive scheme. Ways and means to improve every aspect of quality are also recommended and discussed during this meeting.

### Quality Veto Right

GNFF has established the "Workshop Quality Management Bonus Assessment Regulation" to link up the production quality performance with the incentive scheme. The basic formula is :

Quarterly Quality Performance Bonus =  $(A+B+C+D+E+F) \times Q \times Bonus$ 

where, A = input/output rate

B = production quantity

C = electricity consumption

D = QM organisation and record

E = QM performance standard

F = discretionary marks

Q = quality index

Bonus = actual bonus before quality factors

In addition, Q = 100% - J

J = veto index of quality

= (colour + elasticity + water + others) x 1/3
colour = flour colur quality veto index
elasticity = flour elasticity quality veto index

water = flour water quality veto index

others = flour powder and fineliness quality veto index

#### (d) Feedback System

The internal quality feedback system composes of the full-time quality control staff in the TQC Department and part-time quality control staff in every workshop, shift and group. Original records, cards and reports relating to quality management are properly kept and can provide timely and accurate information. A daily QC report on product quality and problems is submitted to the top management for taking corrective actions immediately.

The external quality control system is based on the customers' feedback by the following means :

- (i) annual or bi-annual customer seminar;
- monthly or quarterly customer survey questionnaire; and
- (iii) regular feedback from the distributors in various cities.

### (e) Quality Consultancy

GNFF has employed Guangdong Quality Service Company, Technical Department of Guangdong Food & Oil Bureau and Guangzhou Quantitative Measurement Bureau to provide consultancy on designing and improving the TQM system.

#### 3.4 Technical Measures

To enhance the effectiveness and efficiency of the Inspection Centre, GNFF has utilized RMB370,000 from the production development fund (a reserve fund after tax) to import advanced testing equipment from the USA, Germany, Sweden and Japan. Furthermore, the workshops have used the micro-electronic equipment to inspect the flour output. GNFF has also used the personal computer to automate production statistics, purchasing and sales reports, and wages system.

# (4) Economic Efficiency Assurance System

GNFF has always recognised economic efficiency as the most important operating indicators. The average annual growth of "industrial output value" and "profit before tax" have been 3.19% and 28.32% as from 1980 to 1990. Since 1988, GNFF's "return on capital employed", "profit per employee" and "productivity per employee" have exceeded the required standards of the second class enterprises in China. The contributors to continuous economic improvement are:

### 4.1 New Product Development and Product Mix Enhancement

Developing new products, providing required products, selling quality products at reasonable prices and expanding the sales channels are important means to enhance the economic efficiency of GNFF. Based on the external and internal generated market information, GNFF has been improving its technology innovation, higher quality product development and more product varieties are the successful elements as well.

New product development and product divisification are risky processes which are handled by GNFF's New Product Development and Technology Innovation Management Committee composed of different technical and management personnel.

In parallel with the uprising living standard in China, the demand of high class flour has been increased. Since the 1990s, GNFF has developed 10 brand new of high class flour which have saved a certain percentage of imported flour at an estimated cost of US\$5 million.

# 4.2 Renovation, Introduction, and Innovation of Technology

Technology advancement and scientific management are the two gears for GNFF to bid the keen competition in this industry. They include the following three aspects.

### (a) Technology Renovation

Since 1983, GNFF has renovated 11 facilities of Workshop No.1 and No.2, such as the conveyance (transportation) lines, the pier for shipping in and out, high voltage electricity self-supply, etc. In 1982, a bank loan of RMB500,000 plus RMB100,000 self-investment, GNFF renovated the Workshop No.1 production facility and icnreased the high class flour output rate from 23% to 60%. The increased RMB170,000 monthly profit repaid the bank loan in the same year.

# (b) Technology Introduction

In 1987, GNFF invested RMB18.38 million in introducing an advanced production plant from Switzerland which could processed 400 tons of wheat per day with automated features and computer controlled mechanism. Since the operation of this new production plant in December 1987, over RMB30 million profit had been created in the first three years. Furthermore, this plant could produce 30% higher class flour than the old ones and productivity has been increased by 65%. In addition, a total of RMB300,000 taken out from the reserve has been invested in purchasing 25 advanced ultra-red inspection machines from the USA, Germany, Sweden and Japan to improve the flour quality.

### (c) Technology Innovation

GNFF has experimented many technology innovations to enhance production techniques, materials input control, input and output ratios, wastages of work-in-progress and output quality.

#### 4.3 Market Information

GNFF makes use of market information to do the following in order to ensure all produces can be sold:

- (a) adjust the production mix according to market trends, demands and changes;
- (b) develop multi-sales channels and increase stock turnovers such as to increase retailing shops, distributors and retailers in many cities (mainly the southern provinces); and
- (c) adjust the selling prices according to market conditions and within government pricing policies.

# 4.4 Financial Management

GNFF's top management recognised the important functions of the accounting and finance which can contribute to the success of economic efficiency. GNFF has thoroughly complied with and implemented the <<Accounting Law>> and <<Cost Management Regulations>> to strengthen the accounting management and control systems such as production cost and quality cost controls in order to promote the enterprise accounting standard from one grade to a higher grade as assessed by the government. In fact, GNFF has been awarded Grade 1 of Fundamental Accounting Work by the Guangdong Finance Bureau. The major accounting and finance strategies of GNFF include:

- (a) comply and implement the <<Accounting Law>> and <<Guangdong Province Food and Oil Fundamental Accounting Work Regulations>>. In parallel with the terms and references of "Factory Manager Responsibility System", GNFF has established a set of targets, responsibility and evaluation system to control the whole operation from ordering raw materials to selling final products;
- (b) update and reconcile the accounting records on a daily basis and prepare financial statements on a monthly basis;
- (c) upkeep the accounting filing and information management system by a separate function within the accounting and finance department; and
- (d) modernise the accounting and financial management techniques such as computerization in order to provide accurate and timely information for planning, control, evaluation and decision-making.

### 4.5 Rationalisation and Reform

System rationalisation and technology reform (including work study) are resources consuming activities but they can solve many production and oepration problems in long term. The mechanism is to consolidate the experience in a certain piece of work, discuss any specific problem happened in the work, devise means to solve the problem, implement the solution and review the experience, and start the cycle again.

GNFF has established a committee led by the General Manager to investigate any system rationalisation and technology reform which are linked up with the incentive scheme according to economic efficiency derived. Since the promulgation of the strategy in 1989, there have been 75 technology reforms in which 9 have awarded special bonuses. They have saved RMB2.6 million of costs and one single item has improved profit by RMB1.7 million.

# (5) Resources Saving System'

GNFF consumes over 1,000 tons of wheat and 40,000-50,000 kwh of electricity per day. Of course, any savings from these consumptions will affect the economic efficiency. Through technology innovation, facility renovation, work study, and organisation and method, GNFF has continuously reduced the ratio of input resources (i.e. materials and energy) to output products (i.e. flour). GNFF has been classified as Grade 2 in terms of resource consumptions by the government. The resources saving system is operated in the following manner.

# 5.1 Organisation

GNFF has set up a Resource Savings Committee to design and review programmes for saving different kinds of resources such as raw materials, indirect materials, electricity, water, etc. cost reduction programmes are implemented by the three levels of managemnet including administrative departments, production The Production Manager (Chief Engineer) is workshops and shifts. responsible for resource consumptions relating to the production workshops and the General Affairs Manager is responsible for other non-production resource consumptions. The 6 engineers in the Production Planning Department supervise the situation of resource consumptions in the workshops, shifts and groups which have designated staff overseeing the planned programmes. The TQC Department also includes resource consumption as one of the important control targets. All the staff involved in the resource consumption programmes assess the progress regularly and report any anormalities to the senior management for review, discussion and action.

# 5.2 Management Tools

The following three mechanisms are the management tools to realise the resource savings programmes.

#### (a) Control Mechanism

Since the end of 1987, GNFF has inspected all facilities, plants, machines and equipment to assess their resource consumptions and then set standards for improvements year by year. At the meantime, "Energy Management System", "Electricity Management System", "Electrical Appliance Management System" and "Water Management System" have been established to monitor, control and improve the consumption standards. Furthermore, regular Resource Consumption Analysis meetings, monthly for production workshops and quarterly for production planning department, are held in order to compile reports for top management review and solve any existing problems.

# (b) Incentive Mechanism

The resource consumption standards are incorporated into the Internal Responsibility Contracts, signed between the top management and workshops, as measurement targets which achievements are linked up with the incentive scheme such as bonuses. In general, the wages and incentive system is based on the following 8 economic and technical targets or standards:

- (i) production quantity;
- (ii) output quality;
- (iii) output passing rate;
- (iv) input/output ratio;
- (v) electricity per ton of output;
- (vi) overheads per ton of output;
- (vii) production safety; and
- (viii) other electricity consumptions.

The above targets are evaluated on a monthly basis before determination of wages and bonuses. Since the implementation of this mechanism, the input/output ratio has been increased by 1.85%, electricity per ton of output reduced by 1.76% and production volume increased by 3.9%.

#### (c) Implementation Mechanism

Implementation procedures must be established in order to realise the effects of the resource savings programmes, especially in the production workshops. The production control department compiles detail records of over 670 mechanical and 840 electrical equipment on a monthly basis to provide consumption information. Furthermore, the production control department is responsible for the following types of procedures:

- (i) raw materials control down to individual worker;
- (ii) facilities and equipment daily maintenance, planned repair and regular inspection;
- (iii) facilities and equipment daily and weekly cleaning;
- (iv) facilities and equipment utilisation rates;
- (v) safety measures;
- (vi) facilities and equipment purchase, renovation, renewal and scrap to save resources i.e. electricity;
- (vii) recruiting and training of repair and maintenance staff; & (viii) quantitative measurement equipment for consumption control.

# 5.3 Technology Development

Resource savings must be accompanied with technology development and innovation which are described in three aspects.

(a) Proper control of input material mix and flow can increase input/output ratio by 1%.

- (b) Replace old machines and equipment to save electricity by 6% and water consumption by 4,500 ton per month.
  Renovate the existing facilities and import advanced
- (c) machines and equipment.

#### Two Increases and Two Reductions 5.4

GNFF has started the "Two Increases and Two Reductions" campaign since 1987. The two increases are production and income. two reductions are resource consumption and expenses (overheads). The major factors contributing to the two increases are selling the quality products to the right market at the right price and time. The components of the two reductions include input resource acquisition, requisition, inventory and working capital controls. As a result, the comparable cost of production was reduced by RMB28.18 million in 1990 compared with 1989. A cost reduction competition has also been implemented by setting a benchmark of RMB100 per employee per month.

#### (6) Safety Production Assurance System

GNFF's Factory Manager has said that "the more in depth enterprise reform, the more production development, the higher economic efficiency, then the more production safety measures and controls are required". In recent years, there were no death or serious injury, fire and quality breakdown happened. Furthermore, the working conditions and environment protection have exceeded the government requirements and qualified as a Safety Production Enterprise. \_\_\_\_\_

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

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Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 8
Report Date : 23 May 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

Name of SOE: Guangzhou Nan Fang Building Group Co. Ltd. (GNFB)

Staff Interviewed: Mr Zheng Jian Zhong/Assistant General Mgr.

(No. of years in this enterprise: 12)
Mr Shaw Tim/Accounting & Finance Manager
(No. of years in this enterprise: 13)

Dates of Visits : First Visit - 10 December 1993

Second Visit - 13 August 1994

# Section 1 : History & Background

The predecessor of Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) was the privately owned Da Xin Department Store established in 1918 and was burnt down during the Second World War in 1938. Then the building was rebuilt and named Nan Fang Building in 1954. Its first four floors (6,000 square metres) were used to engage in selling general merchandise, named Xi Ti Department Stores, and in 1973, changed into Guangzhou Nan Fang Building Department Store. Since 1954, GNFB has been the largest department store in South China. In 1979, as one of experimental enterprises in Guangzhou to be empowered higher operating autonomy, GNFB truly entered into a new development phase. Paying tax on profit instead of profit handover, implementing the general manager responsibility system and the economic responsibility system have been successively carried out.

Turning into the 1990s, under the guidance of the Municipal Commercial Management Committee, GNFB has been undertaking new trials, from having only one department store to a large synthetic group enterprise with 16 strategic business units including retailing, tourism, catering, import and export trade and joint venture businesses. In 1992, the number of employees was 5,000, the value of fixed assets amounted to RMB90 million, and the shopping area was over 22,600 square metres selling 80,000 kinds of commodities (10% were imported). In 1993, the total sales was increased to RMB1,050 million from RMB685 million achieved in 1992.

The glorious achievements of GNFB have been established together with the profound concern of the government leaders, the best support of social circles, the preference of consumers and the united efforts of all workers and staff. Since 1993, GNFB's development plans have been to explore Xi Ti business district by using joint-venture capital, to establish a lot of chain shops and co-selling centres, to develop cargohouse and super wholesale market, to enter into the real estate market and financial market, to build up transnational corporation, and to develop overseas market. GNFB is transforming into a modernised business organisation, which has the first class goods, service, selling concept, quality of staff and business diversification.

GNFB has been trying hard to open up overseas market. After gaining the "import and export right" in April 1984, GNFB has successively set up trade ties with some countries and regions, including Hong Kong, Japan, Italy, Burma, USA, France and Nethelands. GNFB is very active in attending many exhibitions of goods, making sister relationship with An Tian Wu (a Japanese famous department stores in Fugan) and also inviting the chief executive of Aa Tian Wu as the management consultant. GNFB has set up a show room and wholesale centre with Italian Santamato Corporation in Barry city.

GNFB develops their enterprise spirits in terms of "Trustworthy, Efficient, Thoughtful and Deligent". The enterprise's culture with its own characteristics has become a cohesive and centrifugal force to maintain a strong team of employees with high quality. GNFB employees always keep looking ahead and are bold in making innovations. Many reforms have been implemented in ahead of the other counterparts in Guangzhou. In 1991, GNFB invested RMB30 million in expanding space and renovating the After fitting up, the shopping area has been department store. increased by 2,500 square metres and 90% of the space has been utilized for open shelves to sell. The reforms of internal profit distribution system, labour and remuneration system, selling strategies have created remarkable effects since 1992 with an increase of 21.6% in sales and 50% in average income for employees. Approved by the municipal government, as one of the experimental enterprises in Guangzhou, GNFB was converted into a private shareholding enterprise in 1992.

GNFB is and will be promulgating the following strategic themes :

- (1) customer is always No.1;
- (2) sincere to customers;
- (3) reputation and goodwill must be maintained;
- (4) joint-development with national and overseas counterparts;
- (5) cooperative and cohesive work force; and
- (6) first class and modern business enterprise.

#### Section 2 : Legal Form & Organisation Structure

Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) has been a wholly state-owned enterprise since 1954 and it was converted into a private shareholding enterprise in 1992 by issuing 25% of the authorized shares to the employees. The local government is the majority shareholder by holding 75% of the shares. Before the legal form conversion, GNFB's total net assets were revalued (by an authorized CPA firm) at RMB116M which was equivalent to 75% of the share-value held by the government. Then, the employees subscribed for an additional RMB39M of new shares which is equivalent to 25% of the total share-value of RMB155M (i.e. RMB39M+RMB116M).

There is a ceiling, imposed by the Ministry of Finance (MOF) and the Bank of China (BOC), that the total shares held by the employees of a shareholding enterprise can not exceed 20%, but GNFB has obtained a special approval to issue 25% of shares to employees. The employees of GNFB had the free options to subscribe from one share up to some limits which are set for different staff according to their grades and seniorities. The shares are not transferrable among the employees or to any outsiders.

All the department stores in China are under the auspices of the Ministry of Commerce which has delegated its supervision role to the provincial or municipal Commerce Bureau. Before 1990s, GNFB was under the administrative leadership of the Guangzhou First Commerce Bureau as the other department stores in Guangzhou did, but since 1989, GNFB has been directly reporting to the Guangzhou Commercial Management Committee which is a standing organisation under the Guangzhou municipal government.

Before the economic reforms started in 1979, the central planning system dictated all planning and control (long term and short term) in the SOEs. Therefore, GNFB had to carry out the commands, including the quantities and varieties of commodities purchased and sold, as directed from the Bureau.

Turning into the beginning of 1990s, the Guangzhou Commercial Management Committee has changed its roles to appoint the chief executives (chairman, general manager, party secretary) of GNFB, and scruitinise the major development projects, mainly long term ones (as stated in section 5.4), recommended by the GNFB. In addition, the Committee is providing marketing information to the retailing enterprises in Guangzhou in order to help them purchase and sell the right products to the right customers at the right time. Furthermore, the municipal government assists GNFB in getting sources of finance such as bank loan to finance long term investments.

The GNFB's top management has experienced that the Committee has been taking away its visible hands from and leaving more operating autonomy to the retailing industry even before 1992 when the mechanism transformation legislation was announced.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of GNFB can be divided into three levels which are listed below.

- (1) Board of Directors (BOD)
  - 1.1 Chairman (also the General Manager) \*
  - 1.2 Deputy Chairman (also the Party Secretary) \*
  - 1.3 12 Directors -

Deputy Party Secretary
Deputy General Manager of Sales
Deputy General Manager of Purchasing
Deputy General Manager of Administration
Deputy General Manager of Planning & Development
Assistant General Manager (also head of Finance)
Chairman of Labour Union
Secretary of Disciplinary Committee
General Manager of Nan Feng Shopping Mall

General Manager of Underground Shopping Mall General Manager of Guang Ke Long Superstore Head of the Legal Department

- \* They are appointed by the government as representatives to the board of directors.
- (2) Headquarters (Under the General Manager)
  - 2.1 General Manager Office (headed by Assistant General Manager)
    - 2.1.1 Internal Audit
    - 2.1.2 Compliance
    - Legal Advice 2.1.3
    - 2.1.4 Computer Centre
  - Finance Department (headed by Assistant General Manager)
  - Marketing & Sales Department (headed by a Deputy-2.3 General Manager)
  - 2.4 Purchasing Department (headed by a Deputy-General Manager)
  - 2.5 Planning & Development Department (headed by a Deputy-General Manager)
  - 2.6 Administration Department (headed by a Deputy-General Manager)
    - 2.6.1 Personnel
    - 2.6.2 Information & Record
    - 2.6.3 Business Centre
    - 2.6.4 Power & Supply
    - 2.6.5 Repair & Maintenance
    - 2.6.6 Security & Safety
    - 2.6.7 Environmental Protection
    - 2.6.8 Education & Training 2.6.9 Medical

    - 2.6.10 Canteen@
    - 2.6.11 Nursary@
    - 2.6.12 Resort House@
    - 2.6.13 Transportation@
  - @ GNFB is considering to convert these business units in 1995 into self-financed profit centres (or tertiary enterprises) which can provide services both internally and externally.
- Department Stores (Under the General Manager Office)# 3.
  - 3.1 Man's Clothing
  - 3.2 Lady's Clothing
  - 3.3 Children World
  - 3.4 Electrical Appliances
  - Audio Visual Appliances 3.5
  - 3.6 Clocks & Watches
  - 3.7 Gold & Jewelry
  - 3.8 Furniture

- 3.9 Cosmetics
- 3.10 Famous Brand Squaré
- 3.11 Gifts & Delicated Goods
- 3.12 Sportsware
- 3.13 Wines & Drinks
- 3.14 Chocolate & Candies
- 3.15 Supermarket
- 3.16 Coffee Hall

# Each department store is an independent profit centre usually having one manager, two deputy managers and some supporting staff for purchasing, marketing, accounting, personnel and transportation functions. They are reporting to and are supported by the respective departments in the headquarters. Each store has entered into Internal Responsibility Contracts (IRC) with the General Manager.

- (4)Subsidiaries (Under the General Manager Office)@
  - 4.1 Nanfeng Shopping Mall
  - 4.2 Underground Shopping Mall
  - 4.3 Nansheng Shopping Mall
  - 4.4 Nantong Shopping Mall
  - 4.5 Taishan Co-selling Shop
  - 4.6 24-Hour Convenient Shop
  - 4.7 Guang Ke Long Superstore
  - 4.8 Nanfang Storage & Transportation Company
  - 4.9 Nanfang Wholesale & Trading Company
  - 4.10 Nanfang Import & Export Company
  - 4.11 Zhuhai Nanxin Industrial Co. Ltd.
  - 4.12 Nanjiang Garment Manufacturing Company
  - 4.13 Nangiao Food Manufacturing Company
  - 4.14 Ye Ming Zhu Hotel
  - 4.15 Pu Ti Yuan Hotel
  - 4.16 Red House Restaurant
  - 4.17 Nanfang Real Estate Development Company

@ Each subsidiary or joint-venture is an independent venture or business unit with its own management staff who are reporting to and supported by the respective departments in the headquarters.

GNFB had a total of 4,000 working and 500 retired employees at the end of 1994. It is classified as a "Large Size SOE" in China.

# Section 3: Financial Indicators

Total assets RMB 155M (1993)Turnover

: RMB 685M (1992)

(1993) RMB1,050M RMB1,300M (1994) Income before tax : RMB 21M

(1992) - 3.1% of sales (1993) - 2.5% of sales '26M RMB

(1994) - 2.4% of sales RMB 31M

Income tax rate 15% (for shareholding enterprises)

The decrease of profit margin in 1993 and 1994 was due to high inflation, higher sales and related taxes (i.e. 17% of VAT and other urban development taxes) and macro-economic policies implemented by the government to cool down the overheated economy since July 1993.

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# Section 4 : Economic Responsibility Contract System (ERCS)

Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) signed its first 5-year Economic Responsibility Contract (ERC) with the Guangzhou Municipal Government in 1987. The major target set in the ERC was "Income Before Tax" with 6% growth rate. GNFB was underwritten to hand over 55% of the targeted "Income Before Tax" per year to the Municipal Government irrespective of actual performance (profit or loss) achieved. If the actual income before tax exceeded the annual target, 16.5% of the excess would be paid to the government and GNFB could retain the majority retained earnings of 83.5%.

For example,

THEOME HEED TON TOTAL ONLD	=====	=====	=====
Income After Tax left for GNFB	4,500	4,770	5,056
Handover to Government (55%)	5,500	5,830	6,180
Budget Income Before Tax (6% growth)	10,000	10,600	11,236
(RMB'000)	1987	1988	1989

If the actual "Income Before Tax" in 1987 was lower or greater than the annual agreed target, then the senario would become as follow:

(RMB'000)	1987 (Budget)	1987 (Actual)	1987 (Actual)
Budget Income Before Tax (a) Handover to Government	10,000 5,500	8,000 5,500	12,000 5,500
(fixed at 55% of budget)			
	4,500	2,500	6,500
Tax on Excess Income			330
(12,000-10,000)x16.5%			
Income After Tax left for GNFB	(b) 4,500	2,500	6,170
	=====	=====	=====
IAT % of IBT (b)/(a)	45%	31%	51%

The "Income After Tax" left for GNFB was transfered to four reserves, namely,

- (1) Production (Business) Dévelopment Reserve;
- (2) Employee Bonus Reserve;
- (3) Employee Welfare Reserve; and
- (4) Special (Standard-by) Reserve.

According to the actual income after tax and the level of bonus reserve, the employees might get an additional bonus at the end of the year. This system would encourage GNFB to enhance its profitability in order to retain more income after tax for business development, general reserve, empolyee bonus and welfare purposes.

After transforming into a shareholding enterprise in 1992, the second ERC (1992-1996 inclusive) was terminated at the end of 1992. As from 1993, GNFB has to pay an income tax of 15%. It would be interesting to compare the taxation impact between the ERC and Shareholding system by taking the performance of 1993 as an example.

(RMB'000)	ERC	Shareholding
Budget Income Before Tax	20,000	
Actual Income Before Tax Handover to Government:	26,000	26,000
ERC $(20,000x55\% + 6,000x16.5\%)$	11,990	
Shareholding (26,000x15%)		3,900
Income After Tax Assume 100% Dividend Declared:	14,010	22,100
to Government (75%)		16,575
Income After Tax left to :		
GNFB's Four Reserves	14,010	
GNFB's Employees as Dividend		5,525
	=====	=====

In terms of remuneration to the employees, if a year-end bonus of RMB5,525,000 (39% of income after tax i.e. RMB14M) under the ERC system was paid to the employees in 1993, then the two systems would be similar. But according to the past experience, it was unlikely to distribute such a high percentage of year-end bonus to the employees. However, under the ERC system, GNFB had the flexibility to transfer the "Income After Tax" among the four reserves of which two of them (development and special reserves) were important for the growth of the business. But under the shareholding system, GNFB would have nothing left for future development if the government decided to declare all the profit after tax as dividend. Furthermore, GNFB has lost the privilege previously allowed under the ERC system to deduct the bank loan repayment from the taxable profit in assessing income tax.

To tackle this potential problem, GNFB has agreed with the municipal government to allow them either:

- (1) to borrow from the government's portion of the declared and distributed dividend as a loan at favourable interest rate (80% of prime lending rate); or
- (2) to declare and distribute less than 100% of the profit after tax as dividend (GNFB declared RMB0.136 per RMB1 par value share in 1993).

In general, GNFB favours the shareholding system under which the staff have become both employees and shareholders who will receive higher remuneration than the previous ERC system. Furthermore, employee's motivation is higher because they have become the owners of the enterprise as well.

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# Section 5 : Planning System

# 5.1 Organisation Structure

The organisation structure of Guangzhou Nan Fang Group Co. Ltd. (GNFB) is similar to the type of "Strategic Control Companies" as mentioned on p.87 of the "Strategic Management Styles" written by Goold and Campbell. Just to quote that section as follow:

"The predominant organizational theme in these companies has been the creation or reinforcement of independent, profit-responsible divisions that can devise their own strategies with little need for coordination between divisions, and that can be held separately accountable for their results. The businesses within these divisions often require coordinated strategies, and this is a prime function for the divisional management level."

The department stores and branches in GNFB are independent profit centres which are allowed to formulate their own short term strategies in the annual planning and budgeting process. The interactions between the department stores are minimal because they are selling different types of goods and commodities. Therefore, they have little need for coordination and they can be held separately accountable for their results. The different sections within each department store require coordinated strategies, such as the relationship between the stationery and toy sections whose customers are largely children. The coordination work among the sections is one of the prime functions for the manager and deputy managers in each department store.

After the conversion into a shareholding enterprise in 1992, the ownership and management of GNFB are supposed to be separated. The top management are vested with full autonomy to plan and control all the operations. Since then, the top management have been decentralizing more responsibility to each department store and branch such as initiating the annual budget and the internal responsibility contract.

The profit responsibility lies with the department store and branch managers who should decide their own strategies in marketing, selling, purchasing, recruiting and training, cost controlling, etc., in order to achieve the targets set in the IRCs on one hand and creat a solid foundation for future sales or profit growth on the other hand.

Most of the members in the Board of Directors (BOD) are employees in the GNFB. It has the disadvantage of conflicts or bias due to dual roles played by the board members, but the advantage is that they understand each facet of the business well. The selection and appointment of the board members are decided by the AGM but they should be approved by the Guangzhou Commercial Management Committee.

In principle, all the top management (general manager, deputy general managers, department heads, store and branch managers) should be appointed by the BOD. Any major changes of the organisation structure in the department store or branch should be initiated by the store or branch manager and approved by the general manager.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, GNFB has a divisionalised structure in which the department store and branch managers report directly to the general manager, and they play a linking and control role between the department or branch and the general manager.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

#### 5.2 Review Process

Since the conversion into a shareholding enterprise in 1992, Guangzhou Nan Fang Group Co. Ltd. (GNBF) has implemented a more formal planning process - for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). This process starts in October (i.e. fourth quarter) each year and ends in February (i.e. first quarter) the next year.

After intensive internal and external environmental studies by the general manager with his deputy managers and the planning department, a preliminary sales target for next year is decided. From this overall target, guidelines are provided by the general manager to the department store and branch managers to formulate their own annual plans and budgets. Other functions in the headquarters have to compile their manpower and expense budgets as well.

The budgets proposed by the department stores and branches are used as the bases for setting the targets in the subsequent internal responsibility contracts. In fact, the IRC is a subset of the annual plan or budget in order to highlight the key variables to measure the performance and determine the group bonus for each department store and branch.

The accounting and finance department validates all the budgets and consolidate them into a master plan or budget for submission to the top management for review. Then, the general and deputy managers, store and branch managers, and functional managers holds a two-day annual planning meeting outside the city (i.e. resort house or hotel). After this long meeting, most of the budgets including the financing plan are basically determined and subject to some amendments in the later formal and informal meetings and discussions. This iterative exercise is finished until all the plans, budgets and contracts are mutally agreed in February. Then the master budget is tabled in the BOD meeting held in February for approval.

Before 1992, the department stores and other functions in the headquarters were also required to participate in the budgeting process, but it was only for compiling the "Financial Plan" and "Commodity Turnover Plan" in standard formats for submission to the First Commerce Bureau annually. Due concerns and focus had not been given to these two pieces of planning documents by both sides provided the ERC's targets could be reached as appeared in the financial plan.

After changing into a shareholding enterprise in 1992, and under the legislative changes and market economy promotion, GNFB has been given higher automomy in formulating its strategic directions. As a result, all the department stores, branches and functions are compelled to participate in the planning process and extend their planning horizon beyond one year.

The top management has been trying to insert minimal interference in departmental planning decisions, and also leave the short and medium term tactical or strategic decisions to the department stores as well. But if the headquarters think that the budget of a certain department store is too conservative, specific direction will be given to the store manager to build in stretch into the targets.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) explicitly spells out its strategic themes, thrusts and suggestions in the following manner which are black and white descriptions inside the Enterprise Promotion Booklet.

- (1) Spirits
  - 1.1 Sincerity
  - 1.2 Efficiency
  - 1.3 Aggressiveness
  - 1.4 Thoughtfulness
- (2) Management Aims
  - 2.1 Customers are No.1
  - 2.2 Reputation is paramount
  - 2.3 Sincere cooperation
  - 2.4 Joint development
- (3) Development Objectives
  - 3.1 Expand the core business (i.e. retailing)
  - 3.2 Diversify the business portfolio
  - 3.3 Multifunctional services for customers
  - 3.4 Different forms of cooperation and joint-venture
  - 3.5 Be a first class enterprise with modern management
- (4) Colours of Enterprise Emblem
  - 4.1 Green full of vitality and hope
  - 4.2 White sincere, pure, care and considerate
  - 4.3 Golden thriving, prosperous and bright future
- (5) Enterprise Song emphasizes the above

The above strategic themes, thrusts and suggestions are explained by the Party Secretary, Mr Wu Xi Hui, in the following article written in August 1992.

(Quote) "The construction of enterprise civilization is one of the objectives of developing the socialist market economy. It is also an inevitable outcome of further deepening the reforms in business enterprise. The successful experience in the past few years has indicated that the reason why GNFB develops so rapidly is because of its specific civilization or culture which is full of vitality and getting employees of different ages and personalities together.

The establishment of business enterprise's civilization or culture should be centred around the socialist business value which is reflected by the enterprise's spirit and business ethics. In so doing, all the employees have to balance personal interests and righteousness, competition and unity, and also to adopt the valuable parts of the traditional moral standards and to develop the special features of the socialist market economy. When GNFB builds its enterprise culture, the essential employee's personalities, such as perception, thinking and style, are all expressed in terms of the four spirits - sincerity, efficiency, aggressiveness and thoughtfulness, and applied them into the whole operation and management process in order to make them become the common beliefs and codes of conduct for all the employees.

"Sincerity" is not only to the customers, but also to the other organisations and individuals who have business ties with GNFB. It is also the norm of internal relationship among the employees and their activities within GNFB. This spirit or strategic theme fully reflects GNFB's business characteristic and morality.

"Efficiency" is to improve the management effectiveness and efficiency through various internal systematic reforms which become unceasing common practice and progress, and open competition for all employees to strive for.

"Aggressiveness" means never lagging behind by keeping constant progress and new development.

"Thoughtfulness" is to encourage innovation and demands every employee to think boldly, diligently and tactfully in order to develop individual's intellegence and vitalize the business and service.

In order to strike these four spirits or strategic themes into the hearts of all the employees, they are not only embeded into the process of management and administration, but also revealed in the enterprise's emblem, flag, song and other activities. Business is the tie and bridge between the production functions and the consumers. Marx has said that "the exchange of commodities is the relations between persons". He has further explained that "the fundamental characteristics of a business enterprise determine its corporate culture and also its image to the general public". "To create the first class enterprise image" is GNFB's management philosophy. The context to be a first class enterprise include the following 6 first classes: (1) commodity; (2) service; (3) environment; (4) management; (5) sales and marketing; and (6) quality of employee." (Unquote)

GNFB's most important strategic thrusts are to :

- (1) improve the service quality;
- (2) enhance the commodity quality and consumer taste;
- be innovative in marketing and promotion; (3)
- (4)develope new selling and distributing channels; and
- (5) create special features in operation style such as to allow customers to return and replace the defective or unsuitable commodities.

To materialise the above strategic themes and thrusts, GNFB emphasizes very much on employee's education and training, quality commodity's guarantee, comfortable shopping environment and excellent service quality, which can contribute to the establishment of enteprise's good reputation to the public at large.

To put all the above strategic themes, thrusts and suggestions into actions, since the early 1990s, GNFB has firstly implemented the following 5 categories of leading reforms and innovations among the other counterparts in Guangzhou:

#### Customer Services (1)

- 1.1 Greet the customers at the entrances.
- 1.2 Set up the customer reception room.
- Provide "Shopping Lady Guide" services. 1.3
- Employees stand up and sell goods. 1.4
- Free delivery of bulky goods to the customers. 1.5
- 1.6 Provide per-call repair services for refrigerator, washing machine, television set, etc.
- Set up the "Holiday Purchasing Club". 1.7
- Set up the "Bargain Price Express Market" in Nanfeng 1.8 Shopping Mall.

#### (2) Service Quality Assurance

- 2.1 Implement customer supervision committee.2.2 Implement customer evaluation activities.
- Implement "Courtesy and Polite Service Regulations" for 2.3 the employees to comply with.
- Organise activities of "Consumer Rationalization 2.4 Proposals".

- 2.5 Set up the commodity quality assurance checking system.
- 2.6 Establish internal service compliance checking system and total service quality management system.
- (3) Public Relations and Promotion
  - 3.1 Organise the exhibition of famous, execellent and new goods.
  - 3.2 Organise the "New Year Arts Variety Show" with the consumers.
  - 3.3 Organise the "Nanfang Historic Exhibition" to show the past, present and future.

### (4) Retail Networking

- 4.1 Establish co-operative department stores with other cities.
- 4.2 Establish underground shopping malls (stores).
- 4.3 Establish the 24-hour convenient shops.
- 4.4 Establish the large area and open shelf superstores.
- 4.5 Create sister relationship with An Tian Wu (Janpanese Department Stores) and invite their executive Mr Ji Zenghao as the management consultant.
- 4.6 Obtain the "import and export rights" of small value goods in retail business.
- 4.7 Takeover a foreign-invested business (Ye Ming Zhu Hotel).
- 4.8 Establish a showroom and wholesale centre in Barry of Italy.

#### (5) Management Information & Control

- 5.1 Employ the standing legal consultants.
- 5.2 Employ the commodity bar coding for computer management and information system.
- 5.3 Implement the "employee contract system" in retailing industry.

As suggested by Goold and Campbell, a distinguishing feature of strategic control companies is the decentralization of strategy formulation responsibility to divisional or business unit level. Thus, broad themes, major thrusts and specific suggestions are generally delivered, if at all, in low key.

Before 1992, the top management in GNFB from time to time made suggestions on specific strategic issues such as commodity varieties, selling prices, promotion tatics and even display arrangements. The top management followed the financial targets as agreed in the IRCs closely on a monthly and quarterly basis and is quick to make suggestions if they do not match the overall long and short term plan.

To facilitate the implementation of the mechanism transformation legislation enacted in 1992, the top management has left more freedom to the department stores and subsidiaries to adjust their strategies and tactics as long as they would not deviate much from the basic themes, thrusts and the annual budget. The puchasing function was decentralised to individual department stores and branches in 1993.

(Please refer to Q5.2.4-7 and Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

### 5.4 Long-Term Plans (Resource Allocation)

The famous Zhujiang (Pearl) River runs through Guangzhou from west to east and divides the city into northern and southern parts. The majority of the trade and business centres are situated in the northern city. The headquarters and main department store of Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) is located at the Southwest (Si Ti) District of the Northern Guangzhou city and is very close to the river. Xi Ti (means west river bound) District is at the southern end of the People's Road along which more and more busy business centres and high-rise commercial buildings are under construction. The north bound of People's Road passes through the present central railway station and the international airport. The future underground, which is expected to start running in 1998, will have a few stations running from the north to the south of this heavy traffic and busy road. As a result, both the numbers of working population and residents in this district has been increased substantially since 1990. GNFB foresees that this trend will further boost their retailing business and some other lines of business should be considered in longer term.

When GNFB was transformed into a shareholding enterprise in 1992, the first mission undertaken by the board of directors was to formulate a 15-year long term plan (1993-2007 inclusive) which was broken down into two periods (i.e. 1993-2000 and 2001-2007). The GNFB's board of directors was trying to define some long term strategies and propose some long term capital projects although they realised that the economic environment in China was changing rapidly. The following three underlying business philosophies have been laid down in this 15-year long term plan.

- (1) Retailing (i.e. department stores, branches and superstores) should remain the core business.
- (2) Retailing-related businesses should be developed in the 1990s and beyond (horizontal diversification).

(3) The business or investment portfolio should be expanded in the 1990s and beyond (vértical diversification).

The following are some projects to be implemented in the first phase (1993-2000) of the 15-year long range plan:

#### (a) Xi Ti Business Centre

Not too far away from the old Nanfang Building (headquarters and main department store), GNFB has acquired a piece of land upon which the largest business centre in Xi Ti will be built. This modernized and elegant business centre or commercial complex will have a total floor area of 180,000 square metres catering for many synthetical functions such as retailing and wholesale business, catering services, entertainment, communication and transportation services, and office buildings. Such a huge project requires billions of capital to be sourced from share listing, right issue, retained earnings and bank loan. This project is started in May 1995. It will take one and half years to demolish the old buildings and resettle the existing residents, two years to complete the premises, and half a year to decorate the interior. Therefore, the whole complex will be ready to use in mid-1999.

# (b) Nanfang Building Redevelopment

A blue-print has been drawn up for redeveloping the present old (over 40 years) Nanfang Building into a over 40-storey double-tower commercial building which will cater not only for the headquarters, department stores and shopping mall, but also office floors for renting out. But under the present tight credit control policy imposed by the government and banks, it is unlikely to acquire billion's of capital for this investment in the next couple of years.

## (c) Expansion of Branches

Additional branches will be established not only in Guangdong province, but also in other provinces or cities (i.e. Beijing, Tianjian, Nanzhou). Joint-venture with other enterprises in Guangdong province will be a major form of expansion in the core business. A cooperative department store, having a shopping area of 2,500 square metre, between GNFB and a electrical household appliance manufacturing enterprise in Zhongshan city (southwest of Guanzhou) started business in early 1995. This new department store is managed and underwritten (e.g. via IRC) by the electrical appliance department store of GNFB. The availability of capital and experienced staff to set up these new ventures are the major limiting factors.

# (d) Superstores

GNFB is the first retailing enterprise in China to open up a "superstore" (or cargohouse super-wholesale market) which is similar to the first one called "Grantmart" set up in Hong Kong three years ago with a large open-self area decorated as simple as a warehouse or cargohouse. Commodities, mainly food and daily necessities, are sold in large quantities with very attractive bulk discounts. The relative low running costs (such as depreciation) and large turnover can maintain quite handsome profits. Therefore, there are now more than five Grantmart superstores in Hong Kong. superstore called Guang Ke Long, which is a joint-venture of three partners including Hong Kong, managed by GNFB has proved to be successful although it is located in the eastern suburb, yet customers are willing to travel a bit further away from the city centre. GNFB is planning to set up one or two more superstores in locations closer to the heart of the city.

# (e) Joint Venture Chain Shops

Other than the 24-hour convenient shops, GNFB is looking for foreign partners, most likely from Hong Kong, to open a few specialized retailing chain shops such as selling clothing, fast food, bakery, ice-cream, gift and stationery etc.

# (f) Commercial Joint Ventures

GNFB is also searching for local and foreign partners (i.e. Hong Kong, Macau, Taiwan, Singapore etc.) to set up a few joint ventures for commercial businesses such as import and export, wholesale, real estate and manufacturing activities. Furthermore, in early 1995, GNFB has established a joint-venture with a Hong Kong finance company to provide hire-purchase service for the customers (including customer credit investigation and underwritting).

# (g) Real Estate Development

GNFB has established a real estate development subsidiary to start off this completely new line of business which mainly involves building and buying commercial buildings for renting out and selling. At the end of 1994, the 13-storey Huanan Building in the Xidan District (a busy commercial district) of Beijing, was completed and the 4 office floors were ready for renting out.

This new building is a joint-veture of GNFB with other three enterprises in Guangzhou but none of them have sufficient capital to run the retail business such as department store in the lower 6 floors and restaurant in the next 3 floors. GNFB has been discussing with the government for injecting or lending new capital.

#### (h) Financial Investments

Other than buying and selling securities as investments in the Shenzhen Stock Exchange, GNFB has been investing into some subsidiaries in order to diversify the business portfolio, such as hotels and restaurants, right away.

#### (i) Overseas Markets

Besides the import and export business undertakings, GNFB is planning to establish joint-ventures with foreign counterparts in Southeast Asian countries (i.e. Malaysia, Indonesia) to explore the retailing and wholesales opportunities. In fact, a joint-venture to establish a department store in Peru of South America, where there are a lot of Chinese and Japanese, has been discussed since August 1994.

# (j) Public Listing

All the above long term plans or projects require substantial fresh capital of which public listing in the Shenzhen Stock Exchange is one of fesible means. GNFB is one of the 10 shortlisted state-owned enterprises in Guangzhou to be listed in 1995 or 1996 depending on the macro-economic control policy of the government which has been cooled down in 1994.

# (k) Education and Training

GNFB's top management realise that in order to facilitate the long term development of the enterprise in 1990s and beyond, education and training for all levels of employees should be emphasized. Regular in-house training courses are conducted on every Tuesday for various disciplines of employees. A collaborated programme between Guangzhou Jinan University and GNFB has successfully recruited a batch of high school leavers and completed the business study degree before they joined GNFB as management trainees in various functions, department stores and branches.

The above long term plans are initiated and executed by the board of directors or the top management of GNFB. The store and subsidiary managers' participation in some of these plans is restricted to the extent of consultation. Therefore, the formulation of long term plans in GNFB is a top-down approach with little involvement from the department stores and subsidiary managers.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

The promulgation of "Market Economy" since 1992 has entrusted more freedom to GNFB for planning ahead on one hand but simultaneously has induced fiercer competition. Now many foreign invested department stores (i.e. Japan, Taiwan and Hong Kong) have been allowed to open up branches in Beijing, Shanghai, Guangzhou and Shenzhen. In addition to the keen competition from the local department stores, GNFB is facing threats from these foreign counterparts as well. But this open-door policy is carefully monitored by the government in order to protect the state-owned department stores such as GNFB whose management skills are not as sophisticated as the foreign department stores. In this respect, the central government has imposed certain restrictions on the foreign invested department stores such as:

- (a) any proposed new branch must be approved by the Beijing central government;
- (b) they are not allowed to perform wholesale business; and
- (c) they are not entitled to special tax concession.

All in all, retailing is the most vulnerable service industry (or so-called "tertiary enterprise") in China because of having a market size of over 1.2 billion consumers. There are too many unstable and unforeseeable political, economical, social and demographical factors affecting the planning vision of GNFB especially the difficulty in long term planning.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

Before 1992, GNFB was required to submit the following two annual plans to the Guangzhou First Commerce Bureau :

- (a) Financial Plan to highlight the incomes, expenses, profits, taxes, loan repayments and balance sheet items.
- (b) Commodity Turnover Plan to highlight the quantities and varieties of commodities to be purchased, sold and carried. (The purchase function is controlled by GNFB since 1990s.)

These two plans were used by the Bureau to exercise its macro economic control on GNFB through directives or negotiation. After the implementation of the mechanism transformation legislations in 1992, these two plans were not required by the Bureau. As from Ocotber 1992, GNFB has used the following annual planning or budgeting process.

In October, the general manager asks the accounting and finance department to provide the year-to-date financial results. He also requests the planning department to supply information concerning the changes in local, national and international economic environment. Then he calls up a board meeting (top management of the headquarters) to review and discuss the following aspects which have direct or indirect impacts on the next year's plan or budget.

- (1) Capability Evaluation
  - (a) Financial performance
  - (b) Financial stability
  - (c) Borrowing capacity
  - (d) Space & facility availability
  - (e) Manpower availability
- (2) Environmental Scanning\*
  - (a) Worldwide economy changes
  - (b) China economy changes
  - (c) Guangdong province economy changes
  - (d) Guangzhou city economy changes
  - (e) Competitor analysis (other Chinese department stores and foreign-invested department stores)
  - (f) Consummer analysis (purchasing power, fashion, taste, service expectation, etc.)
  - \* Most of the environmental information is collected and analysed by the Planning Department through news cuttings, market or customer surveys and consulting experts.
- (3) Shareholder Expectations
  - (a) Guangzhou Commercial Management Committee expectations
  - (b) Board of Directors expectations

The general conclusion of this board meeting is to set a preliminary total sales target expected to be achieved in the next year. Of course, a certain extent of stretch is built into this target in order to enforce the department stores and branch managers to plan their own budgets agressively. Then the general manager notifies this overall target to all the store and branch managers.

The next step is for the department store and branch managers to formulate their budgets by discussion with their own deputy managers and supporting staff. At the beginning of December, the store managers have to send their first budget drafts to the accounting and finance department for screening and consolidation before submitting to the top management in the headquarters for consideration. The rest of the annual planning procedures are described in the review process of section 5.2 above.

Since October 1992, the department store and branch managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the general manager. Furthermore, the approved budgets and IRCs will affect their strategies and tactics for short and medium term developments.

In view of the rapid changing market conditions especially the retailing businesses all over China, the budget review period has been shortened from quarterly to monthly (sometimes ad hoc meetings are held on a weekly basis). The top management in headquarters and all the department store and branch managers hold a formal review meeting at the beginning of each month to review and discuss the financial performance of last month. Remedial actions are suggested to correct any significant controllable deviations from the quarterly budgets. The targets determined in the budgets and IRCs are seldom adjusted unless facing substantial uncontrollable environmental factors.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, the shareholding system, the mechanism legislation and the market economy have driven GNFB spending more effort to plan ahead. The top management have involved the department store managers or even their subordinates (lower management) in the annual planning and budgeting process which on the one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the store managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.6 Internal Responsibility Contracts (IRC)

Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) established its IRC system in 1987 in order to motivate the departments to attain at least the financial targets set in the ERC signed with the government. This IRC system applies to all the department stores and branches.

Since 1992, the major targets set in the IRC are internal profit before tax and turnover which are directly linked up with the wages and bonus for every department store and subsequently the individual employees. The following is the brief description of the policy, implemented in 1992, governing the linkage between the financial targets and remmuneration under the IRC.

#### (1) Introduction

In order to further the enterprise reforms, enhance the motivation of the employees, increase the economic efficiency and employee's remuneration, the headquarters have set the following policy or guidelines for determining the group and individual wages and bonus for each department store.

- (2) Performance Targets Setting Principles
- 2.1 The internal profit targets for different department stores are set according to the seggregation of the total enterprise's turnover (i.e. RMB600 million for 1992), cost of sales and overheads (i.e. rent, electricity, water etc.).
- 2.2 The staff establishment of each department store is based on the number of employees at the end of 1991. The accounting staff of each department store are included in the headcount and the respective group wages and bonus as well, but they are directly reporting to and under the management of the Accounting and Finance Department in the headquarters.
- 2.3 The "floating wages" of each department store is based on internal profit per floor area (square metre), internal profit per employee, and commodity sales trend.
- 2.4 The "basic wages" of each department store is based on the number of employees at the end of 1991 and their grades and points on the wages scale in 1992.
- 2.5 The "floating wages" plus the "basic wages" forms the basis of linkage between internal profit and remnuneration.
- 2.6 Wages per ten thousand of Internal Profit =

Total Floating Wages + Total Basic Wages ----- x RMB10,000 Targeted Total Internal Profit

- 2.7 The "allowance" per employee as fixed by the government is not linked up with the internal profit and is treated as an expense in the profit and loss.
- 2.8 Except the medical allowance and different single-item bonuses, which are based on the number of employees in each department store and borne by the headquarters, the basic wages, bonus, floating wages, post allowance, meal allowance, town gas allowance, hairdressing allowance, housing allowance, electricity and water allowance, telephone allowance, overtime premium, business trip expense, sales expenses, etc. are all treated as wages and allowances and charged to profit and loss of respective department stores.
- 2.9 The entertainment expenses, overtime payments during the government public holidays (7 days in each year), transportation expenses, and additional taxes levied this year are all treated as overheads and charged to profit and loss of respective department stores.
- 2.10 The direct and apportioned overheads such as insurance, employee's welfare fund, pension fund contribution, depreciation, decoration expenses, advertising and promotion expenses, etc. are charged to profit and loss of respective department stores to determine the internal net profit and corresponding total wages and bonus.
- 2.11 The group wages and bonus of each department store is based on the budgeted number of employees and not affected by the actual headcount in each month. The policy of headcount reduction is determined by the personnel department.
- (3) Evaluation of Department Store's Management, Service & Fault
- 3.1 According to the agreed sales or turnover target, the General Manager evaluates, awards and penalizes the management staff (i.e. store manager, store deputy-managers) twice every year. The related policy is laid down separately.
- 3.2 Each department store must strictly comply with the enterprise service regulations, otherwise, the headquarters will give penalty accordingly.
- 3.3 Any fault and misconduct committed by a department store will be handled and penalized according to respective rules and regulations.

- (4) Internal Wages & Bonus Distribution of Department Store
- 4.1 Sales leaders and other non-sales staff remuneration indexes\*:

Store Manager	1.70
Party Secretary	1.70
Deputy-Store Manager	1.55
Deputy-Party Secretary	1.55
Labour Union Chairman	1.55
Assistant Store Manager	1.40
Section Party Secretary	1.40
Deputy-Union Chairman	1.40
Accounting Supervisor	1.30
Operation Supervisor	1.30
Deputy-Section Party Secretary	1.30
Sales Supervisor	1.25
Deputy-Accounting Supervisor	1.25
Deput-Operating Supervisor	1.25
Deputy-Sales Supervisor	1.20
Accounting/General Clerk	1.20
Driver/Porter	1.15

\* Administrative staff wages & bonus = remuneration index x average wages & bonus of sales staff

The above remuneration indexes are subject to review in 1995 because it was experienced in 1994 that the administrative staff's incomes were lower than many sales personnel.

- 4.2 The wages and bonus (floating and basic) of sales staff are directly linked up the the actual sales or turnover. The detail methods and procedures are determined by individual department stores according to real situations.
- 4.3 The wages and bonus of non-sales or administrative staff is based on the average wages and bonus of all the sales staff in the department times respective indexes. The sales supervisors and their deputies can calculate their remuneration according to the average wages and bonus obtained by their respective sales sections or groups.
- 4.4 The group wages and bonus determined and awarded to each department store must distribute to the employees for remuneration purpose only. A certain percentage of the group wages and bonus awarded in a month can be retained for future slack months in order to evenout the fluctuation of employee's take-home pay.

- 4.5 The management of department store can evaluate the service quality, attendance and discipline of individual employee according to respective rules and regulations laid down by the enterprise.
- (5) The budgeted headcount, wages and bonus per ten thousand of internal profit, bases of floating wages and basic wages are jointly determined by the general manager office, accounting and finance department, personnel department and individual department stores.
- (6) Individual department stores should report their internal remuneration distribution methods and monthly distribution status to the general manager office.
- (7) During the implementation of this policy, each department store must strictly comply with the respective rules and regulations of the enterprise, obey headquarters important orders, support the enterprise civilisation and culture development, and ensure quality service in every aspect. The department stores must ensure true and fair accounting records which reflect real financial performance. The department stores must also comply with the physical inventory control system (at least once every week).
- (8) According to individual specific situation, each department store should design its own "employee shift system" and report the details to the personnel department. The department stores should ensure the best personnel combination in each shift to enhance the labour efficiency. The department stores should also keep the standardised opening hours and undertake the employee training programmes on very Tuesday.
- (9) If due to uncontrollable external factors, such as changes of government policies and market conditions, which adversely affect employee's remuneration, the general manager has the right to ajust the wages and bonus to be payable. If these external factors affect the validity of this policy, the general manager has the power to amend the contents or cease this policy.
- (10) This policy takes effect as from March 1992 and will be reviewed at the end of the year.

As mentioned in the planning review process of section 5.2 above, since 1992, the top management have delegated more autonomy to the store and branch managers to formulate their annual plans and IRCs.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Because the department stores and branches in Guangzhou Nan Fang Group Co. Ltd. (GNFB) are all independent with very minimal interactions and interdependencies, therefore, internal transfer pricing does not exist.

Section 6 : Control System

# 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Guangzhou Nan Fang Group Co. Ltd. (GNFB) has four distinct levels of management hierarchy:

- (1) Board of Directors (BOD)
- (2) Top Management (general and deputy-general managers)
- (3) Middle Management (store and branch managers, deputy managers and other functional managers)
- (4) Lower Management (section leaders under the store managers)

Although there are overlaps between the BOD and the top management who are playing dual roles in both levels, nevertherless, the segregation of duties are clearly defined. The general manager (also chairman of BOD) is acting as an arbitrator to harmonize any role conflicts which happen among the members in the BOD.

The store and branch managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). In addition, since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

The store and branch managers are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation, remuneration (distribution of bonus) and even termination of employment. Unlike Beijing and Shanghai, the labour market in Guangzhou is rather free which means employees can choose their new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the terms of the employment contracts.

GNFB has fully implemented the "employment contract system" since 1993 and the "big rice pot" or "three iron bowls" concept has been abolished. If a redundant or badly-performing employee cannot be transferred to another departement store, he or she will be asked to leave the enterprise.

The major control mechanisms employed by the top management to control the performance of the department stores are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are sales and profits set in the IRCs, although some other qualitative targets (non-financial) are employed, however, they are subsidiary and account for only a small portion of the group wages and bonus calculation.

As long as the department stores can meet the financial targets with growth from year to year, the headquarters will devolve the responsibility for strategy development to the stores without much interference.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Moderate Strategic Control" to "Strategic Control" since 1992.

#### 6.2 Agreeing Objectives

Objectives in Guangzhou Nan Fang Group Co. Ltd. (GNFB) emerge from the detailed discussion of the annual plans or budgets with the department stores and branches. The financial objectives stem from the plans, rather than vice versa. This is not to suggest that the objective-setting process is wholly bottom-up although the top management initiates an overall financial target for all the store and branch managers. It is still the primary function of the store and branch managers to formulate their detailed budgets and IRCs. But the top management in the headquarters can and do push and probe for alternative objectives as they see fit. With the long years of experience and information (financial and marketing) gathered by the general manager, he can give suggestions to individual department stores to amend the financial objectives both in short or long term.

Furthermore, the general manager has a holistic view to achieve the overall financial objectives year after year according to the long term plan. Finally, the result is usually a compromise that both headquarters and department can live with.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence : shift from "Moderate Strategic Control" and "Tight Strategic Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Guangzhou Nan Fang Group Co. Ltd. (GNFB) has monthly and quarterly reporting systems to track actual results versus plans or budgets. All the department stores send monthly results on prescribed formats to the accounting and finance department for calculating the profits and comparing with budgets before submission to the general manager for review.

The contents of the monthly report are simpler than the manufacturing industries. The key financial results such as sales and expenditures are the major concerns of the headquarters. The non-financial measurement yardsticks are assessed jointly by the general manager office and the managers of each department store or branch. The comments and ratings of the service evaluation are written on the same monthly reports. These monthly reports are compiled, through the computer, by the accounting department and general manager office. Any significant variances (without specifying tolerance limits) are highlighted in order to bring to the attention to the top management.

For any serious adverse variances shown on any report, the general or deputy-general managers contacts the respective store or branch managers to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the internal decoration and display arrangement).

During the monthly meeting between the top management in headquarters and the store and branch managers, the general manager puts forward the monthly results for open discussion. The store and branch managers may be asked to explain briefly the significant variances and any other potential problems. Infrequent failures in meeting the budget by the store and branch managers can be tolerated as long as they are taking remedial tactics or strategies to put things back on the right track and attain the budget at the end of the year. Of course, if any serious uncontrollable environmental factors happened to hit any department store or branch adversely, the manager should not be blamed.

After the monthly meeting, all the approved results are passed back to the accounting department for calculating the bonus for last month.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Moderate Financial Control" to "Strategic Control" since 1992.

#### 6.4 Rewards and Incentives

According to the Guangzhou Government's policy, the annual gross wages (including bonus) growth rate of all the shareholding enterprises can not exceed either one of the following limits:

(1) "Income Before Tax" annual growth rate; and

(2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, GNFB is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

Under the previous ERC system, GNFB could transfer a certain percentage of its annual profit after tax (or handover to government) to an "Employee Bonus Reserve" which could be distributed as a year-end bonus to the employees according to the overall financial performance and level of this reserve. This kind of flexibility or buffer was lost when GNFB was tranformed into a shareholding enterprise in 1992. In addition, now GNFB is still subject to the above two limits or ceilings and any excess of the limits will be added back to the taxable income. If declared dividend for the employees is not high enough, then, the total annual wages increase can not cover the high inflation in Guangzhou (1993 - 30% and 1994 - 25%). As an interim measure, GNFB has been allowed by the municipal government to exceed the above two limits or ceilings but the excess portion (wages paid) should not be tax deductable.

The average annual gross wages per employee was around RMB9,000 in 1993 and RMB12,000 in 1994. Under the current high inflation rate and the keen competition in the labour market of this industry, it is expected to increase the average annual gross wages to RMB14,500 in 1995.

The "basic wages" is reviewed annually depending on grade and seniority without paying regard to qualification and technical skill. Every point increase on the basic pay scale is RMB10-20, therefore, it is not substantial enough to catch up with the inflation. Obviously, the "floating wages" or "bonus" is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The first part is determined by the Manpower Bureau of the Guangzhou Government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the GNFB which may include housing, meals, travel, education, attendance, overtime, festival gifts etc. The payment of "allowances" is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "floating wages" or "bonus", as described in section 5.6 above, is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to his or her subordinates according to individual performance, such as the sales achieved by a salesgirl in a certain month. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) can be retained in a reserve in order to make up the low bonus obtained during the months of slack season. The payment of year-end bonus, if there is any, is also according to the annual performance of each department store. It is possible that a department store will receive very low or even zero bonus if it performs much below the targets but it seldom happened in the last few years.

In addition to the remuneration paid to the servicing employees, as from 1994, GNFB has to pay 25.5% of the monthly gross wages and salaries to the government for pension contribution. Furthermore, the other benefits in kind, such as medical and education allowances, account for about 16% of the monthly gross wages and salaries. This kind of life-long responsibility, including all the retired employees, is common to all the state-owned enterprises and sometimes it is adding a significant financial burden to the profit and loss account.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Rice Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

GNFB has implemented this contract employment system since 1993 and now all the employees have signed employment contracts from one to three years subject to review and renewal. At the end of 1994, 250 redundant employees have either been transferred to the self-financed tertiary enterprises (i.e. hotels and restaurant) or terminated their contracts. In general, the motivation of the employees has been improved.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, the enforcement of financial objectives has both a stick and a carrot aspect. Evidence of the stick can be found in the reduction of monthly or year-end bonus and even manangement turnover in senior positions. The carrot is represented by substantial increase in bonus and perhaps career advancement. Due to the difficulty of defining long term strategic control objectives because of the volatility of this industry to the market conditions, the control process tends to stress control against budgeted financial results. As mentioned by Goold and Campbell, due to the lack of precise "strategic" targets, the control contract focuses on short term profit and cash flow figures.

Observation of Control Influence: shift from "Finance Control" and "Moderate Strategic Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	Medium Corporate	Low Corporate
Review Process*	Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	Medium Corporate	Low Corporate
Long-term Plans* (Resource Allocation)	High/Medium Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	Medium Corporate	Low Corporate
Internal Responsibility Contract	Medium Corporate	Low Corporate
Management of Interdepen- dencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Moderate Strategic	Strategic
Agreeing Objectives*	Moderate Strategic	Tight Strategic
Monitoring Results*	Moderate Financial	Strategic
Rewards & Incentives*	Financial	Moderate Strategic

 $<sup>\</sup>star$  Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
Planning influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992]	
Low Corporate	[Post-1992]<- (Strategic Control)	   (Financial   Control)	

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Nan Fang Building Group Co. Ltd. (GNFB) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifted from "Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) gradually although it has not yet reached a very strong-form (very low corporate) of strategic control style as suggested by Goold and Campbell.

As a matter of fact, both the degrees of planning and control influences are on two separate continua. The planning influence should run from high corporate, then medium corporate and down to low corporate. Similarly, there should be measurement in between tight strategic control and tight financial control.

Revised: 10 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

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Post-graduate Programme: PhD in Accounting

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: "The Responsibility Accounting In China Research Title

- Towards An Exploratory Framework"

Report Title : Data Analysis 9 Report Date : 26 August 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

\_\_\_\_\_\_\_

: Beijing Chunshu Rectifier Factory (BCRF) Name of SOE

Staff Interviewed: Mr He Gao Hua (Chief Accountant)

(No. of years in this enterprise : 13 years)

Dates of Visits

: First Visit - 31 August Second Visit - 30 August Third Visit - 12 September 1995

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# Section 1 : History & Background

Beijing Chunshu Rectifier Factory (BCRF) is a state-owned enterprise established in 1960. It is the earliest specialized factory in manufacturing power semiconductor devices and electronic convertor and equipment in China. It is also a key enterprise under the administration of the Ministry of Electronics Industry as well as in the Power Convertor Industry in China. Over the past 35 years, BCRF has supplied a huge amount of varied semiconductors and convertor equipment with wide applications to national and overseas customers. Having had accumulated experience in producing and researching in power convertor and equipment since the 1960s, over 20 other enterprises in the power convertor industry have come to learn in BCRF. Under the training and support from BCRF, these enterprises have obtained great development.

In terms of number of employees (1,200 in 1990) and total assets (RMB26 millions in 1990), BCRF has been the leader among the largest six enterprises of this industry in China. Compared with the other competitors in Shanghai, Xian and Qingdao, BCRF has the most varieties and types of convertor products. BCRF is currently producing the following two major categories of convertor products of which over 95% are sold domestically in China.

- (1) Power Seminconductor Devices\*
  - 1.1 ZP Rectifier Diodes (general purpose)
  - 1.2 KP Triode Thyristors (general purpose)
  - 1.3 KK Fast Switching Thyristors
  - 1.4 KS Bi-directional Thyristors
  - 1.5 ZX Rotator Diodes
  - 1.6 CR Series Thyristor
  - 1.7 PB Series Thyristor Module Block
  - 1.8 GTO High Power Capsule Gate Turnoff Thyristor
  - 1.9 GTR Powerline NPN Transistor
  - 1.10 GTR Module Block & Fast Recovery High Power Diodes
- \* The quality of these products have attained the international standards in the late 1980s. The annual total output of these products reached 300,000 pieces in 1990 and was the largest supplier in China.
- (2) Convertor Equipment#
  - 2.1 KGPS Series Thyristor Medium Frequency Power system
  - 2.2 GK Series Silicon Rectifier Equipment (for union and division switch)
  - 2.3 KT Series Thyristor AC Power Controller
  - 2.4 GD(KGD) Series Thyristor (for electorplating)
  - 2.5 GH(KGH) & GE(KGE) Series Thyristor (for galvano-chemistry and smelting)
  - 2.6 KYH Series High Speed Commutation Oxidation Rectifier

- KS Series Power Thyristor Convertor (for adjustable 2.7 speed DC motor drives)
- 2.8 KJP(SCR) & THP(GTR) Series Power Convertors (for adjustable speed AC motor drives)

# The annual total output of these equipment were over 2,000 sets in 1990.

BCRF does not have the import and export right conferred by the government because less than 5% of the above products were exported to the Southeast Asian countries and nearly all the raw materials and components are produced in China. It is the government's policy to be self-satisfied the demands in this industry without any imported products from overseas. Therefore, BCRF's major marketing strategy is to penetrate and explore the domestic markets.

Since the late 1980s, BCRF has been importing international advanced technology from the UK, USA and Japan in manufacturing its various types of products. While making effort in research and development, BCRF has pursued modern management in order to produce high quality, multi-applicable, reasonable price and prompt delivered power semiconductor devices and convertor equipment for every end-user.

nearly all the manufacturing enterprises in this industry were loss-making mainly because of :

- (a) lack of sources of capital to replace the old plant and machinery due to the macro-economic control policies implemented since July 1993;
- (b) the existing products could not suit the changing demands in the national market;
- the cost of production is high mainly due to inflation of (c) raw materials and wages, and also small batch of production but incurring high fixed costs (i.e. set up, scheduling); the selling prices cannot be increased in line with
- (d) inflation in order to maintain the market share;
- the end users prefer to import the same products from overseas suppliers at similar prices but higher quality; and
- the incompetent leadership ability of the top management. (f)

In 1988, BCRF obtained a bank loan of RMB29 million to procure a set of machines from the UK for producing a series of new products. However, most of these products are still keeping in the inventory and as a result, 60% of the bank loan is still outstanding now. Of course, the loan interest affects the profit and loss account adversely. Adding up with the other working capital bank loan, BCRF paid RMB2.8 million of bank interest in 1994.

BCRF is affected by the above 6 factors at present especially many large infra-structure projects, like the underground railways to be built up in over 10 big cities, are intending to purchase the electronic converter equipment from overseas suppliers. In competing with the overseas competitors, BCRF's cost of production may be even higher, and as a result the selling prices are not competable. Therefore, it is very difficult to explore the overseas markets.

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### Section 2 : Legal Form & Organisation Structure

Beijing Chunshu Retifier Factory (BCRF) has been a wholly state-owned enterprise since its establishment in 1960 and it does not have a concrete plan to convert into a shareholding enterprise in the next few years because of the following reasons:

- (1) stringent rules and regulations governed by the Ministry of Finance (MOF) and the Bank of China (BOC);
- (2) geographically closer to the central government with tighter control on enterprise privatisation than the other coastal cities such as Tianjin, Shanghai, Xiamen and Guangzhou;
   (3) insufficient strength in terms of financial performance,
- (3) insufficient strength in terms of financial performance, market potential, product development and accounting control; and
- (4) social responsibility to staff such as laying off employees after privatisation.

Since 1991, the government has selectively approved 3,600 of large and medium size SOEs, which have good financial performance track records, to transform into shareholding enterprises. BCRF expects shareholding conversion should be the future prospect in view of promulgating market economy and raising capital.

Since BCRF is a wholly state-owned enterprise, it is under the administration of the Beijing Municipal Government and the Beijing Instrument Bureau. Under the central economic planning system before the 1980s, BCRF's planning and control systems were dictated by these authorities and it was just acting as a vehicle (or a cost centre) to carry out the activities as scheduled by them.

In 1983, the Beijing Instrument Bureau was transformed into a quasi-government body called Beijing International Instrument Corporation (BIIC) as an initial step to delgate the governing role to this self-regulated institution composed of all the power and electronic instrument manufacturing industries in Beijing.

Since then, more autonomy in terms of planning, operation, control and pricing decisions has been authorised by the Beijing Government to the BIIC. Turning into this decade, BIIC's major roles played for its subordinate enterprises are to :

- appoint the factory manager (or general manager) and the (1) communist party secretary;
- (2) maintain macroeconomics control on the 5-year's plans suggested by its enterprises;
- provide guidance on product development, technology improvement and market information; and (3)
- (4)act as a bridge or facilitator between the government# and its enterprises in policy matters such as bank borrowing, capital investment, import and export autonomy, taxation, legal form transformation i.e. shareholding, etc.
- Some of the issues have to be discussed and approved by the Beijing Commission of Economic Reform as well.

In responding to and implementing of the "SOE Operation Mechanism Transformation Regulations" enacted by the People's Congress in July 1992, the BIIC has delegated the planning and management responsibilities to BCRF although quarterly and annual reports have to be submitted to the BIIC for review. However, it is a learning process for the top management to exercise this power and get away with from the old central planning system. concern very much the outcomes and effects on the employees and try to avoid rocking the boat too much or taking too much risk.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of BCRF can be divided into 8 divisions under the direct control of the Factory Manager who has an Enterprise Management Office. The departments of the 8 The departments of the 8 divisions are listed as follow:

- Production Division (headed by a Deputy-Factory Manager)
  - Production Workshop No.1 Power Semiconductor Devices
  - Production Workshop No.2 Convertor Devices 1.2
  - Production Workshop No.3 Convertor Equipment Assembly\* 1.3
    - Production Workshop No.4 Fabrication & Processing\* Production Workshop No.5 Materials Handling\* 1.4
- Technical Support Division (headed by the Chief 2. Engineer)
  - 2.1 Production Planning Department
  - 2.2 Production Technology Department
  - 2.3 Environment & Safety Department
  - 2.4 No.1 Product Design Department
  - 2.5 No.2 Product Design Department
  - 2.6 Power & Energy Department
  - Computer & Information Department 2.7

- Quality Control Division (headed by a Deputy-Factory Manager) 3.
  - Quality Management Department
  - Product Inspection Department 3.2
  - Repair & Maintenance Department
- Marketing & Sales Division (headed by the Chief Economist) 4.
  - Marketing Department
  - 4.2 Sales Department
- Purchasing & Supply Division (headed by a Deputy-Factory 5. Manager)
  - Purchasing Department
  - Inventory & Supply Department
- Finance Division (headed by the Chief Accountant) 6.
  - 6.1 Accounting Department
  - Internal Audit Department
- Manpower & Wages Division (headed by a Deputy-Factory Manager 7.
  - 7.1 Personnel Department
  - Education & Training Department
    - 7.2.1 Technical Training School
- Administration Division (headed by a Deputy-Factory Manager) 8.
  - 8.1
  - Security Department
    Estate & Development Department
  - General Affairs Department
    - 8.3.1 Medical
    - 8.3.2 Canteen
    - 8.3.3 Nursary
- 9. Communist Party Office (the Factory Manager is also the Party Secretary)
  - 9.1 Discipline & Supervision
  - Political Education 9.2
- 10. Labour Union Office
- \* These 3 production workshops are operating in the new factory located in the suburb of Beijing.

BCRF had a total of 970 working employees (compared with 1,200 in 1990) and 600 retired employees at the end of 1994. It is classified as a "medium size SOE" in China.

# Section 3 : Financial Indicators

Total assets : RMB 90M (1994)
Turnover : RMB 41M (1992)
RMB 33M (1993)

RMB 21M (1994)

RMB 22M@ (1995 forecast)

Income before tax : RMB5.2M (1992) - 12.7% of sales

RMB 0M (1993) - breakeven (RMB4.6M) (1994) - loss making\*

(RNB4.5M) (1995 forecast)

Income tax rate : 15%# (before 1996)

33% (from 1996)

@ The rental income of RMB8 million (see 5.4g below) is not included but treated as an extraordinary income. Eventually, there will be a profit of about RMB3.5M (i.e. RMB8M-RMB4.5M) in 1995.

\* The decrease in income before tax to breakeven and even incurrance of loss in 1994 were due to high inflation, depreciation and loan interest, unsellable products, inefficient management, insufficient new products and the change of fully absorption costing method to manufacturing costing method under the new enterprise accounting regulations implemented since July 1993. The outstanding bank loan in 1995 was almost RMB30 million.

# BCRF enjoys a lower income tax rate compared with the 33% levied on the other state-owned enterprises because it is treated as a hightech manufacturing enterprise which can retain more earnings for research and development, and also replace the old plant and equipment. Furthermore, since 1992, BCRF has been allowed to depreciate the fixed assets over the standard 3% and provided 1% of sales for research and development. The net VAT (output tax - input tax) was about 9% in 1994 compared with 8% in the past. Without disclosing the exact amount, the chief accountant has admitted the fact that bad and doubtful debts are quite serious in BCRF. He has complained that VAT has to be paid on one hand while cash cannot be received from debtors on the other hand. But this situation was changed in 1995 by paying the net VAT upon receiving cash from the debtors.

# Section 4 : Economic Responsibility Contract System (ERCS)

Since 1986, the Chinese government has actively promoted the ERCS to the state-owned enterprises with an aim to enhance their economic efficiency (over one-third of them were running in losses) through the participation in the profit sharing. The first stage of the ERCS development was from 1986 to 1990. the first three years of this stage, ERCS created positive effects such as the government revenue and the labour remuneration were both increased. However, in the following two years, due to the macroeconomics contol policies adopted by the government to curb down the overheated economy, the market demand for products and services declined and as a result, a lot of contracts could not be fulfilled. Therefore, during the second stage (1991-1995) of the ERCS development, many enterprises were not willing to enter into contracts with the government in 1991. Then the government had to give more favourable terms and conditions to the enterprises in order to induce them entering into the contracts.

Under the above situation, the Beijing Chunshu Rectifier Factory (BCRF) entered into an ERC with the Beijing Municipal Government represented by BIIC in 1992. It is a standing contract without duration (time limit) specified but subject to review by both parties every year. The terms and conditions of this contract were summarised below:

- (1) income tax rate was 15%
- (2) income after tax was split 40:60 between the government and the enterprise (the split was 60:40 and 50:50 before 1992)
- the enterprise (the split was 60:40 and 50:50 before 1992)
  (3) income after tax was subject to two local taxes, i.e.
  energy and transportation development tax 10%
  government budget adjustment tax 15%
- (4) total wages and bonus linked up with economic efficiency
- (5) deducted bank loan repayment of RMB1 million from the income before tax
- (6) accerlarated depreciation by 3%\*
- (7) provided 1% on sales for new product development\*
- \* These two terms were stopped in 1994 after the implementation of the new accounting standards. Actual depreciation and development expenses are now written off to the profit and loss.

The top management (factory manager and the deputies) of BCRF together with BIIC have had some negotiation and discussion with the government in setting the terms and conditions of the ERC. BCRF believed that the ERC could enhance their motivation and then the economic efficiency. Besides, more profit could be retained for product and market development.

In 1989, BCRF obtained a RMB10 million bank loan to build a new factory in the suburb of Beijing. The new premises catered for 3 production workshops which started operation in 1991. One of the favourable terms provided in the ERC was to deduct the bank loan repayment from the taxable income before income tax assessment.

For example at the end of 1992, Income before tax Bank loan repayment	RMB5,200,000 1,000,000
Taxable income Income tax (15%)	4,200,000 630,000
Income after tax Income handed over to government (40%	3,570,000 1,428,000
Income retained by BCRF Bank loan repayment added back	2,142,000 1,000,000
Actual income retained by BCRF (60% of income before tax)	3,142,000

Therefore, both the contractor (Government) and contractee (BCRF) are satisfied with the present arrangements in the ERC.

In addition to the above terms and conditions, the production value, inventory level and turnover targets were also agreed between BIIC and BCRF for 1995.

# Section 5 : Planning System

#### 5.1 Organisation Structure

In consideration of the relatively small operation of Beijing Chunshu Rectifier Factory (BCRF), the guiding theme of the organisation structure is simplicity and accountability. It went to some length in 1992 to create stand-alone business units e.g. the 5 production workshops as independent semi-profit centres that are controlled by individual workshop managers with clear lines of authority and responsibility. Based on the Internal Responsibility Contracts, they are accounted for the production quantities and costs, as well as the fixed and working capital.

Three production workshops are manufacturing different parts and components for the other two assembly workshops, therefore, internal transfer pricing is involved among the five production workshops which will be described in another section below. Other than these five production workshops, all the other departments are classified as cost centres.

Since 1992, BCRF has been decentralizing more planning responsibility to each workshop and department such as initiating the annual budget and the internal responsibility contract. The profit responsibility primarily lies with the workshop manager but the top management keep a surveillance cost control on each production workshop through monthly or weekly report.

The selection and appointment of the factory manager, party secretary and some deputy factory managers are still decided by the Beijing International Instrument Corporation (BIIC) and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a lump sum bonus at the year end. At the end of 1992, the BCRF's factory manager was awarded an incentive bonus of RMB7,000.

Since 1992, the factory manager has full autonomy to appoint most of the deputy-factory managers (the three chiefs are equivalent to deputy-factory managers) and the departmental managers under the 8 divisions. Any major changes of the organisation structure in each division should be initiated by the deputy-factory managers and approved by the factory manager. However, more autonomy of internal management and operation has been delegated to the heads of divisions (deputy-factory managers) since 1992. And in turn, the deputy-factory managers have involved their department heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, BCRF has a decentralized structure in which the individual divisional heads report directly to the factory manager, and they play a linking and control role between the divisions and the factory manager.

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

#### 5.2 Review Process

Since October 1992, Beijing Chunshu Rectifier Factory (BCRF) has implemented a regular formal planning process to review, discuss and sanction the annual plan or budget and the internal responsibility contracts (IRCs). First of all, the factory manager reviews the long term plan and ERC, and evaluates the internal and external environmental factors, and then discusses with his deputy managers and three chiefs in order to determine the annual sales and profit targets for next year.

Based on these preliminary targets, some guidelines are provided to the workshop managers and other department heads for them to initiate their own plans or budgets for the next year. As far as the five production workshops are concerned, their budget proposals contained the key criteria (i.e. production quantity and working capital employed) to be used as the measurement yardsticks of their subsequent internal responsibility contracts. The other non-production divisions and departments have to compile their annual work plans and expense budgets as well.

During November, the Enterprise Management Office under the direction of the factory manager receives all the budgets and plans for validation and consolidation into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions are held between the factory manager, deputy-factory managers, three chiefs and department heads either collectively or individually. This iterative exercise carries on until all the plans, budgets and contracts are mutually agreed and approved in the AGM (all the employees can attain) held during next February. Then the enterprise management office publishes a set of the final master plan and sends to the top management and all the department heads.

Before 1992, the annual budget review process was not as dedicated and formal as described above, and the BIIC and in turn the top management gave directions to the workshops and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, etc.

Since 1992, under the legislative changes and market economy promotion, BIIC has delegated higher automomy to BCRF in formulating its strategic directions. But in view of the present economic downturn in this industry, the BIIC now retains some controls in planning and operation including the manpower and wages increase.

Nevertheless, all the workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan. Therefore, the factory manager has less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), As far as strategic themes are concerned, the Beijing Chunshu Rectifier Factory (BCRF) has explicitly written the following in the introductory section of the policy manual for Internal Economic Responsibility System adopted since 1990.

- (1) to implement the management by exception principles;
- to enhance product and market development; (2)
- (3) to maintain flexible operation to cater for changes;
- to ensure proper marketable product mix; (4)
- (5) to ensure production target with good quality;
- (6)
- to guarantee safety production; to measure monthly internal profit of production workshops; (7)
- (8) to speed up the working capital cycle and cash collection;
- to emphasize the cost reduction activities; and (9)
- (10) to provide more education and training for employees.

The above strategic themes are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise.

BCRF has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets (i.e. Southeast Asian countries) on the other hand. the Quality Control Division was separated from the Technical Support Division and became an independent unit. Furthermore, it is clearly stipulated in the IRC that "quality" has the veto power in determining bonus. As far as hardware is concerned, BCRF has imported some modern manufacturing plant and equipment from the UK, USA and Japan at a cost of over RMB30 million since the 1990s.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

Before 1992, the top management in BCRF from time to time made suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. The top management followed the financial indicators and performance closely on monthly and quarterly basis and were quick to make suggestions if they did not match the overall long and short term plan.

To facilitate the implementation of the legislation in 1992, the top management have given some freedom to the workshop managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they would not deviate much from the ultimate sales and profit targets. Nevertheless, the top management still provide guidelines and suggestions to the workshops and departments in the planning process.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

#### 5.4 Long-Term Plans (Resource Allocation)

Since the establishment of Beijing Chunshu Rectifier Factory (BCRF) in 1960, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system. The commencement of the economic reforms in 1979 started to allowed BCRF to participate in the 5-year's planning with the BIIC and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomics control and adjustment" as an excuse.

The changing role of BIIC since 1990 has encouraged BCRF, for the first time, to formulate their own long term strategic plan (1991-1995). The major contents of this long term plan included capital projects, product and market development which needed to be dicsussed with the BIIC who have been exercising macro-economic controls and provide directives and targets i.e. technology expertise and quality standards. BCRF has also been allowed to carry out fesibility studies to ascertain the possibility of success in the capital projects to be undertaken.

Since then, the top management reviewed the long term plan at the end of each year. After lengthy discussion, another new 5 year plan will be emerged. In fact, a rolling 5-year plan is in operation. In the current 5-year plan (1993-1997 inclusive), the following strategic directions have been laid down.

### (a) Production Facility

Since the early 1990s, a new plant has been established in a suburb area of Beijing to house the three production workshops manufacturing the parts and components for the assembly lines in the old premises. To go in line with the huge and long term environmental protection plan, most of the manufacturing industries have been and will be moving out from the city centre, which is getting bigger and bigger, to the suburb districts. Therefore, since 1993, BCRF is planning to relocate the existing old factory to a new site within the 9th National Economic Planning period (1996-2000) but it is very much depending on the availability of capital funds such as fresh injection from the government. One possibility is to sell the land use right to the foreign investors in exchange for source of finance.

### (b) Competitive Edge

The major two domestic competitors are located in Qingdao (Northeast Coast) and Shanghai (Central Coast) who are two of the 14 economic development cities established since early 1980s. They are benefited from the following favourable policies approved by the central government:

- (i) lower income tax;
- (ii) less municipal taxes;
- (iii) more import and export autonomy;
- (iv) lower import and export taxes;
- (v) more sources of finance for capital investment; and
- (vi) generous land and building use rights.

Therefore, in order to sustain the market share and a competitive edge against these counterparts, BCRF has to enhance its product quality by various means as described in the strategic themes and thrusts section above.

#### (c) Research and Development

Related to the competitive edge strategy mentioned above, BCRF has taken the following steps to enhance its R&D function:

(i) to renew and upgrade the production equipment and facilities;

- (ii) to improve the product design by using value analysis;
- (iii) to investigate and improve the production technology; (iv) to strengthen the manpower and technical skills in the research and development department; and
- to provide more training in research and development.

However, less and less new products have been launched since 1994.

#### (d) New Product Development

BCRF has emphasized very much on the new product development which is one of the major missions of the two product design departments and their performance is partly measured against this objective.

#### (e) Overseas Markets

BEEF and BIIC are working hard to negotiate with the government in obtaining the export right (also the foreign exchange usage right) so that they can explore the overseas markets such as Southeast Asian, South America and Eastern European countries.

#### (f) Cost Reduction

In order to enhance the competitive edge and to increase the profitability, BCRF has taken the following measures to reduce the total cost of operation :

- to cut production costs by value engineering;
- (ii) to set up a standard (target) costing system;
- (iii) to reduce the total number of employees;
- (iv) to reduce overheads e.g. heat, light, etc.; and
- tighten functional budgets i.e. accounting, (v) personnel, sales, purchasing, etc.

A portion of the costs reduced or savings will be distributed to the employees as a kind of bonus.

#### (q) Land Use Right

In 1995, the land use right of a piece of land (8,000 square metre) inside the factory site was leased to an enterprise in Guangdong province for constructing a 5-storey commercial building with a small motel inside. The annual leasing income of about RMB8 million made a significant contribution to the profit and loss account. Another piece of land of 10,000 square metre is ready to lease out in order to bring in an additional RMB10M extraordinary income.

The current 5-year plan was compiled after long discussions between the BIIC and the BCRF's top management. It was eventually agreed and reflected in the ERC signed with the municipal government. Although the department heads (middle management) have been involved in this planning process, they were playing a consultation role only. Furthermore, the workshop managers and department heads are mainly concerned with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the factory manager at least on a monthly basis. Therefore, the long term planning and review process are using a top-down approach in the belief that the factory manager (over 20 years in the plant) has better experience and knowledge of the external environment and even the internal operations of the workshops and departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the BIIC has devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the top management of BCRF is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only. However, many detrimental factors, as described in the History and Background section, are now making the implementation of the above long term plans very difficult if not impossible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.5 Short-Term Plans/Budgets (Resource Allocation)

Since the 1990s, the general short term planning policy adopted by Beijing Chunshu Rectifier Factory (BCRF) is "production determined by sales" which means sales is the initial driving force of all the activities. Reference should also be made to the 5-year long term plan especially to estimate what the sales potential will be for the newly developed product(s) in the next year. As from September 1992, BCRF has employed the following annual budgeting process.

The factory manager and the marketing and sales division are very active in performing some marketing activities such as going to the trade fairs and visiting the exisiting and potential customers with his sales and marketing staff. In September, he evaluates the present and future internal financial, production and human resources with the deputy managers and the three chiefs. He also scans the external opportunties and threats with the sales and marketing staff. Tentatively, the factory manager determines a set of sales mix figures (i.e. sales budget). These sales forecasts will be provided to the respective departments, more importantly to the production workshops, for them to initiate their own budgets.

The first budget submission is in early November and the enterprise management office consolidates all the pieces into a master budget (financial and operation plan) for factory manager's review before the first budget meeting is held with all the workshop managers and department heads. The major purpose of this first meeting is to discuss with the five workshop managers to ascertain whether their production capacities can be matched with the initial sales budget. If they exceed the sales budget, it becomes the primary responsibility of the sales and marketing staff and even the factory manager to hunt for other sales avenues in order to fully utilize the production capacity. If there is excess demand, then priorities will be given to the customers for delivery and agreements must be made with the customers beforehand. Since the competition in this industry is very keen, BCRF has been under full capacity (about 80%) in the last two years.

Again, the second budget submission in December is consolidated by the enterprise management office for further review by the factory manager who will then discuss informally or formally with the workshop managers and department heads. Another submission is usually made in January next year. Finally, the agreed master budget is tabled to the annual general meeting for approval by all the employees in February right after the Chinese New Year.

Since September 1992, the workshop managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the factory manager. The other department heads have also participated carefully in devising their expense and operation budgets which they would be measured against as performance yardsticks.

A copy of the master budget has been obtained and the contents are briefly described in Appendix A at the end of this data analysis. From this extract of the master budget, it is noted that before 1992, BIIC had been involved in BCRF's budgeting process and provided expectations (or targets) to some of the line items. The workshops or departments will be measured on their individual agreed budgets which are divided into quarterly or monthly (for workshops) targets.

Since BCRF's whole budgeting process is still performed on manual basis, therefore, it is not suprising to see that the agreed budgets are fixed once every year although some changes (i.e. sales and production) can be made during the monthly review. In view of the rapidly changing market conditions, the budget review period has been shortened from quarterly to monthly. The factory manager and his deputy managers and three chiefs hold a formal meeting at the beginning of each month to review the financial performance against the master budget and individual departmental budgets.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given BCRF more freedom to plan ahead. The government representative, BIIC, has almost completely devolved the short term planning autonomy to BCRF, except to agree on the overall sales and profit targets. The top management have involved the middle management or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan or the ERC, and on the other hand, it is an important motivational factor for the workshop managers and department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

#### 5.6 Internal Responsibility, Contracts (IRC)

Beijing Chunshu Rectifier Factory (BCRF) established its IRC system in 1991, just one year before signing the first ERC with the municipal government, in order to motivate the efficiency, profitability and cost reduction in the production workshops. Before the implementation of the IRC system across the board, a general policy was set up in 1990. The contents are briefly described in Appendix B at the end of this data analysis.

It took a few months for the factory manager and the workshop managers to negotiate with the terms and conditions for the IRCs signed. This long process indicated that the setting of IRC was not a top-down approach and the workshop managers were very eager on this issue upon which they would be measured against and rewarded thereupon. The 1993 IRCs were subject to at least quarterly review but no adjustments had been made since agreed.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the factory manager has delegated more freedom to the workshop managers in initiating and negotiating their own IRCs, and also involved the finance division intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.7 Management of Interdependencies (Transfer Pricing)

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Management of interdependencies means the central influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the workshops, and exploitation of a shared resource are examples that happen in Beijing Chunshu Rectifier Factory (BCRF) that need headquarters' intervention.

Since 1993, the transfer prices have been determined by standard cost of production which is based on the historical cost of production multiplied by a factor of 1.16. Motivation to a workshop manager to transfer products to another workshop is low because there is no profit margin and most of the times, the actual cost of production is higher than the standard because of unexpected up-rising inflation rates. The workshop managers has little autonomy in fixing the transfer prices and all the intermediate products have to be transferred internally.

The standard transfer prices are reviewed annually in line with the budgeting process and adjusted according to the inflation rates.

Observation of Planning Influence: shift from "Very High Corporate" to "High Corporate" since 1992.

#### Section 6 : Control System

### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Beijing Chunshu Rectifier Factory (BCRF) has three distinct levels of management hierarchy:

- (1) Top Management (factory, deputy-factory managers, chief accountant, chief engineer and chief economist)
- (2) Middle Management (workshop managers and department heads)
- (3) Lower Management (foremen and supervisors)

The deputy-factory managers and the three chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of employment with any staff is a difficult task which will be explained in the rewards and incentives section below.

Since 1988, BCRF has employed an "Internal Economic Evaluation System" which laid down the following principles and policies to define the relationships between responsibility centres, their duties and rights, and how to measure performance.

#### (1) Introduction

The "Internal Economic Evaluation System" (IEES) is an Accounting Information System (AIS) for planning and control the capital employed, production consumptions, effectiveness and efficiency. The ultimate objective is to maximize the profitability by using the minimum resources.

- (2) Principles and Methods
- 2.1 Top Management Support

The top management should recognise the importance of this system by providing directives, demanding efforts, devising means and procedures, and reviewing progress. The Factory Manager must be personally responsible for this system by defining the contents, timetables and procedures.

# 2.2 Common Recognition

First and foremost, the top management should make the middle management (i.e. workshop managers) to recognise the importance of implementing the IEES which is a very important component of the enterprise management. It closely integrates the rights and benefits of the government, enterprise and individuals in order to enhance the motivation and initiation of every party. Furthermore, the spirit and priciples of IEES should also embedded into the minds of all the employees who can work together to achieve the objective of this system.

# (3) System Specifications

# 3.1 Responsibility Centres (5 types)

- 3.1.1 Profit Centre measured by internal profit i.e. production workshops;
- 3.1.2 Capital Centre measured by the working capital employed i.e. purchasing & supply, production support and sales;
- 3.1.3 Expense Centre measured by operating expenses i.e. personnel, accounting and general affairs;
- 3.1.4 Subsidised Centre measured by the subsidy of expense over income i.e. canteen, medical centre and nursary; and
- 3.1.5 Special Centre measured by the cost and benefit of individual investment or project i.e. R&D, product development, estate and facility.

### 3.2 Contents of Evaluation

- 3.2.1 Economic Targets seggregate the economic targets provided by the government down to workshop, product line, group, shift and individual levels.
- 3.2.2 Capital Employed set working capital targets for workshops and other non-production departments.
- 3.2.3 Internal Profit calculate the difference between internal sales revenue and actual expenditure.
- 3.2.4 Transfer Prices use the internal standard prices to settle the transfers and transactions among the responsibility centres.
- 3.2.5 Material Reward award to the responsibility centres according to degree of effectiveness and efficiency achieved.

# 3.3 Principles

- 3.3.1 Economic Responsibility -
  - (a) each centre is responsible for its own economic efficiency according to the above contents of evaluation; and
  - (b) incentives are awarded according to the degree of achievement of the economic targets.
- 3.3.2 Authority and Responsibility appropriate authority should be given to the centres to carry out their responsibilities and achieve the best economic effectiveness.
- 3.3.3 Material Benefit rewards and penalties should be commensurated with the economic results attained.

Principle 3.3.1 is the core, 3.3.2 is the prerequisite, and 3.3.3 is the energizer of the IEES.

- (4) Rules & Regulations
- 4.1 Performance Evaluation

The Factory Manager is responsible to evaluate the performance of the workshops, while the workshop managers are responsible to measure the performance of their respective production lines and groups. The accounting staff in the workshops are reporting to the Finance Division in the headquarters as far as providing information for performance evaluation is concerned.

# 4.2 Enterprise Performance Evaluation

The Factory Manager is responsible to design and organise all the units in evaluating the economic performance systematically. All the planned targets should be assessed in order to improve the operation and management of the whole enterprise. The duties include:

- 4.2.1 to establish a sound performance evaluation system and to be implemented by different levels of management based on the principles shown above;
- 4.2.2 to determine the economic targets to be assessed in each workshop and department;
- 4.2.3 to ensure every economic target and its effectiveness is assessed by the workshop or department properly;
- 4.2.4 to determine the internal profit of each workshop;
- 4.2.5 to assess the cost of manufacturing of each type of product; and
- 4.2.6 to perform economic activity analysis i.e. variance analysis.

### 4.3 Workshop Performance Evaluation

Workshop performance evaluation is the core of assessment which objective is to enhance the productivity in terms of achieving or exceeding the planned economic targets by employing the least manpower, materials and capital. The duties include:

- 4.3.1 to improve the production management standards and emphasize the economic efficiency;
- 4.3.2 to determine the measurement yardsticks for the production lines, groups and shifts and assess the performance subsequently;
- 4.3.3 to calculate the manufacturing cost and internal profit correctly;
- 4.3.4 to ensure the achievement of each economic and technical targets; and
- 4.3.5 to ascertain the quantity and value of work-inprogress at the end of every month.
- (5) Authority and Responsibility
- 5.1 Under the leadership of the workshop manager, each workshop should conduct the performance evaluation properly according to the above principles, rules and regulations.
- 5.2 After assessing the economic targets, the workshop managers should investigate the causes of every significant variance.
- 5.3 Each workshop manager should encourage his production units to enhance the product quality, improve the productivity per employee, save materials, power and energy, reduce the working capital employed and cost of production.
- 5.4 The economic targets should be linked up with the incentive system in each workshop in order to initiate the motivation of the employees.
- 5.5 Within the enterprise long and short term plans, the headquarters has the authority to adjust the production and economic targets in the workshops.
- 5.6 The workshops cannot purchase the raw materials and components from outside suppliers, and cannot sell the finished goods and spare parts to external customers.
- 5.7 Each workshop has the right to employ and dispose the fixed assets owned.

# (6) Economic Targets

The major economic targets used to measure the performance of the workshops include:

- 6.1 production value
- 6.2 production quantity
- 6.3 product quality
- 6.4 internal profit
- 6.5 working capital employed
- 6.6 standard labour hour

Most of these targets were assigned by the headquarters to the workshops under this IEES. The subsequent implementation of the IRC system in 1991 was similar to the IEES but the workshop personnel have been involved in negotiating the targets set.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of BCRF.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

### 6.2 Agreeing Objectives

Beijing Chunshu Rectifier Factory (BRCF) sets similar objectives for its production workshops: workshop managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. In view of the fierce competition within this industry, the production workshops sometimes feel passive in setting their objectives or targets in the budgets or IRCs because their activities are depending on the sales demand. Even at the economic downturn in 1994, the workshops were asked to follow the production budgets although they realised that some products were piling up in stock.

A high pressure to achieve the budgeted production and internal profit is put on the workshop managers at the quarterly or monthly review. They fully understand that their group bonus are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. In terms of expenses, control is tighter and a system of standard cost has been implemented. Although the non-production departments do not have the IRCs, they have agreed specific objectives or targets with the factory manager, for example, amounts of working capital employed, levels of expenses and management by objectives.

Across the board, all the non-manufacturing expenses were cut by 10% in 1994. The promotion, salary and bonus of these functional staff are correlated with these quantitative and non-financial targets.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

### 6.3 Monitoring Results (Reporting & Performance Measurement)

Beijing Chunshu Rectifier Factory (BCRF) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the workshops and departments submit monthly results on standard forms to their respective divisional heads and also to the chief accountant for vetting and comparison with budgets and IRCs. The production workshops are also required to submit production figures to the top management on a weekly basis.

The monthly report format is unique for each department. The contents are mainly corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the fixed budgets. The qualitative targets are usually subjectively measured by the divisional heads and written in the monthly reports as well. These monthly reports are compiled by the accounting department and assessed by the enterprise management office. Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the factory manager for review.

For any serious adverse variances shown on any report, the factory manager will contact with the respective deputy managers, workshop managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

BCRF's senior management hold monthly meetings to discuss production planning, scheduling and management, marketing and sales, economic performance and party's affairs. During the economic performance meeting, the factory manager puts forward the monthly results for open discussion. The workshop managers and the department heads may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a workshop manager, probably he will be replaced by somebody else. It has happened once in the last two years that a workshop manager has been replaced. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results are passed back to the manpower and wages division for calculating the group bonus of each workshop or department for last month. Then the accounting department processes the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization is not well recognised by the top management even though a few stand-alone personal computers have been used for production planning and payroll. The accounting functions are still performed manually. There is no plan for implementing a comprehensive integrated management or accounting information system. Perhaps the lack of capital for investment in computer hardware and software and the urgent needs to focus on the marketing strategies put computerization at the bottom of the priority list.

Now, BCRF views a budget or IRC as a contract between the top management and the department or workshop. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.4 Rewards and Incentives ,

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, BCRF is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

The take-home pay of each employee in BCRF is mainly composed of three elements as broken down below :

(1) Basic Wages 35% - 45% (2) Bonus 40% - 25% (3) Allowances 25% - 30%

The average annual gross wages per employee was around RMB5,600 in 1993. This wages level is at least 30% lower than the Southern cities like Xiamen and Guangzhou because the inflation rate is lower in Beijing (20% compared with 35% in Guangzhou in 1993). Nevertheless, under the current high inflation rate in China (overall average 23% and 22% in 1993 and 1994 respectively), BCRF increased the average annual gross wages to RMB6,200 in 1994 and was expected to reach RMB7,000 in 1995. Because of the loss making situation, BCRF's average wages level was lower than many other industries in Beijing.

According to the general national standard adopted by most of the state-owned enterprises, BCRF's production workers are classified into 8 classes and within each class there are two to three sub-classes. Promotion from one class (or sub-class) to the next higher class (or sub-class) mainly depends on seniority, knowledge of work, technical skill and training. Usually, there is an annual assessment or test of every worker to determine his or her promotion. The pay scale of monthly basic wages to workers ranges from RMB150 to RMB350. Therefore, the wages difference between two successive classes is only about RMB25 and it may take over 20 years rising from the lowest class to the highest class. The annual wages increment can never catch up with the inflation.

There is another basic salary pay-scale divided into 16 classes (2 to 3 sub-classes in each class) for the technical and management staff and its range is from RMB150 (Class 1) to RMB350 (Class 16) per month. For example,

Management Staff	•	Technical Staff	
Post	Classes	Post	Classes
Factory Manager	15 - 16		
Deputy Factory Mgr.	13 - 14		
Chief Accountant	13 - 14		
Chief Engineer	13 - 14		
Department Head	10 - 12	Senior Engineer	10 - 12
Deputy Dept. Head	8 - 10	Engineer	8 - 10
Supervisor	6 - 8	Senior Technician	6 - 8
Section Leader	5 - 6	Technician	5 - 6
Senior Clerk	3 - 4	Junior Technician	3 - 4
Junior Clerk	1 - 2	Trainee	1 - 2

There are two portions for the "allowance". The first part is determined by the Manpower and Wages Bureau of the Beijing Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity.

The second part is decided by BCRF which may include housing, meals, travel, education, attendance, overtime, hair-dressing, festival gifts etc. The payment of monthly "allowance" is about RMB150 to RMB180 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the workshops, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the factory manager and a workshop manager decides what level of group bonus will be given to the department. Of course, it is up to the workshop manager to award that lump sum of group bonus to his or her subordinates according to invidual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

How is the bonus determined for the management and administrative staff in the other departments? It can be described in the following steps:

# (1) Calculation of management score

- (a) Performance according to targets set
- (b) Discipline according to rules and regulations
- (c) Management methods and styles
- (d) Security and safety

### (2) Calculation of average bonus

Management score % (1) x Monthly average production bonus

# (3) Calculation of individual bonus

Average monthly bonus (2) x Individual index\*

\* Different indexes for different grades of staff, i.e.

Factory Manager = 2.0
Deputy-Factory Manager = 1.8
Department Head = 1.6
Deputy Department Head = 1.5
Supervisor = 1.4

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the BIIC will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management). On the other hand, if the overall performance of the enterprise is not satisfactory or far below the ERC's targets, the factory manager may be replaced by the government. Since 1990, BCRF has replaced three factory managers already!

If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

In addition to the wages and salaries to the present employees, BCRF has to pay pensions and other allowances (i.e. medical) to 600 retired employees. As from 1994, a kind of "social welfare policy" mandated by the government has to be implemented in all the state-owned enterprises. Under this policy, BCRF has to contribute 25.5% of the monthly total payroll to the government central pension fund. The government will ultimately responsible for the future pension payments to the BCRF's employees. The government is now considering to ask for an additional 16% - 18% from the state-owned enterprises to cover the medical, unemployment and disable allowances for the employees.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Rice Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. At the end of June 1995, the total number of employees in all the state-owned enterprises was 143 millions,

accounting for 86% of the industrial and commercial workforce in China. Therefore, it takes a long time to change the working attitudes of this huge amount of employed population.

However, to lay off a certain percentage of redundant employees may cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Instead of fully implementing this contract employment system, BCRF has signed "In-Post Contracts" with most of the employees for periods from one to five years. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages (according to class in pay-scale), allowance and bonus. Without such a contract, that employee is out of job but he or she is still an employee of BCRF and is allowed to received a basic monthly subsidy of about RMB200. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better. Since the implementation of this system, the number of employees has been reduced from 1,200 to 970 at present.

Another means to absorb the redundant employees is to transfer them to a few "tertiary enterprises" (service enterprises), such as transportation, motor vehicle repairing, canteen and nursary, which are self-financed independent profit centres.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, BCRF believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Finance Control" to "Moderate Financial Control" since 1992

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Chunshu Rectifier Factory (BCRF) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	Very High to High Corporate	
Review Process*	High Corporate	Medium Corporate
Strategic Themes, Thrusts and Suggestions*	Very High to High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High to Medium Corporate	Low Corporate
Internal Responsibility Contract	High Corporate	Medium Corporate
Management of Interdepen- dencies* (Transfer Pricing)	Very High Corporate	High Corporate
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Financial	Moderate Financial
Monitoring Results*	Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

 $<sup>\</sup>star$  Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence	
	Tight Strategic	Tight Financial
High Corporate	(Strategic Programming)	(Financial Programming)
Medium Corporate		[Pre-1992]        / [Post-1992]
Low Corporate	(Strategic Control)	(Financial Control)

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Chunshu Rectifier Factory (BCRF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

Revised: 10 February 1996

#### Appendix A

# BEIJING CHUNSHU RECTIFIER FACTORY (BCRF) MAJOR CONTENTS OF ANNUAL MASTER BUDGET

#### (1) Financial Targets Summary

- 1 Production value
  - 1.1.1 Industrial output value
  - 1.1.2 Growth % compared with last year
- 1.2 Sales incomes (gross before sales tax)
  - 1.2.1 Products sales income
    - (a) Attainable target
    - (b) Optimistic target
  - 1.2.2 Growth % compared with last year
- 1.3 Profits
  - 1.3.1 Net profit before tax
    - (a) Attainable target
    - (b) Optimistic target
  - 1.3.2 Growth % compared with last year
- 1.4 Bank loan repayment

# (2) Major Economic Targets

- 2.1 Production value
- 2.2 Production quantities (by product categories)
- 2.3 Financial plan
  - 2.3.1 Net profit before tax
  - 2.3.2 Profit and sales taxes
  - 2.3.3 Working capital turnover rate
  - 2.3.4 Cost reduction rate
  - 2.3.5 Profit and sales taxes % net capital employed
  - Sales plan (by product categories)
  - Production value per employee
- 2.6 Product quality assurance rate
- 2.7 Energy consumption per RMB10,000 of production value
- 2.8 Material consumption rate

Against each of the above budget items, the following information is shown as far as possible:

- (a) Measuring unit
- (b) Last year's actual
- (c) This year's budget
- (d) This year budget +/- % of last year's actual
- (e) Quarterly breakdowns
- (f) Remarks

2.4

2.5

#### (3) Financing Plan (Master Budget) Introduction

- 3.1 Economic targets summary
- 3.2 Major targets (based on 3.1) agreed with :

Purchasing & Supply Department 3.2.1 3.2.2 Marketing & Sales Department 3.2.3 Production Planning & Support Division 3.2.4 Production Workshops 3.2.5 Non-manufacturing overheads and expenses Profit & loss account (compared with last year actuals) 3.3 3.3.1 Sales income (gross) 3.3.2 Sales tax -3.3.3 Cost of manufacturing\* -3.3.4 Selling & administration expenses -3.3.5 Educational surcharge = 3.3.6 Profit from sales + 3.3.7 Other sales income + 3.3.8 Extraordinary income -3.3.9 Extraordinary expense = 3.3.10 Profit before income tax -3.3.11 Specific loan repayment -3.3.12 Income tax -3.3.13 Energy & transportation development tax -3.3.14 Other county taxes = 3.3.15 Retained earnings = 3.3.15 Production development reserve + 3.3.16 Employee welfare reserve + 3.3.17 employee bonus reserve. \* includes : raw materials, electricity, gas, water, wages, depreciation, repair & maintenance, opening & closing WIP Production workshop cost & internal profit plans 3.4 (broken down by the 5 production workshops)
3.4.1 Internal sales income 3.4.2 Variable cost % sales income 3.4.3 Variable cost (3.4.1 x 3.4.2) 3.4.4 Fixed cost (wages & expenses) Total cost (3.4.3 + 3.4.4)3.4.5 3.4.6 Internal profit (3.4.1 - 3.4.5) 3.4.7 Internal profit margin (3.4.6 % 3.4.1) [last year budgets and actuals are shown for comparison] (4)Other Financing Plans (Budgets) 4.1 Production workshop expenses budget (broken down by the 5 production workshops) 4.1.2 Welfare fund 4.1.1 Wages Administration 4.1.3 Depreciation 4.1.4 4.1.5 Repair & maintenance 4.1.6 Spare parts 4.1.7 Water & electricity 4.1.8 Gas 4.1.9 Plant hiring charges 4.1.10 Insurance 4.1.11 Meal allowance 4.1.11 Consumable materials 4.1.12 Labour union contribution 4.1.13 Special bonus 4.1.14 Product testing 4.1.15 Travelling 4.1.17 Other allowances

[last year budgets and actuals are shown for comparison]

4.1.16 Entertainment

- 4.2 General administration & management expenses budget 4.2.1 Salaries 4.2.2 Welfare fund 4.2.3 Labour union contribution 4.2.4 Depreciation 4.2.5 Repair & maintenance 4.2.6 Gas 4.2.7 Water & electricity 4.2.8 Product testing 4.2.9 Hiring charges 4.2.10 Local travelling 4.2.12 Entertainment 4.2.11 Overseas travelling 4.2.13 Consumable materials 4.2.14 Insurance 4.2.15 Transportation & tax 4.2.16 Product indemnity 4.2.17 Fire & security 4.2.19 Research & development 4.2.18 Bank interest 4.2.20 Drainage 4.2.21 New product testing 4.2.22 Estate duties 4.2.23 Education & training 4.2.24 Medical 4.2.25 Management fees to BIIC 4.2.26 Meal 4.2.27 Advertising & promotion 4.2.28 Other allowances [last year budgets and actuals are shown for comparison]
- Working capital budget 4.3
  - 4.3.1 Raw materials 4.3.2 Spare parts
  - Sub-contracted materials 4.3.4 Repair materials 4.3.3
  - 4.3.5 Work-in-progress (breakdown by types of products)
  - 4.3.6 Finished goods (breakdown by types of products)
  - 4.3.7 Accounts receivables & collection period (days)
  - 4.3.8 Working capital turnover period (days)
    4.3.9 Working capital employed % production value

Against each of the above budget items, the following information is shown as far as possible :

- (a) Responsible department
- Last year actual (yearly average & year-end balance) (b)
- Last year budget (c)
- This year budget (d)
- Turnover period (days) (e)
- Remarks (f)
- 4.4 Employee welfare expenses budget
  - 4.4.1 Employee medical Kindergarten subsidies 4.4.2
  - 4.4.3 Employee's dependents medical
  - Hair-dressing subsidies 4.4.4 Urgency subsidies 4.4.5
  - 4.4.6 Medical centre for kindergarten
  - 4.4.7 Family planning 4.4.8 Canteen
  - Employee's quarters 4.4.10 Recreation 4.4.9
  - [last year actuals and budgets are shown for comparison]
- 4.5 Production unit cost budgets by workshops and products
- Sales budgets by products, quantities and values 4.6

### Purchasing & Supply Plans (Budgets) (5)

- 5.1 Raw materials closing balance budget
  - Major categories of materials 5.1.1
  - Standard closing balance \$ 5.1.2
  - 5.1.3 Standard closing balance %
  - 5.1.4 Last year actual closing balance
  - 5.1.5 This year budget closing balance
  - 5.1.6 This year budget over standard (5.1.5 5.1.2)
  - This year budget over last year actual (5.1.5-5.1.4) 5.1.7
  - 5.1.8 Remarks
- Raw materials consumption & turnover budget 5.2
  - 5.2.1 Major categories of materials
  - 5.2.2
  - Last year actual consumption This year budget consumption 5.2.3
  - 5.2.4 This year budget consumption over last year
  - 5.2.5 Last year actual turnover period (days)
  - This year budget turnover period (days) 5.2.6
  - 5.2.7 This year budget turnover period over last year
- Consumed materials collected for reuse plan 5.3
  - Imported materials purchasing plan

### Other Plans (Budgets) (6)

5.4

- New products development plan 6.1
  - 6.1.1 Product description
  - 6.1.2 Technical features
  - 6.1.3 Schedule of progress
  - 6.1.4 Responsible department(s) & person(s)
  - 6.1.5 Remarks
- New technologies development plan 6.2
  - 6.2.1 Item description
  - 6.2.2 Major features
  - 6.2.3 Schedule of progress
  - 6.2.4 Responsible department(s) & person(s)
  - 6.2.5 Remarks
- Technologies renovation plan 6.3
  - 6.3.1 Item description
  - 6.3.2 Renovation contents
  - 6.3.3 Expected economic benefits
  - 6.3.4 Completion date
  - 6.3.5 Investment required
  - 6.3.6 Materials and parts required
  - 6.3.7 Responsible department(s) & person(s)
- Existing products renovation plan 6.4
  - 6.4.1 Item description
  - 6.4.2 Major contents
  - Schedule of progress 6.4.3
  - Responsible department(s) & person(s) 6.4.4
  - 6.4.5 Remarks

Item description 6.5.1 6.5.2 Job contents 6.5.3 Responsible department(s) & person(s) 6.5.4 Schedule of progress 6.5.5 Remarks 6.6 Quality product recognition plan\* 6.6.1 Product description 6.6.2 Product specification 6.6.3 Quality grading/rating\* 6.6.4 Completion date 6.6.5 Contents of procedures 6.6.6 Responsible department(s) & person(s) \* plan to achieve product quality rating such as Grade 1 awarded by the municipal government Quality circles plan 6.7 6.7.1 Workshop or department 6.7.2 QC group title 6.7.3 Objective 6.7.4 Group leader Product quality standard (national) plan 6.8 6.9 Product quality standard (international) plan 6.10 Product reliability testing plan 6.11 Product inspection & measuring plan 6.12 TQM training programme plan 6.13 Import & export action plan 6.14 Intelligence information plan 6.15 Job/Work plan of : 6.15.1 Production Technology Department 6.15.2 Power & Energy Supply Department 6.15.3 Environmental & Safety Department 5.15.4 Design Department 6.16 Facility & Equipment Renovation Plan 6.16.1 Description 6.16.2 Specification 6.16.3 Quantity 6.16.4 Unit price Total purchase cost 6.16.5 6.16.6 Supplier 6.16.7 Department required 6.16.8 Remarks 6.17 Capital Expenditure Budget (for current year) 6.17.1 Description 6.17.2 Specification 6.17.3 Source of supply 6.17.4 Quantity Unit price 6.17.5 6.17.6 Total purchase cost

Standardisation programme plan

6.5

6.17.7

Remarks 6.18 Repair & Maintenance Plan 6.19 Education & Training Plan

# (7) Enterprise Management Plan

- 7.1 Factory Manager Responsibility System
  - 7.1.1 Determine the organisation structure and employee establishment in order to maximise production output and turnover
  - 7.1.2 Coordinate and facilitate the relationships among the party, management and employees and to ensure the supervision responsibility of the party
  - 7.1.3 Formulate the long term plans for operation and development strategies, product development, technology enhancement and management improvement
  - 7.1.4 Upgrade the class of the enterprise according to the standards set by the government
  - 7.1.5 Set down the targets during the term of the contract between the factory manager and the government
  - 7.1.6 Agree the economic responsibility contract with the government

# 7.2 Resources Consumption

- 7.2.1 Establish a power and energy consumption saving system
- 7.2.2 Establish a materials consumption saving system by applying modern techniques and methods
- 7.2.3 Establish materials consumption standards

### 7.3 Internal Economic Responsibility System

- 7.3.1 Establish an internal economic responsibility system according to the enterprise's long term strategies, product quality standards, resources consumption plan and economic efficiency
- 7.3.2 Enter into internal responsibility contracts with different levels of management and determine the performance standards for periodic evaluation
- 7.3.3 Distribute the resources and wages properly among the employees, management and government

### 7.4 Financial Resources Management

- 7.4.1 Establish different types of expenditure and working captial employment standards
- 7.4.2 Establish the efficiency management guarantee system according to the economic efficiency targets

### 7.5 Technology & Facility Management

7.5.1 Improve the facility ready-to-use rate, machine and equipment utilization rate, and technological level

- 7.6 Fundamental Management ,
  - 7.6.1 Enhance the job standardisation according to the << Industrial Enterprises Standardisation Evaluation Methods>> issued by the government
  - 7.6.2 Enhance the quantitative analysis according to the <<Industrial Enterprises Quantitative Analysis Upgrading Standards>> issued by the government
  - 7.6.3 Revise and improve the average working labour hours
  - 7.6.4 Improve the information and filing systems
  - 7.6.5 Strengthen the composition of production groups and shifts, democratic management, safety production and inspection systems
  - 7.6.6 Implement the education and training requirements in order to commensurate with the enterprise upgrading standards
  - 7.6.7 Strengthen the production technology management
  - 7.6.8 Improve the quality management of outside purchases and sub-contractor works
  - 7.6.9 Enhance the work-in-progress management [time schedule, responsible department and person(s) have been assigned for each of the above item]

### (8) Modern Enterprise Management Plan

- 8.1 Computer Management
  - 8.1.1 Information Department establish the index system for technological intelligent information
  - 8.1.2 Personal Department establish relevant personnel management policies
  - 8.1.3 Finance Department provide management accounting information on sales and production performance
- 8.2 Total Quality Management
  - 8.2.1 Establish total quality assurance system
  - 8.2.2 Development quality circle activities
- 8.3 Value Engineering (Production Technology Department)
  - 8.3.1 Evaluate the economic efficiency of GDS1000A/2-12 and GDS6000A/3-18 (products) which have completed the value engineering and started the production
  - 8.3.2 Start the value engineering process for product GDS2000a/12-36 and reduce the cost of production based on the experience gained from 8.3.1 above
  - 8.3.3 Try to undertake value engineering studies on a few other products
- 8.4 Marketing & Sales Forecast (Marketing & Sales Department)
- 8.5 Target Management (Finance Department)
  - 8.5.1 Target (Standard) costing
  - 8.5.2 Target profit
- 8.6 Cost-Volume-Profit Analysis (Finance Department)
  - 8.6.1 Use break-even analysis

- 8.7 ABC Management (Purchasing & Supply Division)
  - 8.7.1 Employ the ABC concept in inventory management 8.7.2 Reduce the working capital invested in inventory

  - 8.7.3 Reduce and clear the slow-moving and obsolete stock [time schedule, responsible department and person(s) have been assigned for each of the above item]

### Finance Division Specific Requirements (9)

- Redefine the organisation structure, manpower planning, job 9.1 standardisation and computerisation within the division
- Provide relevant, concise and in time accounting information 9.2 to the top management for decision making and economic efficiency improvement
- 30 June 1995

### Appendix B

# BEIJING CHUNSHU RECTIFIER FACTORY (BCRF) MAJOR CONTENTS OF INTERNAL RESPONSIBILITY CONTRACT SYSTEM

### (1) Introduction

Refer to the Strategic Themes, Thrusts and Suggestions in section 5.3 above. The primary financial objective is to achieve income before tax of RMB7.5 million in 1991.

## (2) Incentive Scheme (General Rules)

- 2.1 The apprentices, who have been in service for one year or above, are entitled to 50% of incentive bonus of the substantiated employees.
- 2.2 Group incentive bonus will be deducted by the headquarters if any one of the following events happens:
  - 2.2.1 employees who undertake off-the-job education and training courses but exclude the less than 6 months programmes assigned by the management;
  - 2.2.2 employees who have taken over 6 months accumulated sick leave;
  - 2.2.3 employees who have taken over 4 months maternity
    leave (one child only);
  - 2.2.4 employees who join in or leave from or retire from the position during the month;
  - 2.2.5 employees who are responsible for any fatal or serious injury, facility damage and quality defect;

  - 2.2.7 employees who are absent from work without valid reasons;
  - 2.2.8 employees who violate the security, fire or traffic safety rules and regulations; and
  - 2.2.9 employees who are arrested or detained by the police or summoned by the court.
- 2.3 Individual incentive bonus will be deducted by the workshop or department if any one of the following events happens:
  - 2.3.1 employees who have been late or early leave for three times or accumulated over 30 minutes;
  - 2.3.2 employees who fight, drinking alcohol, playing cards, shopping, playing chess, reading novel, trespassing into other departments, etc. during the office hours;
    2.3.3 employees who do not get off their bicycles when
  - 2.3.3 employees who do not get off their bicycles when coming in and going out the main gate, and place their bicycles in unauthorised places;

- 2.3.4 non-establishment employees who take sick, condolence causal and marriage leaves (1 day deducts 5%, 2 days 10%, 3 days 25%, 4 days 40%, 5 days 60%, 6 days 80%, 7 days 100%); and
- 2.3.5 employees who violate other rules and regulations.
- (3) Bonus Calculation (General Rules)
- 3.1 According to the Beijing Manpower Bureau Document No.426 implemented in 1987, RMB20 of each employee's wages or salary will be bundled with the monthly bonus as calculated and subject to the followings:
  - 3.1.1 the following employees do not entitle to the monthly

bonus and the RMB20 wages -

- (a) apprentices who work less than one year;
- (b) employees who join in or leave from or retire from the position during the month;
- (c) employees who take sick, maternity, condolence, marriage and sick leaves for over 7 days in the month; and
- (d) employees who stay in hospital under medical cover;
- 3.1.2 the following employees do not entitle to the monthly bonus but receive the RMB10 wages -
  - (a) apprentices who work over one year; and
  - (b) employees who are under probation and training.
- 3.2 One-third of the production workshop's monthly bonus will be on floating basis. The bonus of the non-production departments is 95% of the monthly average bonus of the 5 production workshops.
- 3.3 The monthly bonus of the non-production division or department is calculated as follow:

Monthly average nonus of the 5 production workshops x index\*

* Production Facility & Support Division	1.10
Marketing & Sales Division	1.10
Purchasing & Supply Division	1.10
Other Divisions/Departments	1.00
Receptionists/security guards/gardeners/cleaners	0.85

3.4 The monthly bonus of the production workshop's management staff is equal to the average bonus of the workers in each workshop.

- 3.5 All the departmental internal responsibility contracts are supplement to this general policy and they should be approved and filed by the Enterprise Management Office who evaluates the individual performance on a monthly basis according to the terms and conditions of the contracts.
- 3.6 Any transfer or secondment of employees must be approved by appropriate management and recorded by the Personnel and Wages Department. The receiving department is responsible for the transferred or seconded employee's bonus. Other general rules are:
  - 3.6.1 transfer/secondment between non-production departments, the bonus is deducted from the outgoing department;
  - 3.6.2 transfer/secondment between production workshops, no bonus is deducted from the outgoing workshop;
  - 3.6.3 transfer/secondment from workshop to non-production department, no bonus is deducted from the outgoing workshop; and
  - 3.6.4 transfer/secondment from non-production department to workshop, the bonus is deducted from the outgoing department.
- 3.7 The actual equivalent working hours must reach 100 hours before any bonus is calculated.
- 3.8 All employee's education and training hours, including examination hours, must be according to the timetables as approved by the Education and Training Department. Any excess of the scheduled hours without valid authority (i.e. school's certification) are treated as causal leave without bonus entitlement.

# (4) Bonus Calculation (Procedures)

- 4.1 Before the 5th of each month, the head of every workshop and department should access the actual results against the targets set, fill in the performance report and submit to the Enterprise Management Office.
- 4.2 The Enterprise Management Office should validate all the performance reports and submit to the Factory Manager for review before the 7th of each month. The approved peformance results or reports should be passed to the Personnel and Wages Department for bonus calculation.
- 4.3 Any delay or unable to submit the performance report should deduct 20% of the monthly bonus per day. Any falsification of the report should deduct 50% of the monthly bonus.

- 4.4 The validated performance reports by the Personnel and Wages Department should be submitted to the Factory Manager for final approval before the 9th of each month. Then the Accounting Department is responsible for the bonus distribution on or before the 10th of each month. Any delay in the procedures should deduct 50% monthly bonus of the person(s) who is/are responsible.
- 4.5 Bonus calculation formula (see section 5 below).
- 4.6 Every workshop and department should consider its working environment and evaluation requirement to design its internal economic responsibility contract.
- 4.7 Any deficiency, problems and ideas concerning the internal economic responsibility contract identified during the implementation period should direct to the Enterprise Management Office and subject to Factory Manager's approval for amendment if necessary.
- (5) Bonus Calculation Formula
- 5.1 Workshops (Powder Semiconductor Devices, Converter Devices, Converter Equipment Assembly)

Average Bonus Per Worker (A1) = (Monthly Output Quantity x Bonus Per Unit Output x Product Mix Completion Rate)/Acutal Headcount

Actual Monthly Bonus Per Worker (B1) = (A1) x Quality Performance Index x (1 - Mark Deducted)

5.2 Workshop (Fabrication & Processing)

Average Monthly Bonus Per Worker (A2) = (Total A1 of 3 Workshops x Product Mix Completion Rate)/3

Actual Monthly Bonus Per Worker (B2) = A2 x Quality Performance Index x (1 - Mark Deducted)

5.3 Divisions (Production Facility & Support, Marketing & Sales, Purchasing & Supply)

Average Monthly Bonus Per Employee (A3) = A2  $\times$  0.95 Actual Monthly Bonus Per Employee (B3) = A3  $\times$  (1 - Mark Deducted)

5.4 Other Divisions

Actual Monthly Bonus Per Employee (B4) = B3  $\times$  0.91

5.5 Other Specical Posts

## (6) Common Targets (applied to all workshops and departments)

### 6.1 Work Plan

- 6.1.1 Contents based on the annual plan to formulate the monthly, quarterly and yearly work plans which should aim at problem solving and quality improvement by setting targets and implementing procedures. The work plan of last month should be assessed on or before the 4th of this month and determine the work plan of the current month.
- 6.1.2 Assessment any delay in work plan submission deduct 0.05 mark.
- 6.1.3 Assessor Production Facility & Support Department

## 6.2 Internal Responsibility Contract

- 6.2.1 Contents performance reports should be submitted to the Enterprise Management Office on or before the 5th each month.
- 6.2.2 Assessment any delay by one day deducts 20% of the monthly bonus and any falsification deducts 50% of the monthly bonus of the person(s) in charge.
- 6.2.3 Assessor Enterprise Management Office

### 6.3 Environment & Sanity

- 6.3.1 Contents the area within the responsibility of each workshop and department must be kept tidy and clean.
- 6.3.2 Assessment see separate rules & regulations
- 6.3.3 Assessor General Affairs Department

# 6.4 Security & Safety

- 6.4.1 Contents strictly comply with "Security Management System" and "Fire Safety Management System".
- 6.4.2 Assessment according to the rules and regulations of the two systems.
  - 6.4.3 Assessor Security Department

### 6.5 Political & Technical Training

- 6.5.1 Contents according to the enterprise's education and training plans to participate the respective programmes. Attendance should be at least 90% and learning materials should be noted.
- 6.5.2 Assessment every 5% attendance rate below standard deducts 0.005 mark.
- 6.5.3 Assessor Education and Training Department

6.6 Family Planning

- 6.6.1 Contents comply with "one-child policy" and "marriage age policy" (male min. age 26 and female min. age 24).
- 6.6.2 Assessment each "illegal pregnancy" deducts 0.02 mark per employee, and each "illegal child birth" deducts 0.1 mark per employee.
- 6.6.3 Assessor General Affairs Department
- 6.7 Workshop Expenses & Management Expenses (Variable Costs)
  6.7.1 Contents reduce 10% of the budgeted expenses
  - 6.7.1 Contents reduce 10% of the budgeted expenses compared with last year (i.e. 1990).
  - 6.7.2 Assessment evaluate at the end of the year.
  - 6.7.3 Assessor Accounting & Finance Department
- 6.8 Government Policies, Laws and Enterprise Rules & Disciplines 6.8.1 Contents comply with the government policies and laws, observe the society ethics, and follow the enterprise's rules and regulations.
  - 6.8.2 Assessment each disciplinary action deducts 0.005 mark per employee, and each arrest by the police deducts 0.01 mark per employee.
  - 6.8.3 Assessor Labour & Wages Department
- 6.9 Internal Reporting
  - 6.9.1 Contents according to enterprise systems & economic responsibility system to submit reports to respective departments or parties.
  - 6.9.2 Assessment except special or ad hoc reports, any one day delay in internal reporting deducts 0.005 mark.
  - 6.9.3 Assessor respective departments
- 6.10 Water & Electricity Savings
  - 6.10.1 Contents no wastage of water and electricity is allowed, and using electric heater for cooking, boiling water and warming are not allowed.
  - 6.10.2 Assessment deducts 50% bonus of the employee who offends this regulation.
  - 6.10.3 Assessor Facility & Security Department
- (7) Internal Profit Plans of Production Workshops

The following was the format, of internal profit planned for each production workshop for 1993 :

- Inter-departmental sales \$
- 7.2 Variable production cost %
- 7.3 Variable production cost \$ (7.1 x 7.2)
- 7.4 Fixed production cost \$(7.4.1 + 7.4.2)
  - 7.4.1 production expenses \$ 7.4.2 production wages \$
- 7.5 Total production cost \$ (7.3 + 7.4)
- Internal profit \$ (7.1 7.5) 7.6
- Internal profit % (7.6 % 7.1)

For each of the above items, the following figures were given or budgeted:

- Actual of 1991 (a)
- Budget of 1992 Actual of 1992 (b)
- (c)
- (d) Budget of 1993

30 June 1995

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 10
Report Date : 31 August 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

\_\_\_\_\_\_\_

Name of SOE : Beijing Instrument Machine Tool Works (BIMT)

Staff Interviewed: Mr Wu De Cheng (Chief Accountant)

(No. of years in this enterprise : 16 years)

Dates of Visits : First Visit - 1 September 1993

Second Visit - 1 September 1994

### Section 1 : History & Background

Beijing Instrument Machine Tool Works (BIMT) is specialised in manufacturing multi-purpose tool milling machines. It is a key enterprise under the Ministry of Machine Building Industry and also a production base for exporting. BIMT had including 200 technicians at the end of 1992. BIMT had 1,200 employees The enterprise occupied a total land area of 93,000 square metres, whereas the building or floor area was 40,000 square metres in the same year. Total fixed assets at historical cost was RMB16 million in 1992. The production output of various machine tools was about 700 sets of which 60% were exported to 30 countries, including the USA, France, Italy, South American and Southeast Asian regions. obtained the "import and export right" and created a foreign income of US\$3M in 1992. The underground railways in Beijing, Shanghai and Guangzhou have been using BIMT's products. The high product quality has earned good reputation from both local and overseas customers.

BIMT is manufacturing the following three categories of milling machines:

- (1) Multi-purpose tool milling machines
  Models X8130, X8130A, X8125, X8132 and X8140 which can be
  fitted with digital display device; and
  XK8130A, XK8140 and RU800 can be equipped with CNC
  system.
- (2) Radial milling machines
  Models X6320 and XJ9325B.
- (3) Equipment for air-conditioning
  Models BD8100 and BD8200 employing Johnson Control's (USA)
  technology with proportional type air valve;
  KG, KGD, KGF, KGT, KK, KKD, KKT, KKF of ESM
  acutator for various instrument panels;
  KXW, KXW-A, KXF, KXF-A instrument casing for powersupply unit, temperature preservation and protective device.

In recent years, BIMT has undertaken significant technical renovation by importing some advanced production equipment and established a 2,000 square metres constant-temperature workshop in order to enhance the manufacturing process and product quality. BIMT has entered into a cooperative joint-venture with Italian Rambaudi Corporation in manufacturing a new RU800 CNC multi-purpose tool milling machine. Through this collaboration, some technicians have been trained up, and the ability for developing new products and manufacturing technology have been improved.

In 1994, nearly all the manufacturing enterprises in this industry were loss-making mainly because of :

- lack of sources of capital to replace the old plant and machinery due to the macro-economic control policies (a) implemented since July 1993;
- the existing products could not suit the changing demands in the national market;
- the cost of production is high mainly due to inflation of raw materials and wages, and also small batch of production but incurring high fixed costs (i.e. set up, scheduling); (c)
- the selling prices cannot be increased in line with (d) inflation in order to maintain the market share;
- the end users prefer to import the same products from (e) overseas suppliers at similar prices but higher quality; and the incompetent leadership ability of the top management.
- (f)

In 1993, BIMT obtained a bank loan of RMB20 million to set up a R&D Centre in order to diversify into new products. Adding up with the other working capital bank loan, BIMT incurred an outstanding balance of RMB40 million and paid RMB4.5 million of bank interest in 1994. Of course, the loan interest affects the profit and loss account adversely. Since the self-financing concept has been implemented in 1992, the government is now reluctant to inject fresh capital into the state-owned enterprises who can only rely on bank borrowing. Another major reason leading to high bank borrowing was due to the bad debts problem. BIMT estimated a total of RMB20 million doubtful debts Contrary, BIMT was unable to settle RMB8 million of accounts payable at the same time.

BIMT is affected by the above 6 factors at present especially many large infra-structure projects, like the underground railways to be built up in over 10 big cities, are intending to purchase the tool milling machines from overseas suppliers. In competing with the overseas competitors, BIMT's cost of production may be even higher, and as a result the selling prices are not competable. Therefore, BIMT is losing out to the overseas competitors and was unlikely to maintain an export sales of US\$3.6 million in 1994.

# Section 2 : Legal Form & Organisation Structure

Beijing Instrument Machine Tool Works (BIMT) has been a wholly state-owned enterprise since its establishment in 1956 and it does not have a concrete plan to convert into a shareholding enterprise in the next few years because of the following reasons:

- stringent rules and regulations governed by the Ministry of (1)Finance (MOF) and the Bank of China (BOC);
- geographically closer to the central government with tighter (2) control on enterprise privatisation than the other coastal cities such as Tianjin, Shanghai, Xiamen and Guangzhou;

- (3) insufficient strength in terms of financial performance, market potential, product development and accounting control; and
- (4) social responsibility to staff such as laying off employees after privatisation.

At the end of 1995, the government has selectively approved 3,600 of large- and medium-size SOEs, which had good financial performance track records, to transform into shareholding enterprises. BIMT expects shareholding conversion should be the future prospect in view of promulgating market economy and raising capital.

Since BIMT is a wholly state-owned enterprise, it is under the administration of the Beijing Municipal Government and the Beijing Machine Building Bureau. Under the central economic planning system before the 1980s, BIMT's planning and control systems were dictated by these authorities and it was just acting as a vehicle (or a cost centre) to carry out the activities as scheduled by them.

In 1983, the Beijing Machine Building Bureau was transformed into a quasi-government body called Beijing International Instrument Corporation (BIIC) as an initial step to delegate the governing role to this self-regulated institution composed of all the power and electronic instrument manufacturing industries in Beijing.

Since then, more autonomy in terms of planning, operation, control and pricing decisions has been authorised by the Beijing Government to the BIIC and turning into this decade, BIIC's major roles played for its subordinate enterprises are to:

- (1) appoint the factory manager (or general manager) and the communist party secretary;
- (2) maintain macroeconomics controls on the 5-year's plans suggested by its enterprises;
- (3) provide guidance on product development, technology improvement and market information; and
- (4) act as a bridge or facilitator between the government# and its enterprises in policy matters such as capital investment, import and export autonomy, taxation, legal form transformation i.e. shareholding, etc.
- # Some of the issues have to be discussed and approved by the Beijing Commission of Economic Reform as well.

In responding to and implementing of the "SOE Operation Mechanism Transformation Regulations" enacted by the People's Congress in July 1992, the BIIC has delegated the planning and management responsibilities to BIMT although quarterly and annual reports have to be submitted to the BIIC for review.

However, it is a learning process for the top management to exercise this power and get away with from the old centrol planning system. They concern very much the outcomes and effects on the employees and try to avoid rocking the boat too much or taking too much risk.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation structure of BIMT can be divided divisions under the direct control of the Factory Manager who has an Enterprise Management Office. The departments of the 5 divisions are listed as follow:

- Production Division (headed by a Deputy-Factory Manager)
  - 1.1 Production Workshop No.1#
  - Production Workshop No.2# 1.2
  - 1.3 Production Workshop No.3#
  - 1.4 Production Workshop No.4#
  - 1.5 Purchasing & Supply Company\*
- Production Technology Division (headed by the Chief Engineer) 2.
  - 2.1 Chief Engineer Office
  - 2.2 Facility & Support Department2.3 Quality Control Department2.4 Inspection Department

  - Research & Development Department 2.4
- Marketing & Sales Company\* (headed by the Chief Economist) 3.
- Finance Division (headed by the Chief Accountant) 4.
  - Accounting Department
  - 4.2 Internal Audit Department
- Administration Division (headed by a Deputy-Factory Manager) 5.
  - 5.1 Security Department
  - 5.2 Estate & Development Department
  - 5.3 General Affairs Department
    - 5.4.1 Medical
    - 5.4.2 Canteen
    - 5.4.3 Nursary
- Manpower & Wages Division (headed by a Deputy-Factory Manager 6.
  - 6.1 Personnel Department
  - 6.2 Wages Department
  - 6.3 Education & Training Department
    - Technical Training School
- 7. Communist Party Office
  - 7.1 Discipline & Promotion
  - 7.2 Political Education

### Labour Union Office 8.

- All the 4 production workshops have signed Internal Responsibility Contracts (IRC) with the Factory Manager and are measured mainly on internal profit.
- The Purchasing and Supply Company is an independent and self-financed service entity (tertiary enterprise) which can buy from and sell to the external vendors and customers respectively. Similarly, the Marketing and Sales Company is an independent investment centre which represents BIMT selling the final products to local and overseas customers.

BIMT had a total of 1,250 (including 100 employees in the two service companies) working employees and 300 retired employees at the end of 1994. It is classified as a "medium-size SOE" in China.

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### Section 3 : Financial Indicators

Total assets : RMB130M (1993) : RMB 42M Turnover (1992)RMB 48M (1993)

RMB 50M# (1994)

Income before tax : RMB3.2M (1992) -7.6% of sales

(1993) - 5.2% of sales\* RMB2.5M RMB2.5M (1994) - 5.0% of sales

Income tax rate 33%@

- # BMIT failed to achieve the target of RMB55M of sales in 1994.
- \* The decrease in net profit margin was mainly due to high inflation and bank interest, and incompetable selling prices as well.
- @ The net VAT (output VAT input VAT) is about 7% which has to be paid upon sales but some accounts receivable may be doubtful. As a result, strain has been placed on the cash flow.

### Section 4: Economic Responsibility Contract System (ERCS)

Since 1986, the Chinese government has actively promoted the ERCS to the state-owned enterprises with an aim to enhance their economic efficiency (over one-third of them were running in losses) through the participation in the profit sharing. The first stage of the ERCS development was from 1986 to 1990. In the first three years of this stage, ERCS created positive effects such as the government revenue and the labour remuneration were both increased.

However, in the following two years, due to the macroeconomics contol policies adopted by the government to curb down the overheated economy, the market demand for products and services declined and as a result, a lot of contracts could not be fulfilled. Therefore, during the second stage (1991-1995) of the ERCS development, many enterprises were not willing to enter into contracts with the government in 1991. Then the government had to give more favourable terms and conditions to the enterprises in order to induce them entering into the contracts.

Under the above situation, the Beijing Instrument Machine Tool Works (BIMT) entered into the first 5-year ERC (1991-1995) in 1991 with the following 7 government departments in Beijing:

- (1) Finance Bureau;
- (2) Tax Bureau;
- (3) Manpower & Wages Bureau;
- (4) Economic & Trade Commission;
- (5) State Assets Administration Bureau;
- (6) Bank of China; and
- (7) Beijing International Instrument Corporation.

The terms and conditions of this contract were summarised below:

- (1) profit before tax RMB3M in the first year;
- (2) profit before tax growth rate 8% per year;
- (3) foreign exchange income of US\$3.6M each year; and
- (4) for every 1% increase in profit before tax, the gross wages can be increased by 0.7%.

The top management (factory manager and the deputies) of BIMT together with BIIC have had some negotiation and discussion with the government departments in setting the terms and conditions of the ERC. BIMT believed that the ERC could enhance their motivation and then the economic efficiency. Besides, more profit could be retained for product and market development. Therefore, both the contractor (Government) and contractee (BIMT) are satisfied with the present arrangements in the ERC.

In view of the present promulgations of shareholding transformation (privatisation), company law and modern enterprise system, BIMT expects that the the ERC will be ceased after the current one is expired at the end of 1995, instead BIMT will be subject to the new taxation system enforced since January 1994 and other laws and regulations governing the state-owned enterprises.

### Section 5 : Planning System

### 5.1 Organisation Structure

In consideration of the relatively small operation of Beijing Instrument Machine Tool Works (BIMT), the guiding theme of the organisation structure is simplicity and accountability. It went to some length in 1992 to create stand-alone business units e.g. the 4 production workshops as independent semi-profit centres that are controlled by individual workshop managers with clear lines of authority and responsibility. Based on the Internal Responsibility Contracts (IRC), they are accounted for the production quantities and costs, as well as the fixed and working capital. Other than these four production workshops, all the other departments are classified as cost centres.

Since 1992, BIMT has been decentralizing more planning responsibility to each workshop and department such as initiating the annual budget and the internal responsibility contract. The profit responsibility primarily lies with the workshop manager but the top management keep a surveillance cost control on each production workshop through monthly or weekly report.

The selection and appointment of the factory manager and party secretary are decided by the Beijing International Instrument Corporation (BIIC) and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a lump sum bonus at the year end.

Since 1992, the factory manager has full autonomy to appoint the deputy-factory managers (the three chiefs are equivalent to deputy-factory managers) and the departmental managers under the 5 divisions. Any major changes of the organisation structure in each division should be initiated by the deputy-factory managers and approved by the factory manager. However, more autonomy of internal management and operation has been delegated to the heads of divisions (deputy-factory managers) since 1992. And in turn, the deputy-factory managers have involved their department heads more in planning, control and decision making. (Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, BIMT has a decentralized structure in which the individual divisional heads report directly to the factory manager, and they play a linking and control role between the divisions and the factory manager.

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

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### 5.2 Review Process

Since October 1992, Beijing Instrument Machine Tool Works (BIMT) has implemented a regular formal planning process to review, discuss and sanction the annual plan or budget and the internal responsibility contracts (IRCs). First of all, the factory manager reviews the long term plan and ERC, and evaluates the internal and external environmental factors, and then discusses with his deputy managers and three chiefs in order to determine the annual sales and profit targets for next year. Based on these preliminary targets, some guidelines are provided to the workshop managers and other department heads for them to initiate their own plans or budgets for the next year. As far as the four production workshops are concerned, their budget proposals contained the key criteria (i.e. internal profit, production quantity and working capital employed) to be used as the measurement yardsticks of their subsequent internal responsibility contracts. The other non-production divisions and departments have to compile their annual work plans and expense budgets as well.

During November, the Enterprise Management Office and Chief Accountant under the direction of the factory manager receives all the budgets and plans for validation and consolidation into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions are held between the factory manager, deputy-factory managers, three chiefs and department heads either collectively or individually. This iterative exercise carries on until all the plans, budgets and contracts are mutually agreed and approved in the AGM (all the employees can attain) held during next February. Then the enterprise management office publishes a set of the final master plan and sends to the top management and all the department heads.

Before 1992, the annual budget review process was not as dedicated and formal as described above, and the BIIC and in turn the top management gave directions to the workshops and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, etc. Since 1992, under the legislative changes and market economy promotion, BIIC has delegated higher automomy to BIMT in formulating its strategic directions.

Nevertheless, all the workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in

the 5-year long term plan. Therefore, the factory manager has less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence : shift from "High Corporate" to "Medium Corporate" since 1992.

## Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc. As far as strategic themes are concerned, the Beijing Instrument Machine Tool Works (BIMT) has explicitly written the following in the introductory section of the policy manual for Internal Economic Responsibility System adopted since 1990.

- (1) to implement the management by exception principles;
- to enhance product and market development; (2)
- (3) to maintain flexible operation to cater for changes;
- (4)to ensure proper marketable product mix;
- (5). to ensure production target with good quality;
- (6)
- to guarantee safety production; to measure monthly internal profit of production workshops; (7)
- to speed up the working capital cycle and cash collection; (8)
- to emphasize the cost reduction activities; and (9)
- (10) to provide more education and training for employees.

The above strategic themes are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise.

BIMT has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets (i.e. Southeast Asian countries) on the other hand. Furthermore, it is clearly stipulated in the IRC that "quality" has the veto power in determining bonus. As far as hardware is concerned, BIMT has imported some modern manufacturing plant and equipment from the USA and Japan at a cost of over RMB30 million since 1992.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

Before 1992, the top management in BIMT from time to time made suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. The top management followed the financial indicators and performance closely on monthly and quarterly basis and were quick to make suggestions if they did not match the overall long and short term plan.

To facilitate the implementation of the legislation in 1992, the top management have given some freedom to the workshop managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they would not deviate much from the ultimate sales and profit targets. Nevertheless, the top management still provide guidelines and suggestions to the workshops and departments in the planning process.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

### 5.4 Long-Term Plans (Resource Allocation)

Since the establishment of Beijing Instrument Machine Tool Works (BIMT) in 1956, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system. The commencement of the economic reforms in 1979 started to allowed BIMT to participate in the 5-year's planning with the BIIC and the municipal government but specific directives and suggestions were always coming from the top by using the term "macroeconomics control and adjustment" as an excuse.

The changing role of BIIC since 1990 has encouraged BIMT, for the first time, to formulate their own long term strategic plan (1991-1995). The major contents of this long term plan included capital projects, product and market development which needed to be dicsussed with the BIIC who have been exercising macro-economic controls and provide directives and targets i.e. technology expertise and quality standards. BIMT has also been allowed to carry out fesibility studies to ascertain the possibility of success in the capital projects to be undertaken.

Since then, the top management reviewed the long term plan at the end of each year. After lengthy discussion, another new 5 year plan will be emerged. In fact, a rolling 5-year plan is in operation. In the current 5-year plan (1993-1997 inclusive), the following strategic directions have been laid down.

### Competitive Edge (a)

In order to sustain the market share and a competitive edge against these counterparts, BIMT has to enhance its product quality by various means as described in the strategic themes and thrusts section above.

### (b) Research and Development

Related to the competitive edge strategy mentioned above, BIMT has invested over RMB20M since 1993 to establish a new R&D Centre to investigate into new products. Furthermore, BMIT has taken the following steps to enhance its R&D function:

- (i) to renew and upgrade the production equipment and facilities;
- (ii) to improve the product design by using value analysis;
- (iii) to investigate and improve the production technology;
- (iv) to strengthen the manpower and technical skills in the research and development department; and to provide more training in research and development.

### (c) New Product Development

BIMT has been discussing with an Italian counterpart to jointly develop a new tool milling machine CD840A equiped with advanced technology and sold at a higher selling price.

### (d) Overseas Markets

BIMT obtained the export right (also the foreign exchange usage right) in 1993, so that they can explore the overseas markets such as Southeast Asian, South America and Eastern European countries. But BIMT failed the export targets in both 1993 and 1994 because of competitors' quality and insufficient sales outlets although they have been actively participated in the exhibitions held in the UK, Germany and South America.

### (e) Cost Reduction

In order to enhance the competitive edge and to increase the profitability, BIMT has taken the following measures to reduce the total cost of operation :

- to cut production costs by value engineering;
- (ii) to set up a standard (target) costing system;
- (iii) to reduce the total number of employees;
- (iv) to reduce overheads e.g. heat, light, etc.; and(v) to tighten functional budgets i.e. accounting, personnel, sales, purchasing, etc.

A portion of the costs reduced or savings will be distributed to the employees as a kind of bonus.

The current 5-year plan was compiled after long discussions between the BIIC and the BIMT's top management. It was eventually agreed and reflected in the ERC signed with the municipal government. Although the department heads (middle management) have been involved in this planning process, they were playing a consultation role only. Furthermore, the workshop managers and department heads are mainly concerned with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the factory manager at least on a monthly basis. Therefore, the long term planning and review process are using a top-down approach in the belief that the factory manager (over 20 years in the plant) has better experience and knowledge of the external environment and even the internal operations of the workshops and departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the BIIC has devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the top management of BIMT is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only. However, many detrimental factors, as described in the History and Background section, are now making the implementation of the above long term plans very difficult if not impossible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

### 5.5 Short-Term Plans/Budgets (Resource Allocation)

Since the 1990s, the general short term planning policy adopted by Beijing Instrument Machine Tool Works (BIMT) is "production determined by sales" which means sales is the initial driving force of all the activities. Reference should also be made to the 5-year long term plan especially to estimate what the sales potential will be for the newly developed product(s) in the next year. As from September 1992, BIMT has employed the following annual budgeting process.

The factory manager and the marketing and sales division are very active in performing some marketing activities such as participating in local and overseas exhibitions and visits to exisiting and potential customers with his sales and marketing staff. In September, he evaluates the present and future internal financial, production and human resources with the deputy managers and the three chiefs. He also scans the external opportunties and threats with the sales and marketing staff. Eventually, the factory manager tentatively determines a set of sales mix figures (i.e. sales budget). These sales forecasts will be provided to the respective departments, more importantly to the production workshops, for them to initiate their own budgets.

The first budget submission is in early November and the enterprise management office and chief accountant consolidate all the pieces into a master budget (financial and operation plan) for factory manager's review before the first budget meeting is held with all the workshop managers and department heads. The major purpose of this first meeting is to discuss with the four workshop managers to ascertain whether their production capacities can be matched with the initial sales budget. If they exceed the sales budget, it becomes the primary responsibility of the sales and marketing staff and even the factory manager to hunt for other sales avenues in order to fully utilize the production capacity. If there is excess demand, then priorities will be given to the customers for delivery and agreements must be made with the customers beforehand. Since the competition in this industry is very keen, BIMT has been under full capacity (about 80%) in the last two years.

Again, the second budget submission in December is consolidated by the enterprise management office for further review by the factory manager who will then discuss informally or formally with the workshop managers and department heads. Another submission is usually made in January next year. Finally, the agreed master budget is tabled to the annual general meeting for approval by all the employees in February right after the Chinese New Year.

Since September 1992, the workshop managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the factory manager. The other department heads have also participated carefully in devising their expense and operation budgets which they would be measured against as performance yardsticks.

Since BIMT's whole budgeting process is still performed on manual basis, therefore, it is not suprising to see that the agreed budgets are fixed once every year although some changes (i.e. sales and production) can be made during the quarterly review. In view of the rapid changing market conditions, the budget review period has been shortened from half-yearly to quarterly. The factory manager and his deputy managers and three chiefs hold a formal meeting at the beginning of each month to review the financial performance against the master budget and individual departmental budgets.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given BIMT more freedom to plan ahead. The government representative, BIIC, has almost completely devolved the short term planning autonomy to BIMT, except to agree on the overall sales and profit targets. The top management have involved the middle management or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan or the ERC, and on the other hand, it is an important motivational factor for the workshop managers and department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

# 5.6 Internal Responsibility Contracts (IRC)

Beijing Instrument Machine Tool Works (BIMT) established its IRC system in 1992, just one year after signing the first ERC with the municipal government, in order to motivate the efficiency, profitability and cost reduction in the production workshops. The followings were the contents of the IRC signed between the Factory Manager and No.1 Workshop Manager in January 1994.

Department : Production Workshop No.1 Duration : January - December 1994

Introduction

In order to accomplish the financial targets of RMB80M turnover, RMB10M profit before VAT and income tax, and RMB8,000 wages per employee, the following terms and conditions have been agreed between the Headquarters and the Production Workshop No.1.

### (1) Authorities

- 1.1 Production Workshop No.1 is a self-managed and self-financed independent profit centre. The workshop manager is the representative (contractee) of this IRC.
- 1.2 Within the manpower budget, the workshop has the authorities to design its organisation structure, to appoint management personnel, to assign jobs to workers, to distribute the wages and bonus, and to manage the working capital appropriated by the headquarters.
- 1.3 The workshop has the rights to employ the building, facility and equipment assigned by the headquarters in order to operate its activities. The workshop should actively participate in developing marketable products. The workshop should also try to obtain sub-contracting work from the outside customers in order to utilize any spare capacity.
- (2) Responsibilities
- 2.1 The workshop should strictly comply with the Industrial Enterprise Accounting System and Industrial Financial Regulations to determine costs of production correctly. All incomes and expenses should be recorded and processed by the Accounting and Finance Department. Any violation of these rules may be penalised by deducting 5-10 times of the amount involved from the total wages payable to the workshop.
- 2.2 The workshop guarantees RMB4.5 million of internal profit and RMB40 million of internal sales to the Marketing and Sales Company (servicing company). The internal sales include RMB10 million revenue from non-standard products manufactured. The workshop's total remuneration is linked with the internal profit achieved. If the above targets can be attained, RMB2,293,669 of wages, bonus and allowances will be awarded to the workshop. The floating base is RMB2 million (see 3.1 below).

- 2.3 The workshop should comply with the production plans to purchase the component's from the other workshops at the negotiated transfer prices which are equal to [standard cost x (1 + mark-up%)].
- 2.4 The workshop absorbs RMB3,263,000 of management expenses allocated from the headquarters.
- 2.5 The workshop employs RMB5.5 million of production working capital and pays a notional interest, as cost of production, calculated by [monthly average capital employed x 9.15%].
- 2.6 The workshop ensures the supplies of standard products and components (or spares) to the Marketing and Sales Company. The selling prices of standard products are according to the negotiated (or agreed) prices. The selling prices of components (or spares) are equal to the market price. The workshop should be allocated 5.6% of the selling expenses incurred by the Company. Selling expenses include notional interest charged on working capital employed by the Company.
- 2.7 Standard (Planned) prices are used for materials and parts supplied by the Purchasing and Supply Company. As from 1 July 1994, actual purchase prices will be used instead of standard prices. The workshop should be allocated 6.7% of the purchasing expenses incurred by the Company. Purchasing expenses include notional interest charged on working capital employed by the Company.
- 2.8 The workshop should guarantee the product quality and all the quality targets laid down must be complied with.
- 2.9 Repair and maintenance on the production facilities and equipment should be performed according to the annual plan. Actual repair and maintenance expenses should be charged to the cost of manufacturing according to the new accounting standards implemented since July 1993.
- 2.10 Certain percentages on the amount of total wages should be
   provided for :
   labour union expenses : 2%

labour union expenses : 2% education & training expenses : 1.5% retirement/pension fund : 20% retirement medical expenses : 3%

- 2.11 Enhance the operation management in order to :
  - (a) control levels of working capital and expenses;
  - (b) improve the inventory control such as the physical count, bin card and stock ledger are reconciled;
  - (c) shorten the production cycle, even out the output rate, and try small batch and flexible manufacturing system;
  - (d) improve the daily operation control; and

- (e) creat a good working environment.
- 2.12 The annual repair and maintainence plan must be implemented in order to achieve over 85% of ready-to-use rate of the production facilities and equipment.
- 2.13 Enforce the safety education and resolve any potential safety problems in advance in order to guarantee no accident and damage to the employees and production facilities and equipment.
- (3) Incentive
- 3.1 According to 2.2 above, if any 1% increase in internal profit over the annual target of RMB4.5, 0.7% of the floating base (i.e. RMB2M) will be awarded as bonus. Vice versa, 0.7% of the floating base will be deducted from the total remuneration for any 1% decrease in internal profit target. For examples:

Actual Internal Profit	Incentive Bonus/Penalty
RMB4.545M (101%)	$RMB2M \times 0.7\% = RMB 14,000$
RMB4.725M (105%)	$RMB2M \times 0.7\% \times 5 = RMB 70,000$
RMB4.410M ( 98%)	$RMB2M \times 0.7% \times 2 = (RMB 28,000)$
RMB4.140M ( 92%)	$RMB2M \times 0.7% \times 8 = (RMB112,000)$

- 3.2 If internal profit is apparently below the monthly target, the prepaid wages for the month will normally be less than 70% of the total amount. (The actual internal profit can only be determined during the next month.)
- 3.3 According to the time schedule, the workshop should submit the pre-determined financial reports to the Accounting and Finance Department.
- 3.4 Any significant damages caused due to managment mal-practice or negligence, the workshop leaders will be demoted or disciplined.
- 3.5 If all the financial and non-financial targets can be achieved, the workshop manager's remuneration will be 1 3 times of the average wages per employee in the workshop. However, if some of the targets cannot be achieved, the workshop manager's remuneration will be reduced to 80% of the average wages per employee in the workshop.
- 3.6 Any dispute between the workshop and the marketing and sales company or purchasing and supply company will be arbitrated by the Enterprise Management Office.

3.7 This contract will be effective for 1994 after discussion and approval by the annual general meeting (represented by various levels of management and workers).

It took a few months for the factory manager and the workshop managers to negotiate with the terms and conditions for the IRCs signed. This long process indicated that the setting of IRC was not a top-down approach and the workshop managers were very eager on this issue upon which they would be measured against and rewarded thereupon.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the factory manager has delegated more freedom to the workshop managers in initiating and negotiating their own IRCs, and also involved the finance division intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Management of interdependencies means the central influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the workshops, and exploitation of a shared resource are examples that happen in Beijing Insturment Machine Tool Works (BIMT) that need headquarters' intervention.

As shown in the organisation chart in Section 2 above, the Purchasing and Supply Company is an independent and self-financed service entity (teritary enterprise) which can buy from and sell to the external vendors and customers respectively. The transactions between the Company and BIMT are treated as arms-length and charged according to the adjusted market prices. Similarly, the Marketing and Sales Company is an independent investment centre which represents BIMT selling the final products to local and overseas customers. The Company purchased the final products from BIMT at adjusted market prices as well.

As described in the IRC sample of Production Workshop No.1 in Section 5.6 (sub-section 2.3), the workshop should comply with the prouction plans to purchase the components from the other workshops at the negotiated transfer prices which are equal to  $[standard\ cost\ x\ (1 + mark-up%)]$ .

Furthermore, the workshop ensures the supplies of standard products and components (or spares) to the Marketing and Sales Company (sub-section 2.5). The selling prices of standard products are according to the negotiated (or agreed) prices. The selling prices of components (or spares) are equal to the market prices. The standard transfer prices are reviewed annually in line with the budgeting process and adjusted according to the inflation rates.

Observation of Planning Influence : Shift from "High Corporate" to "Medium Corporate" since 1992.

### Section 6 : Control System

### Decentralisation and Control 6.1

As far as the organisation structure is concerned, Beijing Instrument Machine Tool Works (BIMT) has three distinct levels of management hierarchy:

- (1) Top Management (factory manager, deputy-factory managers, chief accountant, chief engineer and chief economist)
- (2) Middle Management (workshop managers and department heads)
- (3) Lower Management (foremen and supervisors)

The deputy-factory managers and the three chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of employment with any staff is a difficult task which will be explained in the rewards and incentives section.

(Please refer to Q6.1.1-3 on the questionnaire extracts Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of BIMT.

Observation of Control Influence : shift from "Financial Control" to "Moderate Financial Control" since 1992. \_\_\_\_\_\_

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### 6.2 Agreeing Objectives

Beijing Instrument Machine Tool Works (BIMT) sets similar objectives for its production workshops: workshop managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions.

The critical occasion, therefore, is the annual budget review. In view of the fierce competition within this industry, the production workshops sometimes feel passive in setting their objectives or targets in the budgets or IRCs because their activities are depending on the sales demand. Even at the economic downturn in 1994, the workshops were asked to follow the production budgets although they realised that some products were piling up in stock.

A high pressure to achieve the budgeted production and internal profit is put on the workshop managers at the quarterly or monthly review. They fully understand that their group bonuses are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. In terms of expenses, control is tighter and a system of standard cost has been implemented. Although the non-production departments do not have the IRCs, they have agreed specific objectives or targets with the factory manager, for example, amounts of working capital employed, levels of expenses and management by objectives.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Beijing Instrument Machine Tool Works (BIMT) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the workshops and departments submit monthly results on standard forms to their respective divisional heads and also to the chief accountant for vetting and comparison with budgets and IRCs. The production workshops are also required to submit production figures to the top management on a weekly basis.

The monthly report format is unique for each department. The contents are mainly corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the fixed budgets. The qualitative targets are usually subjectively measured by the divisional heads and written in the monthly reports as well. These monthly reports are compiled by the accounting department and assessed by the enterprise management office.

Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the factory manager for review. For any serious adverse variances shown on any report, the factory manager will contact with the respective deputy managers, workshop managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

BIMT's senior management hold monthly meetings to discuss production planning, scheduling and management, marketing and sales, economic performance and party's affairs. During the economic performance meeting, the factory manager will put forward the monthly results for open discussion. The workshop managers and the department heads may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a workshop manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results will be passed back to the manpower and wages department for calculating the group bonus of each workshop or department for last month. Then the accounting department will process the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization is not well recognised by the top management even though a few stand-alone personal computers have been used for production planning and payroll. The accounting functions are still performed manually. There is no plan for implementing a comprehensive integrated management or accounting information system. Perhaps the lack of capital for investment in computer hardware and software and the urgent needs to focus on the marketing strategies put computerization at the bottom of the priority list.

Now, BIMT views a budget or IRC as a contract between the top management and the department or workshop. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

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## 6.4 Rewards and Incentives

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the BIMT is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

The take-home pay of each employee in BIMT is mainly composed of three elements as broken down below:

(1)	Basic Wages	35%	-	45%
(2)	Bonus	40%		25%
(3)	Allowances	25%	-	30%

The average annual gross wages per employee was around RMB6,580 in 1993. This wages level is at least 30% lower than the Southern cities like Xiamen and Guangzhou because the inflation rate is lower in Beijing (20% compared with 35% in Guangzhou in 1993). Nevertheless, under the current high inflation rate in China (overall average 23% and 21% in 1993 and 1994 respectively), BIMT increased the average annual gross wages to RMB7,500 in 1994 and is expected to reach RMB8,500 in 1995.

There are two portions for the "allowance". The first part is determined by the Manpower and Wages Bureau of the Beijing Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity.

The second part is decided by the BIMT which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowance" is about RMB115 to RMB140 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the workshops, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the factory manager and a workshop manager decides what level of group bonus will be given to the department. Of course, it is up to the workshop manager to award that lump sum of group bonus to his or her subordinates according to invidual performance.

The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

How is the bonus determined for the management and administrative staff in the other departments? It can be described in the following steps:

- (1) Calculation of management score
  - (a) Performance according to targets set
  - (b) Discipline according to rules and regulations
  - (c) Management methods and styles
  - (d) Security and safety
- (2) Calculation of average bonus

Management score % (1) x Monthly average production bonus

(3) Calculation of individual bonus

Average monthly bonus (2) x Individual index\*

\* Different indexes for different grades of staff, i.e.

Factory Manager = 2.0

Deputy-Factory Manager = 1.8

Department Head = 1.6

Deputy Department Head = 1.5

Supervisor = 1.4

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the BIIC will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management). On the other hand, if the overall performance of the enterprise is not satisfactory or far below the ERC's targets, the factory manager may be replaced by the BIIC. If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

In addition to the wages and salaries to the present employees, BIMT has to pay pensions and other allowances (i.e. medical) to 300 retired employees. As from 1994, a kind of "social welfare policy" mandated by the government has to be implemented in all the state-owned enterprises. Under this policy, BIMT has to contribute 25.5% of the monthly total payroll to the government for employees' pension.

The government will ultimately responsible for the future pension payments to the BIMT's employees. The government is now considering to ask for an additional 16% - 18% from the state-owned enterprises to cover the medical, unemployment and disable allowances for the employees.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Rice Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. At the end of June 1995, the total number of employees in all the state-owned enterprises was 143 millions, accounting for 86% of the industrial and commercial workforce in China. Therefore, it takes a long time to change the working attitudes of this huge amount of employed population.

However, to lay off a certain percentage of redundant employees may cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Instead of fully implementing this contract employment system, BIMT has signed "In-Post Contracts" with most of the employees for periods from one to five years. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages (according to class in pay-scale), allowance and bonus. Without such a contract, that employee is out of job but he or she is still an employee of BIMT and is allowed to received a basic monthly subsidy of about RMB150. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better.

Another means to absorb the redundant employees is to transfer them to a few "tertiary enterprises" (service enterprises), such as transportation, repair and maintenance, canteen and nursary, which are self-financed independent profit centres. (Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, BIMT believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Instrument Machine Tool Works (BIMT) belonged to before and after 1992.

Influences	Refore 1992	After 1992
Planning Influences:	· • • • • • • • • • • • • • • • • • • •	
Organisation Structure*	Very High to High Corporate	Medium Corporate
Review Process*	High Corporate	Medium Corporate
Strategic Themes, Thrusts and Suggestions*	Very High to High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High to Medium Corporate	Low Corporate
Internal Responsibility Contract	High Corporate	Medium Corporate
Management of Interdepen- dencies* (Transfer Pricing)	High Corporate	Medium Corporate
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence	
	Tight Strategic	Tight Financial
High Corporate	(Strategic Programming)	(Financial Programming)
Medium Corporate		[Pre-1992]
Low Corporate	(Strategic Control)	(Financial Control)

# Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Instrument Machine Tool Works (BIMT) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

Revised: 10 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 11
Report Date : 29 December 1994

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

High Corporate Tight Strategic Strategic Programming(	
High Corporate Tight Financial Financial Programming ( Low Corporate Tight Strategic Strategic Control (	

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Name of SOE : Shanghai No.1 Department Store Company

Limited (SDS1)

Staff Interviewed : Miss Lee Shu Hua/Chief Accountant

(No. of years in this enterprise: 7 years)

Dates of Visits : First Visit - 11 September 1993

Second Visit - 5 September 1994 Third Visit - 10 February 1995

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# Section 1 : History & Background

Before the formation of People's Republic of China (PRC) in October 1949, Shanghai No.1 Department Store Co. Ltd. (SDS1) had been existed and previously known as Daxin Department Store. SDS1 is the first and largest state-owned department store in Shanghai established in the same month right after the birth of the PRC.

Since the early 1930s, SDS1 has been using the present old building as the main store with an expansion from 5 floors in 1960s to 7 floors in 1980s, and then 9 floors in 1994 with a total shopping area over 20,000 square metres and another 5,000 square metres for administration offices. This famous old building is located in the central of Nanging Road (at the one end of Nanging East Road) which is recognised as the heart of West Shanghai business centre. Probably, there will be another significant potential capital gain if this building is revaluated again.

Turnover has been expended from a few millions of yuan (Reminbi) in the early 1950s to RMB1,700 million (yuan) in 1993 and expected to achieve RMB2,100 million (yuan) in 1994. Number of items of commodities on sales has been increased to over 30,000 in 1994. About 5% of the commodities, manily household electrical appliances, are imported from overseas countries.

In view of the fierce competition from local and foreign-invested department stores in Shanghai, SDS1 has been focusing on improving the service quality, modifying the commodity mix, expanding the wholesale market and diversifying into other businesses, in order to capture a bigger share in this vigorous retailing market. In the first 6 months of 1994, SDS1 attained a turnover (from retailing) of RMB1,022 million which was increased by 22% compared with the same period in 1993. In parallel, profit from retailing was increased by 5.4% to RMB57 million. According to the local government statistics, SDS1 was ranked the top in terms of turnover and profit in the Shanghai retailing business. Furthermore, in 1994, SDS1 was qualified by the Ministry of Domestic Trade as an "Outstanding Enterprise" and presented the "Golden Bridge Award".

# Section 2 : Legal Form & Organisation Structure

Shanghai No.1 Department Store (SDS1) has been a wholly state-owned enterprise since 1949 and it was transformed into a shareholding enterprise in mid-1992 in order to raise RMB470 million of capital to finance the three major projects as described in the "Long Term Plans" [Section 5.4] below.

The shares were held by the government (60%), other enterprises (21%) and individuals (19%). The individual shares, issued to the employees and general public at a price of RMB8.90 per share, were listed in the Shanghai Stock Exchange in July 1992. A "Right Issue" was made in July 1993 to raise an additional capital of RMB200 million which has also been fully utilized to finance the major projects. Therefore, SDS1 had to obtain a bank loan of RMB12 million to further inject funds for these few capital projects. The total bank loan was further increased to RMB200 million at the end of 1994.

Since SDS1's major shareholder is the government, therefore, it is under the administration of the Shanghai Municipal Government and also the Shanghai Commerce Bureau which is a branch of the Ministry of Commerce in Beijing. Before the economic reforms started in 1979, the central planning system dictated all the planning and control systems of the state-owned enterprises. Therefore, SDS1 acted just as a vehicle (or cost centre) to carry out the retailing activities according to the commands directed from the bureau. Since the economic reform started in 1979, instead of dictatorship from the bureau, SDS1 has been involved in the 5-year long range plan even though SDS1 for most of the time had to take the directives from and give in their negotiations to the authority.

After converting into a shareholding enterprise, the SDS1's top management (i.e. board of directors) have experienced much higher pressure to develop and monitor both long and short term plans because now they are accountable to various shareholders, including the general public, other than the government who is the major shareholder. But on the other hand, their degree of freedom is higher than the wholly state-owned enterprises in terms of higher autonomy and motivation to manage their business activities. Now the Shanghai Municipal Government and Commerce Bureau only oversee the major development and projects, mainly long term ones, recommended by SDS1. Furthermore, the bureau has fully delegated the pricing autonomy to SDS1 to compete in the fast developing and keen retailing market in Shanghai.

In responding to and implementing of the "SOE Operation Mechanism Tranformation Regulations" enacted by the People's Congress in July 1992, both the government and bureau have delegated the planning and control responsibilities to the top management of SDS1 to run their own business. In addition, a shareholding enterprise like SDS1 has vested the right to raise both long and short term capital as well.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

The organisation sturucture of SDS1 is listed as follow:

- 1. Board of Directors (11 members)
  - 1.1 Chairman
  - 1.2 1 Vice-Chairman
  - 1.3 General Manager
  - 1.4 1 Deputy General Manager
  - 1.5 1 Government Representative
  - 1.6 1 Labour Union Representative
  - 1.7 1 Party Representative
  - 1.8 4 Enterprise Representatives (major shareholders)
- 2. Executive Management
  - 2.1 General Manager
  - 2.2 Deputy General Manager Operation
  - 2.3 Deputy General Manager Purchasing & Stores
  - 2.4 Deputy General Manager Marketing & Sales
  - 2.5 Deputy General Manager Planning
  - 2.6 Deputy General Manager General Affairs
  - 2.7 Chief Accountant
- 3. 7 Department Stores & 1 Wholesale Market\*
  - 3.1 Women's Clothing
  - 3.2 Men's Clothing
  - 3.3 Electrical Household Appliances
  - 3.4 Watches & Jewellery
  - 3.5 Household Furniture
  - 3.6 Daily Necessities
  - 3.7 Supermarket
  - 3.8 Wholesale Market

(Each department has its own manager, deputy managers, accounting, personnel, general affairs staff and section supervisors in charge of several counters selling various commodities.)

- 4. Other Branches (2,000 6,000 square metres) \*
  - 4.1 Manager
  - 4.2 2 Deputy Managers
  - 4.3 Purchasing Officer
  - 4.4 Accounting Officer
  - 4.5 Personnel Officer
  - 4.6 General Affairs Officer
  - 4.7 Section Supervisors
- 5. Joint-Ventures, Subsidiaries & Tertiary Enterprises\* (See section 5.4 of Long-Term Plan)
- \* All the department stores, branches, joint-ventures, subsidiaries and tertiary enterprises are treated as profit centres and have signed Internal Responsibility Contracts (IRC) with the General Manager. In turn, each Department Store has the autonomy to sign second level IRCs with its various sections.

SDS1 had a total of 4,500 employees at end of 1994 and about 2,000 retired employees whose pensions and benefits had to be borne by SDS1. Since 1992, all the employees have signed "employment contracts" with duration from one to five years.

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# Section 3 : Financial Indicators

#### 3.1 Key Figures

Total assets : RMB 1,101M (1993)
Turnover : RMB 1,780M (1993)
RMB 2,140M (1994)

Income before tax : RMB 105M (1993) - 5.89% of sales RMB 110M (1994) - 5.14% of sales\*

Income tax rate : 15% (since 1992)

\* The reduction of profit margin in 1994 was mainly due to the inflation of purchased goods, wages and overheads.

#### 3.2 Financial Statements

The "Balance Sheet" as at 30 June 1994 was as follow:

	Million	Yuan
	30.06.94	30.06.93
Intangible & deferred assets	12	16
Net fixed assets	73	77
Construction in progress	344	281
Long-term investments	306	267
Current assets	369	460
Total assets	1,104	1,101
	====	====
Paid-up capital	198*	153#
Capital reserve	569	581
General reserve	44	17
Unappropriated profit	46	. 90
Long-term liabilities	13**	1
Current liabilities	234	259
Total equity and liabilities	1,104	1,101
	====	=====

<sup>\*</sup> The paid-up capital was 198,238,992 shares of RMB1 each.

<sup>\*\*</sup> The increase of RMB12 million was due to a bank loan to finance the capital construction projects.

# A bonus issue (3 for 10) and cash dividend (RMB0.2/share) were made on 23 May 1994 which were financed by the unappropriated profit (RMB63 million) and general reserve (RMB13 million). After the right issue in 1993 and bonus issue in 1994, the shares were held as follow:

	No. of shares	
Government	88.51 million	44.65%
Enterprises	61.89 million	31.22%
Individuals	47.84 million	24.13%
	198.24 million	100.00%

The 6-month profit and loss account as at 30 June 1994 is as follow (excluding subsidiary enterprises) :

Income from major business	JanJun. 94 Yuan'000 1,021,565	JanJun. 93 Yuan'000 837,682
Profit from major business	56,603	53,705
Profit from other business	3,557	274
Profit from investments	4,255	13,192
Non-operating income	1,139#	345
Non-operating expenses	(11,570)@	(7,516)
Net profit before tax	53,984	60,000
Income tax	8,133	9,000
Net profit after tax	45,851	51,000
	=======	======
Net profit after tax % per share	23.13%	
Net profit after tax % equity	5.35%	

# The increase of non-operating income was due to the export tax refund of RMB839,000.

@ The increase of non-operating expenses was due to the increase payments to the retired employees.

# 3.3 Performance Indexes (1994)

	6 months Actual Yuan'000	12 months Budget Yuan'000	% of Budget
Operating Income			
Holding only	102,156	2,137,000	47.80%
Subsidiaries included	120,308	2,137,000	56.30%
Profit before tax	53,984	100,000	53.98%
Profit after tax	45,851	85,000	53.94%

The audited financial statements for 1994 would be available in April 1995.

# Section 4 : Economic Responsibility Contract System (ERCS)

The Shanghai No.1 Department Store had entered Economic Responsibility Contract (ERC) with the Shanghai Municipal Government and Commerce Bureau since 1987. The major financial targets set in the ERC were turnover, profit, income and other taxes. The ERC was ceased in 1992 when SDS1 was converted into a shareholding enterprise and SDS1 has been subject to income and other taxes.

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# Section 5 : Planning System

# 5.1 Organisation Structure

The organisation structure of Shanghai No.1 Department Stores (SDS1) is similar to a matrix management with functional staff i.e. accounting, personnel, purchasing, general affairs etc. in each department store or branch reporting to both the store or branch managers and the head office. It went to some length during the shareholding transformation in 1992 to create semi-stand-alone business units of all the 7 department stores, other branches and "tertiary enterprises" (i.e. motel, restaurant, import/export business and other joint-ventures) by giving higher autonomy in terms of personnel, purchasing, sales, promotion, operation, evaluation and remuneration.

Since 1992, SDS1 has been decentralizing more planning responsibility to each department store and other business units such as initiating the annual plan and the internal responsibility contract. The profit responsibility primarily lies with the store and branch managers but the top management keep a close eye on the financial performance of each profit centre through monthly or weekly report.

Since privatisation in 1992, the Chairman of the board has been appointed by the State Assets Administration Bureau. The annual general meeting and board of directors have full autonomy to appoint the general manager and his deputy managers. Then, the general manager can appoint other senior managers in the headquarters and the managers of the department stores and business units. In turn, the store and unit managers have the autonomy to appoint their own staff but should report to the headquarters. Any major changes of the organisation structure in each store and business unit should be initiated by the manager and approved by the general manager.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, SDS1 has a decentralized structure in which the individual store and unit managers report directly to the general manager, and they play a linking and control role between the profit centre and the general manager.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

#### 5.2 Review Process

Since the transformation into shareholding enterprise, Shanghai No.1 Department Store (SDS1) has implemented a formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). First of all, the board of directors refer to the long term plan and evaluate the internal and external environmental factors before thorough discussions with the top management in the headquarters. The ultimate conclusion is to determine the annual sales and profit targets for next year. Based on these preliminary targets, some guidelines are provided to the department store managers and other business unit managers for them to initiate their own plans or budgets for the next year. Much emphasis is placed on the internal profits for the department stores which annual plans contained the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

In October, all the department stores and business units submit their annual plans to the Planning Deputy General Manager for consolidation before review and discussion by the top management and board of directors. The first annual planning meeting is held in November by the board of directors mainly to discuss the gaps between the submitted plans and the targets perceived by the board. The top management is trying to provide assistance to the department stores and business units to close the gaps as far as possible. Then, further formal and informal meetings and discussions are held between the top management and department and unit heads either collectively or individually. This iterative exercise carries on until all the annual plans and contracts are mutually agreed and approved in the board meeting held during February. The approved annual plans are broken down into quarterly and monthly plans to cater for seasonal and holiday factors. The annual plans are formally reviewed once during the middle of the year.

Before privatisation in 1992, the department stores had not participated too much in the annual planning process. Instead, they were given the performance targets by the top management. Since 1992, under the ownership and legislative changes, and the market economy promotion, the municipal government has delegated higher automomy to SDS1 in formulating its strategic directions. As a result, all the department stores and business units, who know their operations better, are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan which is accountable to the shareholders.

Therefore, the top management in the headquarters has less interference in departmental planning decisions, but without reducing the financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc. As far as strategic themes are concerned, the Shanghai No.1 Department Store (SDS1) has explicitly promulgated the following:

- (1) to provide different varieties, choices, models, fashions and prices of commodities for various segments of customers;
- (2) to guaranteed the quality, return and delivery of the commodities sold;
- (3) to adopt different flexible selling methods and styles;
- (4) to improve service quality to promote company reputation and goodwill; and
- (5) to use modern management techniques i.e. computerization to enhance economic efficiency.

The above strategic themes are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise. SDS1 has been promulgating "commodity and price variety" as the most important strategic thrust in order to provide a wide spectrum of goods for different segments of customers to choose from. In parallel with the sharp increases of income, which is a major cause of high inflation in China (average 22.7% in 1994), the purchasing power of the general public has been raised significantly in the 1990s. Therefore, SDS1 offers different classes or price levels of many categories of commodities for various segments of customers to choose from according to their purchasing abilities.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in SDS1 still from time to time make suggestions on specific issues relating to the planning and control process such as department layout and decoration, promotion strategies, selling price, commodity mix, purchasing and manpower. Despite this fact, the top management has given more freedom to the department and unit heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

The top management follow the financial indicators and performance closely on monthly and quarterly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Medium Corporate" to "Medium-Low Corporate" since 1992.

# 5.4 Long-Term Plans (Resource Allocation)

Having had fresh capital from listing in the Shanghai Stock Exchange and the subsequent two right issues in 1993 and 1994, Shanghai No.1 Department Store (SDS1) has actively undertaken the following long term projects which are believed to be able to contribute handsome returns to the shareholders and other stakeholders. These projects will be extended to the 9th National Long Term Plan (1996-2000).

# (1) Major Branches in Shanghai

Since 1993, SDS1 has established 4 branches in 3 busy districts of Western Shanghai and 1 in Eastern Shanghai. This strategy can expand the market share, increase turnover and profit, and absorb excessive employees from the main store. A few more branches will be opened in the next 5 years.

### (2) Branches outside Shanghai

SDS1 is planning to establish a few branches in the nearby counties or cities in order to capture the increasing economic growth and income per capita in these places.

# (3) Joint Venture with Japan

Since late 1992, SDS1 has entered into a joint-venture with Yohan Department Store (holding 45% of the shares), one of the top five in Japan, to build up a commercial complex in Pudong (Eastern Shanghai on the other side of Huangpu River) having 2 towers of 9 floors and 22 floors respectively and occupying a total floor area of 140,000 square metres. The lower tower will have the largest department store in Shanghai and Asia, restaurants, amusement grounds, supermarket etc. The higher tower will be office floors to be rented out. This giant commercial complex named Shanghai New Centuary Plaza will be opened at the end of 1995.

#### (4) Expansion

Since January 1995, SDS1 started to eract a 20-storey building adjacent to the present old building on the Nanjing East Road side. Six floors of over 25,000 square metres will be used as new department stores (connected with the existing stores). The other 16 floors will be rented out as offices.

#### (5) Diversification

At the beginning of 1993, SDS1 has acquired the adjacent 6-storey building with a total floor area of 6,700 square metres and transformed it into a multi-service block having a fast-food restaurant (managed by Cafe de Coral of Hong Kong), a traditional restaurant, a bar and a small motel.

# (6) Manufacturing

Since the early 1990s, SDS1 has entered into small joint-ventures with some factories located in the suburban areas in manufacturing clothing, leather and consumable products for sales in the department stores.

# (7) Import/Export

Since 1994, SDS1 has obtained the "Import/Export Right" from the central government. Then, SDS1 has immediately signed an economic responsibility contract with the local government to manage an import and export enterprise called Fujitec. In the first 6 months of 1994, Fujitec achieved a turnover of RMB91 million and a profit before tax of RMB2.3 million. The import and export trade will be enhanced not only for profit but also for gaining foreign exchange.

#### (8) Investment

Since the late 1994, SDS1 has invested US\$1 million to acquire 70% of the shares in Shanghai Konmose Computer Limited as a first step to involve in the high technology business. This subsidiary is generating profit since January 1995.

#### (9) Wholesale

In early 1994, SDS1 has invested RMB5 million in Shanghai Textile Product Company and transformed this enterprise into a new one called Shanghai No.1 Commercial Products Company which is mainly handling the wholesale and retailing of textile and consumable commodities. In the same year, SDS1 utilised over half of the space on the 7th floor of the old building to convert it into a wholesale market displaying various commodities for the retailers to choose from.

# (10) Overseas Business

SDS1 is planning to establish a few department stores and wholesale business centres in a couple of Southeast Asian countries as the first step to penetrate into the overseas markets.

# (11) Tertiary (Service) Enterprises

Since 1992, SDS1 has been financing and assisting the retired employees to establish small retailing shops and other related businesses which are all independent self-financing profit centres. On one hand, this strategies can increase the income of the retirees who receive about RMB300 pension per month and alleviate the financial burden of SDS1 on the other hand.

# (12) Long Term Finance

In order to finance the above long term projects, SDS1 has increased the current bank loan to RMB200 million. On 17 February 1995, SDS1's joint-venture with Japanese Yohan Department SDS1 entered into a US\$48 million (RMB400 million) cyndicate loan contract with 13 local and overseas banks in Hong Kong. The large sum of cash will be used to finance the Shanghai New Centuary Plaza described in (3) above. Apart from increasing the bank loan, SDS1 is planning to process another right issue or to issue B shares (for foreign investors but B shares index has dropped from the base 100 to 55 since 1991).

Since the establishment SDS1 in 1949, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system.

The commencement of the economic reforms in 1979 started to allow SDS1 to participate in the 5-year's planning with the Shanghai Municipal Government and the Shanghai Commerce Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse.

The Enterprise Mechanism Tansformation promulgated by the government and the Privatisation of SDS1 in 1992 have legitimately delegated the long term strategic planning autonomy to SDS1 who is not only responsible to the government (majority shareholder) but also to the other shareholders in the public. SDS1 must demostrate to the stakeholders of its future development to sustain growth in terms of asset value and profitability.

However, many external factors and uncertainties, such as government macro-economic control policies and inflation, have affected the validity and reliability of the above long term plans which have been subject to review and changes every year. The long term plans are initiated and discussed by the top management and the board of directors without much participation from the department store and business unit managers except playing a consultation role only. Furthermore, the store and unit managers concern with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have financial surveillance coming from the top management at least on a monthly basis.

Therefore, the long term planning and review process are using a top-down approach in the belief that the board of directors and top management have better experience and knowledge of the external environment and even the internal operations of the departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Shanghai Commercial Bureau has almost completely devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the board of directors of SDS1 is taking the leading role to formulate its own long term plans but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

# Short-Term Plans/Budgets (Resource Allocation)

Before 1992, Shanghai No.1 Department Store (SDS1) was required to submit the following two annual plans to the Shanghai Commercial Bureau :

- Financial Plan to highlight the (a) incomes, expenses, profits, taxes, loan repayments and balance sheet items.
- Commodity Turnover Plan to highlight the quantities and varieties of commodities to be purchased, sold and carried. (b) (The purchase function is controlled by SDS1 since 1990s.)

These two plans were used by the Bureau to exercise its macro economic control on SDS1 through directives or negotiations. After the implementation of the mechanism transformation legislations in 1992, these two plans were not required by the As from October 1992, SDS1 has used the following annual planning or budgeting process.

In October, the general manager asks the accounting and finance department to provide the year-to-date financial results. also requests the planning department to supply information concerning the changes in local, national and international economic environments. Then he calls up a board of director's meeting to review and discuss the following aspects which have direct or indirect impacts on the next year's plan or budget.

- Capability Evaluation (1)
  - Financial performance Financial stability (a)
  - (b)
  - (c) Borrowing capacity
  - (d) Space & facility availability
  - Manpower availability (e)
- (2) Environmental Scanning\*
  - Worldwide economy changes (a)
  - (b) China economy changes
  - Shanghai economy changes (c)
  - (d) Competitor analysis (other Chinese department stores and foreign-invested department stores)
  - (e) Consummer analysis (purchasing power, fashion, taste, service expectation, etc.)
  - \* Most of the environmental information is collected and analysed by the Planning Department through news cuttings, market or customer surveys and consulting experts.
- (3) Shareholder Expectations
  - Commerce Bureau expectations
  - Board of Directors expectations (b)
  - Other shareholders expectations

# (4) Long-term Plans (as shown in 5.4 above)

The general conclusion of this board meeting is to set preliminary targets for sales and profit expected to be achieved in the next year. Of course, a certain extent of stretch is built into these targets in order to enforce the department store and business unit managers to plan their own budgets agressively. Then the general manager breaks down these targets on divisional basis and notify them to individual store, branch and unit managers.

The next step is for the department store and business unit managers to formulate their budgets by discussion with their own deputy managers and supporting staff. In November, the store and unit managers have to send their first budget drafts to the accounting and finance department for screening and consolidation before submitting to the top management in the headquarters for consideration. At this point of time, informal discussions may be held between the top management and the store and unit managers trying to bridge the gap of different expectations.

Then formal and informal meetings are held until compromises and agreements have been reached between the headquarters and the department stores and business units. After the Chinese New Year in early February, the master budget is tabled in the board meeting for approval, and after that, implementation begins. Fruthermore, the annual buget is disclosed during the AGM held in April and also in the Annual Report. The budgets and IRCs are broken down into quarterly targets for periodic control and measurement.

Since October 1992, the department store and business unit managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the top management. Furthermore, the approved budgets and IRCs affect their strategies and tactics for short and medium term developments.

In view of the rapid changing market conditions especially the retailing businesses all over China, the budget review period has been shortened from quarterly to monthly (sometimes ad hoc meetings are held on a weekly basis). The top management in headquarters and all the department store managers hold a formal review meeting at the beginning of each month to review and discuss the financial performance of last month. Remedial actions are suggested to correct any significant controllable deviations from the quarterly budgets. The targets determined in the budgets and IRCs are seldom adjusted unless facing substantial uncontrollable environmental factors. Basically, a fixed budget concept is employed.

(Please refer to Q5.5.1-8, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, the shareholding system, the mechanism legislation and the market economy have driven SDS1 spending more effort to plan ahead. The top management have involved the department store and business unit managers or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plans, and on the other hand, it is an important motivational factor for the store managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence : shift from "Medium Corporate" to "Very Low Corporate" since 1992. \_\_\_\_\_\_

#### 5.6 Internal Responsibility Contracts (IRC)

Shanghai No.1 Department Store (SDS1) established its IRC system in 1985 in order to motivate the departments to attain at least the financial targets set in the ERC signed with the government. This IRC system applies to the 7 department stores and other business units. In turn, each department store will sign similar IRCs with its sections selling different kinds of commodities. The duration of the IRCs is usually last for one year but a few of them may be two-year contracts for more stable profit centres.

Since 1993, the major targets set in the IRCs with the 7 department stores include the followings:

Economic Targets - (1) Turnover (2) Internal Profit

Other Targets

- (3) Stock Turnover Rate
  - (4) Stock-out Frequency

  - (5) Daily Cash Flow(6) Business Development\*
  - (7) Store Management#
  - (8) General@
- \* Measurement criteria include new commodities and varieties, department renovation and decoration, usage of floor space, etc.
- # Measurement criteria include daily operation, staff discipline, commodity display, etc.
- @ Measurement criteria include service attitude, after sales service, security and safety, fictitious or competable commodities, cleanliness, customer's comments, etc.

Since 1992, the IRCs have been developed by the department stores during the budgeting process (October - February). After iterative discussions and negotiations with the top management in the headquarters, the IRCs are agreed and signed by the store managers and the general manager.

The IRCs are reviewed quarterly in parallel with the budget review but both the general manager and the store managers are trying to avoid adjusting the targets unless there are significant uncontrollable environmental changes affecting their validity.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the store managers in initiating and negotiating their own IRCs, and also involved the finance department intensively as a vetting mechanism in order to set the targets as objectively as possible.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Because the 7 department stores, branches and other business units in Shanghai No.1 Department Store (SDS1) are all independent with very minimal interactions and interdependencies, therefore, internal transfer pricing does not exist.

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# Section 6 : Control System

# 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Shanghai No.1 Department Store (SDS1) has four distinct levels of management hierarchy:

- (1) Board of Directors (BOD)
- (2) Top Management (general and deputy-general managers)
- (3) Middle Management (department store managers, deputy managers and other functional managers)
- (4) Lower Management (section leaders under the store managers)

Although there are overlaps between the BOD and the top management who are playing dual roles in both levels, nevertherless, the segregation of duties are clearly defined. The chairman is acting as an arbitrator to harmonize any role conflicts which happen among the members in the BOD.

The department store and branch managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). In addition, since 1992, the store managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation.

The department store managers are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation, remuneration (distribution of bonus) and even termination of employment. With tremendous increase of foreign-invested and joint-venture enterprises, the present labour market in Shanghai is rather free which means employees can choose their new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the Labour Law (implemented in January 1995) and the terms of the employment contracts. SDS1 has fully implemented the "employment contract system" since 1992 and the "big rice pot" or "three iron bowls" concept has been abolished. If a redundant or badly-performing employee can not be transferred to another departement store, he or she will be asked to leave the enterprise.

The major control mechanisms employed by the top management to control the performance of the department stores are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are sales and profits set in the IRCs, although some other qualitative targets (non-financial) are employed.

As long as the department stores can meet the financial targets with growth from year to year, the headquarters can devolve the responsibility for strategy development to the stores without much interference.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Moderate Financial Control" to "Tight Strategic Control" since 1992.

### 6.2 Agreeing Objectives

Objectives in Shanghai No.1 Department Store (SDS1) emerge from the detailed discussion of the annual plans or budgets with the department stores and business units. The financial objectives stem from the plans, rather than vice versa. This is not to suggest that the objective-setting process is wholly bottom-up although the top management initiates an overall financial target for all the store managers. It is still the primary function of the store managers to formulate their detailed budgets and IRCs. But top management in the headquarters can and do push and probe for alternative objectives as they see fit since they are under the pressure from shareholders. With the long years of experience and information (financial and marketing) gathered by the different board members, suggestions are provided to individual department stores to amend the financial objectives both in the short or long term. Furthermore, the board of directors has a holistic view to achieve the overall financial objectives year after year according to the long term plan. Finally, the result is usually a compromise that both headquarters and department can live with.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Moderate Financial Control" to "Strategic Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Shanghai No.1 Department Stores (SDS1) has monthly and quarterly reporting systems to track actual results versus plans or budgets. Each department store has its own accounting staff responsible for sending monthly results on prescribed formats to the accounting and finance department in the headquarters for calculating the internal profits and comparing with budgets before submission to the general manager for review.

The contents of the monthly report are simpler than the manufacturing industries. The key financial results such as sales and expenditures are the major concerns of the headquarters. The non-financial measurement yardsticks (see IRC in section 5.6) are assessed by the operation department through daily inspections. The comments and ratings of the service evaluation are written on the same monthly reports. These monthly reports are compiled, through the computer, by the accounting staff.

Any significant variances (without specifying tolerance limits) are highlighted in order to bring to the attention to the top management. Apart from the accounting function, the computing centre of SDS1 is working on the purchasing, inventory and sales systems.

For any serious adverse variances shown on any report, the general or deputy-general managers contacts the respective store managers to dig out the underlining reasons or ask them to perform investigation immediately. It is expected that remedial actions can be taken to handle the short term problems as soon as possible (such as a sudden sales promotion by a counterpart). Whereas, strategic steps may be considered and implemented to solve some medium term problems (such as the internal decoration and display arrangement).

During the monthly meeting between the top management in headquarters and the store managers, the general manager puts forward the monthly results for open discussion. The store managers may be asked to explain briefly the significant variances and any other potential problems. Infrequent failures in meeting the budget by the store managers can be tolerated as long as they are taking remedial tactics or strategies to put things back on the right track and attain the budget at the end of the year. Of course, if any serious uncontrollable environmental factors happened to hit any department store adversely, the manager should not be blamed.

After the monthly meeting, all the approved results will be passed back to the accounting department for calculating the bonus for last month.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

The financial results achieved by SDS1 in 1994 were very encouraging even under keen competition from the domestic and foreign-invested counterparts in Shanghai since the 1990s. The sales and profit per employee of SDS1 in 1994 was ranked the top in the retailing business of China.

Observation of Control Influence: shift from "Moderate Financial Control" to "Strategic Control" since 1992.

#### 6.4 Rewards and Incentives

According to the central government's policy, the annual gross wages (including bonus) growth rate of all the state-owned enterprises, including shareholding companies, cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the SDS1 is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

Under the previous ERC system, SDS1 could transfer a certain percentage of its annual profit after tax (or handover to government) to an "Employee Bonus Reserve" which could be distributed as a year-end bonus to the employees according to the overall financial performance and level of this reserve. This kind of flexibility or buffer was lost when SDS1 was tranformed into a shareholding enterprise in July 1992. In addition, SDS1 is now subject to the above two limits or ceilings. If declared dividend for the employees is not high enough, then, the total annual wages increase cannot cover the high inflation in Shanghai (30% in 1994). As an interim measure, SDS1 has agreed with the municipal government to allow them to exceed the above two limits or ceilings but the excess portion (wages paid) would not be tax deductable.

The take-home pay structure of SDS1 is composed of basic wages, seniority wages, post (skill) wages, bonus and allowances. The average annual gross wages per employee was around RMB12,000 in 1994. Under the current high inflation rate and the keen competition in the labour market of this industry, it is expected to increase the average annual gross wages to RMB14,000 in 1995.

The "basic wages" is reviewed annually depending on grade and seniority without paying regard to qualification and technical skill. Every point increase on the basic pay scale is RMB10-20, therefore, it is not substantial enough to catch up with the inflation. Obviously, the "bonus" is the major source of income which is determined according to the IRC. The "seniority wages" is depending on the years of service while the "post wages" is based on a specific skill required in the job.

There are two portions for the "allowances". The first part is determined by the Manpower Bureau of the Shanghai Government at least once in each year mainly for the purpose of combating the inflation. The second part is decided by the SDS1 which may include housing, meals, travel, education, attendance, overtime, festival gifts etc. The payment of "allowances" is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus", as described in section 5.6 above, is based on the accomplishment of the IRC. An IRC signed between the general manager and a store manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to various sales sections and in turn, the section heads can distribute the group bonuses to counters or individuals according to performance, such as the sales achieved by a salesgirl in a certain month. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (20% - 30%) can be retained in a reserve in order to make up the low bonus obtained during the months of slack season. The payment of year-end bonus, if there is any, is also according to the annual performance of each department stores. It is possible that a department store will receive very low or even zero bonus if it performs much below the targets but it seldom happened in the last few years.

The bonus paid to the management and administrative staff in the headquarters is calculated as follow:

Monthly average wages per employee x Grading factor\* x Perfromance factor#

* i.	e. Position	Grading factor
	General Manager	1.6
	Deputy General Manager	1.5
	Chief Accountant	1.5
	Supervisor	1.3
	Senior Clerk	1.1

# Performance factor is assessed by the head of each service department usually less than 100%.

In addition to the remuneration paid to the servicing employees, SDS1 has to pay pension and other allowances to 2,000 retired employees. This kind of life-long responsibility is common to all the state-owned enterprises and it is adding a significant financial burden to the profit and loss account. To alleviate this ailing situation, a Central Government Welfare Fund System has been promulgated since 1993 and will be fully implemented in 1996.

Since 1993, SDS1 has been contributing 25.5% of the monthly gross wages and salaries paid to the employees to the Central Government Social Welfare Fund for the purpose of pension. The shortfall between the enterprise contribution and actual payments to employees will be covered by the government. Similar contributions are under discussion for the other social welfare benefits such as medical, unemployment and disable allowances.

All these policies are aiming at to share the social securities between the government and the enterprises for the long term benefit of the working population.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Rice Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. SDS1 has implemented this contract employment system since 1992 and now all the employees have signed employment contracts from one to five years subject to review and renewal. In general, the motivation of the employees has been improved.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, the enforcement of financial objectives has both a stick and a carrot aspect. Evidence of the stick can be found in the reduction of monthly or year-end bonus and even management turnover in senior positions. The carrot is represented by substantial increase in bonus and perhaps career advancement. The public listing of SDS1 has brought into pressure from the shareholders to the board of directors to define long term strategic control objectives in order to maintain a satisfactory growth in profitability in light of the volatility of this industry to the market conditions. The control process tends to stress control against budgeted financial results in short term on one hand and profit viability of the long term investments or projects on the other hand.

Observation of Control Influence: shift from "Finance Control" to "Moderate Strategic Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai No.1 Department Stores (SDS1) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	Medium Corporate	Low Corporate
Review Process*	Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	Medium Corporate	Medium to Low Corporate
Long-term Plans* (Resource Allocation)	High to Medium Corporate	Medium to Low Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	Medium Corporate	Very Low Corporate
Internal Responsibility Contract	Medium Corporate	Low Corporate
Management of Interdepen- dencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Moderate Financial	Tight Strategic
Agreeing Objectives*	Moderate Financial	Strategic
Monitoring Results*	Moderate Financial	Strategic
Rewards & Incentives*	Financial	Moderate Strategic

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence	
	Tight Strategic	Tight Financial
High Corporate	(Strategic Programming)	(Financial Programming)
Medium Corporate		[Pre-1992]
Low Corporate	[Post-1992] (Strategic Control)	      (Financial   Control)

# Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai No.1 Department Store before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifted from "Financial Control" (Pre-1992) to "Strategic Control" (Post-1992) gradually although it has not yet reached a very strong-form (very low corporate) of strategic control style as suggested by Goold and Campbell.

As a matter of fact, both the degrees of planning and control influences are on two separate continua. The planning influence should run from high corporate, then medium corporate and down to low corporate. Similarly, there should be measurement in between tight strategic control and tight financial control.

Revised: 12 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 12
Report Date : 18 January 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)
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Name of SOE : Shanghai Crane & Conveyor Works (SCCW)

Staff Interviewed : Miss Zhu Mei Di/Chief Accountant

(No. of years in this enterprise : 26 years) Miss Zhu Zhi Mei/Deputy Manager of Finance Department/Shanghai Heavy Mining Machinery

Corporation (SHMMC)

(No. of years in this enterprise: 25 years)

Dates of Visits : First Visit - 6 September 1994 Second Visit - 12 January 1995

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# Section 1 : History & Background

Shanghai Crane & Conveyor Works (SCCW) is a state-owned enterprise established in 1958. Over the years, SCCW have supplied a great variety of single units and complete material handling systems to metalurgical, mining, coal, construction material, light and textile, chemical and machine-building industries as well as thermal, hydraulic and nuclear power stations, harbors, railway stations and airports. The annual turnout (output) can be up to 30,000 tonnes. It is one of China's leading plants in designing and manufacturing of cranes, belt conveyors and special material handling equipment.

SCCW is located on the northern outskirt of Shanghai with a total land space of 188,000 square metres and only 10 kilometres away from Shanghai River (Huangpu River) from where its products can be shipped to other cities and abroad. Its private (internal) railway spur (system) is connected with the Shanghai railway system for easy access of land transportation. SCCW has nine production workshops for crane and conveyor manufacturing, customer-desinged products, speed reducers, frabrication, heat-treatment, forging, packing, and two auxiliary workshops. In order to assure product qaulity and promote modern management, SCCW has set up a quality control office to exercise unified control over the entire process from raw material acceptance to after-sales service. Computer has been used for design, manufacturing, inventory, accounting and management controls.

SCCW has 2,300 employees including 300 experienced and well-trined engineers and technicians, who are competent in design and manufacturing different types and purposes of cranes, belt conveyors and special material handling systems and complete equipment. Besides, SCCW has established Shanghai Material Handling Machinery Research Institute under the authority of Shanghai Municipal Science Commission. In this institute, there are three research sections, a technical information section and a standard section. It is engaged in scientific research and development of new products and components with well equiped test facilities such as speed reducer meshing stand, idler test stand, electrical laboratory and machine shop. For the purpose of strengthening education of the employees and enhancing qualified personnel, SCCW has run part-time technical school for many years.

The major competitors of SCCW of similar scale of operation come from Yingchuan, Dalin, Fuzhou and Guangzhou cities. SCCW is very active in searching new businesses in national and overseas markets and maintain close relationships with customers, industries and research institutions. SCCW exported a relatively small portion (less than 10%) products to some Southeast Asian countries and achieved a revenue of US\$3 million in 1994.

The recent establishment of five affiliate plants in Shanghai suburbs, Jiansu and Guizhou provinces embodies SCCW's pace-keeping with the overall economic system reform in China. In recent years, SCCW has paid special attention to the switchover of its main products to special function, multi-function and technical intensification. SCCW's operation philosophy is to provide advanced products to its customers with least cost and maximum use value through modern design and upgraded products.

For the sake of further improving the performance and quality of the products, SCCW has signed collaborated agreements successively with foreign counterparts in Japan, Germany and the USA for manufacturing roller table conveyor system used in petro-chemical plant, port bulk material handling systems, steel works cranes and airport passenger boarding bridges. The foreign partners are satisfied with SCCW's performance. A few new projects of this nature are under negotiation. SCCW's products have been sold to over 20 countries and regions.

Material handling equipment play a very important role in various industries and are in great demand in the construction of the four modernizations in China. Therefore, SCCW is developing the second and third generation of its main products which are listed below:

#### 1. Cranes

- 1.1 Double Girder E.O.T. Cranes
  - Capacity: 5-50 tonnes Span: 10.5m - 31.5m
- 1.2 Single Girder E.O.T. Cranes
  - Capacity: 1-5 tonnes Span: 7.5m - 17m
- 1.3 Gantry Cranes
  - Capacity: 10-50 tonnes Span: 24m - 40m
- 1.4 Special Hoisting Equipment

Cranes for Bao Shan Iron & Steel Complex

(The second largest iron and steel complex in China)

#### 2. Crane Components

- 2.1 Main Conducting Systems
- 2.2 Cable Festoon Systems
- 2.3 Cable Carriage Systems
- 2.4 Travelling Mechanisms
- 2.5 Control Cabin Versions

3. Belt Conveyors

Fixed Type Model DX Steel Cord Belt Conveyors

Belt Width: 800mm - 2,000mm Belt Speed: 2 - 5m/sec : optional Length

Fixed Type Model TD75 Belt Conveyors 3.2

Belt Width: 500mm - 1,400mm Belt Speed: 0.8 - 4m/sec Length : optional

Truck Feeder (freed the workers from intensive labour) 3.3

Belt Width : 400mm - 1,500mm Belt Speed: 0.4 - 2.5m/sec

- 4. Conveyor Components
  - 4.1 Discharge Trolley
  - 4.2 Rubber Lagged Belt Pulley
  - 4.3 Drive Unit
  - 4.4 Electronic Belt Scale
  - 4.5 Scale Calibration Device
  - Hydrolic Brake 4.5
- 5. Vibration Conveyors
  - 5.1 Vertical Vibration Conveyor
  - 5.2 Double-mass Inertia-type Vibration Conveyor
  - Dewatering Vibration Conveyor 5.3
  - 5.4 Horizontal Vibration Conveyor
- Elevators 6.
  - Enclosed Endless Bucket Elevators 6.1

Lifting Speed : 0.4 - 1.4m/sec

Lifting Height : 2.7m - 30m

: 20 - 40 cubic metre/hour Capacity

- Material Handling System (Customer Specifications) 7.
- 8. Airport Equipment
  - 8.1 Passenger Boarding Bridges
  - 8.2 Luggage Conveyors
- 9. Speed Reducers
- 10. Parts for Customer's Production Facilities

# Section 2 : Legal Form & Organisation Structure

Shanghai Crane & Conveyor Works (SCCW) has been a wholly state-owned enterprise since 1958 and it does not have a concrete plan to convert into a shareholding enterprise in the next few years because of the stringent rules and regulations governed by the Ministry of Finance (MOF) and the Bank of China (BOC). These bodies have so far approved over 3,600 large- and medium-size SOEs, which have good financial performance track records, to transform into shareholding enterprises since 1990.

SCCW is under the administration of the Shanghai Heavy Mining Machinery Corporation (SHMMC) which is an independent organisation under the umbrella of the Shanghai Mechanical and Electrical Equipment Bureau (a branch of the corresponding ministry in Beijing). SHMMC has 17 fully state-owned enterprises manufacturing heavy machinery and equipment for mining, steel, energy, transportation, construction and other industries. The major role played by this corporation is to maintain an economical balance of the production and sales among its member enterprises. It also arranges capital to finance the approved projects or investments for the enterprises. Another important function of the corporation is to provide market information for its industry to produce the right products and sell to the right markets at the right time.

Before the economic reforms started in 1979, the central planning system dictated all the planning and control systems of the state-owned enterprises. Therefore, SCCW acted just as a vehicle (or cost centre) to carry out the activities according to the commands directed from the bureau. Since the economic reform started in 1979, instead of dictatorship from the bureau, SCCW has been involved in the 5-year long range plan even though SCCW for most of the time had to take the directives from and give in their negotiations to the authority.

Since the promulgation of the "SOE Operation Mechanism Transformation Regulations" by the People's Congress in July 1992, the Shanghai Mechanical and Electrical Equipment Bureau has not yet fully delegated the management autonomy to SHMMC and its 17 enterprises as compared with the more liberal attitude of the Shanghai Textile Bureau. The short term planning and operation like purchasing, production and sales autonomy have been delegated to SCCW. But the Bureau and SHMMC still oversee the long term development and projects recommended by SCCW and also appoint the top management of SCCW. The investment autonomy such as raising capital for project investment has to be arranged by the Bureau and SHMMC.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

Under the Factory Manager, who has an Enterprise Management Office, the organisation structure of SMCW is listed as follow :

- Deputy-Factory Manager (Production)
  - 1.1 Crane Manufacturing Workshop\*
  - 1.2 Conveyor Manufacturing Workshop\*
  - Customer Designed Proudcts Manufacturing Workshop\* 1.3
  - 1.4 Speed Reducers Manufacturing Workshop\*
  - 1.5 Metal Framework Workshop#
  - Heat Treatment Workshop# 1.6
  - 1.7 Packing Workshop#
  - 1.8 Mechinery Repair Centre
  - Tool Supplies Centre 1.9
  - 1.10 Purchasing Department
  - 1.11 Safty & Environment Department
  - 1.12 Production Planning Department
- Chief Engineer (with 2 Assistant Chief Engineers) 2.
  - Quality Control Department 2.1
  - Quality Inspection Department 2.2
  - 2.3 Technical Department
  - Research & Development Department 2.4
  - Information & Filing Department 2.5
  - 2.6 Energy Supplies Department
  - 2.7 Tool Department
  - 2.8 Railway Department
- 3. Deputy-Factory Manager (Sales)

[Acting by Factory Manager]

- 3.1 Equipment Sales Department
- 3.2 Components Sales Department
- Deputy-Factory Manager (Administration) 4.
  - Personnel Department 4.1
  - 4.2 Education Department
  - 4.3 Estate Department
  - 4.4
  - Security Department General Affairs Department 4.5
  - 4.6 Hospital
- Chief Accountant (Accounting & Finance) 5.
  - Accounting Department
  - Auditing & Legal Department 5.2
- Deputy-Factory Manager (Tertiary/Service Enterprises) 6.
- Communist Party Office 7.
- 8. Labour Union Office
- Production supporting workshops.

- All the production workshops and departments are treated as cost or expense centres.
- @ Most of the workshops and departments have signed Internal Responsibility Contracts (IRC) with the Factory Manager either on an annual basis or on a single project or job basis. For the details, please refer to section 5.6 below.

SCCW had a total of 2,470 working employees and 860 retired employees at the end of 1994. It is classified as a "medium-sized SOE" in China. About 215 of the working employees are involved in 20 "tertiary enterprises" (service enterprises) including motel, restaurant, transportation (i.e. taxi), decoration, repair & maintenance, spares sales, retailing etc. On the other hand, 80 redundant employees have stopped their jobs or posts and received only basic wages and welfare. All the employees have signed "employment contracts" since 1993 with duration from one year to no limit leaving an optional right to the employees.

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## Section 3 : Financial Indicators

Total assets RMB 190M (1994)RMB 190M (1993)Turnover

RMB 230M (1994)

RMB 260M@ (1995 forecast)

: RMB 2.1M Income before tax

RMB 2.1M (1993) - 1.1%\* of sales RMB 3.3M# (1994) - 1.4% of sales RMB 3.5M (1995) - 1.3% of sales

: 55% (before 1994) Income tax rate

33% (from 1994)

@ This is the figure compromised with the SHMMC but in fact the internal target agreed with the sales department is RMB280M in order to initiate salemen's motivation.

\* The low profit margin was mainly because of open and keen competition under the market economy instead of the quaranteed production and sales budgets as assigned by the government before 1992, and also the purchased prices of raw materials like iron and steel (60% of turnover) which prices are fluctuating tremendously since 1993 due to significant import from other countries. In addition, selling prices in quotations have to be reduced in order to bid the contracts. Furthermore, inflation and heavy payroll and benefit in kinds (including retired employees) increased the total expenditures or fixed overheads (RMB40M in 1993). Improvement in 1994 was mainly due to product quality enhancement and other marketing strategies as described in the long term and short term planning sections below.

# Income before tax has deducted the value added tax already which amounted to RMB13.2M in 1994 or 5.7% of the turnover. The VAT related to new products approved by the municipal government can be refunded. In addition, conversion cost added to input materials imported from joint venture partners i.e. Japan can be exempted from VAT.

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# Section 4: Economic Responsibility Contract System (ERCS)

The Shanghai Crane & Conveyor Works (SCCW) entered into the first 5-year (1988-1992) Economic Responsibility Contract (ERC) with the Shanghai Mechanical & Electrical Equipment Bureau and the Shanghai Finance Bureau (representing the Shanghai municipal government) in 1988. This first ERC was based on the "Three Guarantees and One Linkage" concept which means the contractee (SCCW) had to guarantee:

- (1) income tax handed over to the government;
- (2) technology improvement;
- (3) foreign exchange created from export; and

the total remuneration payable to the employees was linked up with the overall economic (or financial) performance.

As from 1992, no formal ERC has been existed but targets on production output value, sales, income tax and accounts receivable have been agreed between SCCW and the Corporation (SHMMC). The production output is valued at 1990 price index except new or modified products i.e. 12% growth of sales in 1995. The SHMMC has also agreed similar targets with the Shanghai Electrical and Mechanical Equipment Bureau and Shanghai Municipal Economic Planning Committee subject to negotiation and review per quarter and allowed to revise if necessary. These targets are put in terms of growth percentages. The fulfilment of these targets by SHMMC will be awarded a lump sum bonus from the government assessed twice every year. In turn SHMMC will distribute this bonus to its 17 enterprise managers according to their achievement of predetermined targets. Usually 40% of the bonus will be distributed during the mid-year and 60% will be given at the year end. This incentive system is similar to the "Factory Manager Responsibility System" adopted by the state-owned enterprises in parallel with the ERC system promulgated since 1987.

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# Section 5 : Planning System ,

# 5.1 Organisation Structure

The organisation structure of Shanghai Crane & Conveyor Works (SCCW) has not been changed much since the 1980s. Once for a while, the production workshops had been classified as profit centres, but the difficulty of determining internal profits due to input and output price fluctuation and changes in product mix, they have been converted back into cost centres. Now, all the units are treated as either cost centres or expense centres.

The four production workshops are manufacturing different product lines and the other five production support workshops are providing components and services to the production departments according to the production schedules without charging any costs or profit margins. SCCW is using a job costing system by collecting all the direct production, supporting and other relevant costs to each individual job or product. Therefore, internal transfer pricing is not involved.

Since 1992, SCCW has been decentralizing more planning responsibility to each workshop and department such as initiating the annual plan and the internal responsibility contract. The production and cost control responsibility primarily lies with the workshop manager but the top management keep a surveillance quantity and quality control on each production workshop through monthly or weekly report.

The selection and appointment of the top management (i.e. factory and deputy-factory managers) are still decided by the Shanghai Heavy Mining Machinery Corporation (SHMMC) and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a predetermined lump sum bonus at the year end (see section 4.5 above).

Since 1992, the factory manager has the autonomy to appoint the senior staff such as the workshop managers and department heads. Any major changes of the organisation structure in each unit should be initiated by the deputy-factory managers, chief engineer or chief accountant and approved by the factory manager. However, more autonomy of internal management and operation has been delegated to the deputy-factory managers and the chiefs since 1992. And in turn, the deputy-factory managers and chiefs have involved their workshop managers and department heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, SCCW has a decentralized structure in which the individual deputy-factory managers and chiefs report directly to the factory manager, and they play a linking and control role between the workshops or departments and the factory manager.

Observation of Planning Influence: shift from "High Corporate" to "High-Medium Corporate" since 1992.

## 5.2 Review Process

Since 1992, Shanghai Crane & Conveyor Works (SCCW) has implemented a more formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). In September, the factory manager discusses with the SHMMC concerning the next year targets such as production output value, sales, profit and working capital. Then, he will evaluate the internal and external environmental factors with his deputy managers and chiefs in order to determine whether the above targets are realistic or not. If there is any gap, then the factory manager will negotiate with SHMMC until compromise can be reached. Based on these preliminary targets, some guidelines are provided to the workshop managers and other department heads for them to initiate their own plans or budgets for the next year. Much emphasis is placed on the production quantity for the four production workshops which annual plans contained the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

At the end of October, all the workshops and departments submit their initial plans to the Enterprise Management Office for consolidation before review and discussion by the factory managers with the deputy managers and the two chiefs. The first annual planning meeting is held in November mainly to discuss the gaps between the submitted plans with the targets agreed between the top management and SHMMC. The top management try to help the production workshops solving their technical, financial and other problems in order to close the gaps as far as possible. Then, further formal and informal meetings and discussions are held between the factory manager, deputy-factory managers, workshop managers and department heads either collectively or individually. This iterative exercise carries on until all the annual plans and contracts are mutually agreed and approved in January.

The approved annual plans are broken down into quarterly and monthly plans to cater for demand, holiday and other factors. All the individual annual plans will be consolidated into a booklet and distribtuted to all senior staff. A copy of the 1994 Annual Plan has been obtained and briefly described in section 5.5 below. The factory manager has to report the consolidated annual plan to the AGM (all the employees can attain) held in February. The annual plans are formally reviewed in every April and September and adjustments on significant deviations are allowed to make after detail discussion and approval from top management.

Before 1992, the workshop managers and department heads did not participate so intensively in this annual planning review process and the government and the corporation gave directions to the workshops and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, etc. Since 1992, under the legislative changes and market economy promotion, the government has delegated higher automomy to SHMMC and SCCW in formulating its strategic directions. As a result, all the workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long-term plan.

Therefore, the factory manager has less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

## 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as macro-eocnomic control (1994), operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc.

The strategic themes and thrusts of Shanghai Crane & Conveyor Works (SCCW) are listed in the 1994 Annual Plan as follows:

- (1) Increase planning participation and flexibility.
- (2) Enhance product design (use value engineering).
- (3) Adjust product mix.
- (4) Improve production technology.
- (5) Simplify production process.
- (6) Maintain production output growth.
- (7) Improve purchasing and supply process and quality.
- (8) Enhance product quality.
- (9) Strengthen internal management quality.
- (10) Reduce redundent employees.
- (11) Reform manpower and wages system.
- (12) Continue and increase export and joint ventures.

The above strategic themes are directed from the top management at the beginning pages of the annual plan for all the employees to observe and keep in mind when they are performing their duties for the enterprise.

SCCW has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets on the other hand. However, under the tight quality control procedures, some minor technical or manual defects have occured and a few complaints have received from big customers like Baoshan Iron & Steel Works which is the second largest enterprise of this kind in China and a major customer to SCCW. SCCW has envisaged a vision to attain ISO9000 certification before 2000 but no concreate plans have been formulated yet.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in SCCW still from time to time make suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. Despite this fact, the top management has given some freedom to the department heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

The top management follow the financial indicators and performance closely on monthly and quarterly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

# 5.4 Long-Term Plans (Resource Allocation)

Since the establishment of Shanghai Crane & Conveyor Works (SCCW) in 1958, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system.

The commencement of the economic reforms in 1979 started to allowed SCCW to participate in the 5-year's planning with the Shanghai Heavy Mining Mechinery Corporation (SHMMC) and the Shanghai Electrical and Mechanical Equipment Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomics control and adjustment" as an excuse.

The changing role of bureau and the corporation since 1990 has encouraged SCCW, for the first time, to formulate their own long-term strategic plan (1991-1995). However, many internal factors and uncertainties have affected the validity and reliability of this long-term plan which has been subject to review and changes every year. During the last year of the 5-year long-term plan, the factory manager initiates the next 5-year plan before discussions with the deputy managers and chiefs started. After lengthy discussion, the next 5-year plan will be emerged and submitted to SHMMC for further discussion and negotiation. The 5-year plan will be reviewed every year and adjustments will be made through the annual planning exercise.

The followings are the major long-term plans or projects laid down for the nineth 5-year plan (1996-2000) although a few of them have been started during 1991-1995.

## (a) Joint Ventrues

In addition to the present joint ventures with the USA, Japan, and Germany to enhance the production and product quality, SCCW has entered into a new contract with Mitsubishi Heavy Machinery of Japan to manufacture and export a series of new crane products to Thailand. The trial run and pilot test of the first model finished sucessfully at the end of 1994. Further production will be commenced in early 1995. This project will be a major one in the nineth 5-year plan (1996-2000)

# (b) Product Development

Significant changes in the infrastructure have been occured in recent years under the transition from planned economy to market economy. SCCW has envisaged that standard conveyors and light cranes demands have been declined. On the other hand, high technology, high quality, heavy non-standard and customer-order cranes sales are on increase coming from iron and steel, transportation, energy and mining industries. In order to cope with this market trend, SCCW has been exploring into this new product mix by using its own R&D and cooperation with foreign counterparts. For example, a new type of crane product used in the nuclear plan is under construction and testing before delivery in June 1995. In addition, plans are drawing up for manufacturing waste processing machines for iron and steel industry.

# (c) Production Diversification

In addition to supply traditional and new products to the existing heavy industries, SCCW is developing other new product lines to suit the needs of other businesses like the passenger boarding bridges and luggage conveyors for the airports, speed reducers for different machinery and material handling systems for high technology plant. Furthermore, SCCW is discussing a joint-venture with a German Corporation to manufacture sub-way compartments which are in high demand not only in Shanghai (the first underground line was completed at the end of 1994) but also in many other big cities having plans for building their underground systems.

## (d) Competitive Edge

SCCW has been facing keen competition from many other smaller manufacturers of similar kinds of products (like 5t-20t of cranes) in the nearby provinces such as Jiangsu, Zhejiang, Jiangxi etc. To maintain at least the market share and competitive edge against these counterparts, SCCW has to manufacture higher quality, tailor-made and heavier products as described in the short-term plans below.

# (e) Market Development

To penetrate into the domestic market and capture higher market share, the sales personnel has been seggregated into geographic teams with different marketing strategies and tatics such as regular visits to the existing customers. The IRC signed with the Sales Department links up the

remuneration directly with the sales volume and the accounts receivable (or cash collected) in order to motivate the sales and marketing effort.

#### (f) Overseas Markets

SCCW is working closely with the SHMMC to negotiate with the government in obtaining the import and export right (also the foreign exchange usage right) so that they can explore the overseas markets such as Southeast Asian, South America and Eastern European Countries.

# (g) Sources of Capital

Due to capital intensive nature and long production cycle (6 to 18 months), SCCW had an outstanding bank loan of over RMB90M (for both fixed assets and current assets financing purposes) at the end of 1994 and paid almost RMB10M of bank interest in the same year. In order to finance the above long term projects, at least an additional RMB50M is required in the next few years. One way to capture additional capital is getting loans from foreign banks through the joint-venture arrangement such as foreign loan from a German bank by entering a joint-venture to manufacture underground compartments. Another source of captial is to transform SCCW into a shareholding enterprise and issue shares to its employees, other enterprises and individuals. But the latter avenue involves a lot of political and economic problems related to the government, bureau and corporation (SHMMC).

# (h) Computerization

SCCW purchased a mini-computer and established a computer centre in 1994. Except using for product design and material requisition plan, the computer system has not been expanded for other purposes or for local area networking system due to the technical incompetence of the computing and management staff. At present, idnividual stand-alone personal computers are employed by, purhasing, production, sales, personnel and accounting departments for their own purposes. For example, accounting department is using a personnel computer for wages and invetory control systems. SCCW is planning to provide intensive training for both computing and management staff to expediate the computerization process and aiming at the LANS.

The current 5-year plan (1991-1995) was compiled after long discussion between the Bureau, Corporation and the SCCW's top management. Although the deputy factory managers, chiefs and

some department heads (middle management) have been involved in this planning process, they were playing a consultation role only.

As far as the next 5-year plan (1996-2000) is concerned, the production workshops and department heads are mainly concerned with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the factory manager at least on a monthly basis. Therefore, the long term planning and review process are using a top-down approach in the belief that the factory manager has better experience and knowledge of the external environment and even the internal operations of the workshops and departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Bureau has devolved its central planning role to the SHMMC and in turn individual enterprises under the latter's umbrella since 1992. Now, the top management of SCCW is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

The following is a brief description of SCCW's 1994 Annual Plan (Budget):

Part 1: Introduction to Annual Plan

#### (1) Background

The spirit or mission in formulating the 1994 Annual Plan or Budget was in accordance with the Third Plennary Session of the 14th Communist Party Committee held in October 1993 during which the major theme promulgated was that continuous, high speed and healthy economic development should be maintained in 1994.

# (2) Targets

Tight management and administration control must be imposed in order to achieve the following financial targets:

2.1 Industrial Output Value (at 1990 cost value)

Minimum : RMB120M Ideal : RMB150M

2.2 Turnover

Minimum : RMB230M Ideal : RMB250M

2.3 Profit Before Tax

Minimum : RMB3.6M Ideal : RMB4.1M

- 2.4 Export Foreign Exchange : Over US\$2.05M
- 2.5 Annual Income Per Employee : RMB10,000
- (3) Development
- 3.1 Significant losses were incurred in 1991 and 1992 but a profit before income tax of RMB2M was made in 1993 due to improvements in product mix, marketing strategy and internal management.
- 3.2 Since 1993, the few joint ventures undertaken with Japan, Germany and USA have brought in new capital, technology, management and product.

- 3.3 In light of the Socialist Market Economy, SCCW has envisaged that standard conveyors and light cranes sales have been declined. On the other hand, high technology, high quality, heavy non-standard and customer-order cranes sales are on increase coming from the infrastructure industries like transportation, energy and mines.
- (4) Strategic Themes & Thrusts
- 4.1 Increase planning participation and flexibility.
- 4.2 Enhance product design (value engineering).
- 4.3 Adjust product mix.
- 4.4 Improve production technology.
- 4.5 Simplify production process.
- 4.6 Maintain production output growth.
- 4.7 Improve purchasing and supply process and quality.
- 4.8 Enhance product quality.
- 4.9 Strengthen internal management quality.
- 4.10 Reduce redundent employees.
- 4.11 Reform manpower and wages system.
- 4.12 Continue and increase export and joint ventures.
- (5) Sales Strategies
- 5.1 Establish market information and sales/services network.
- 5.2 Enhance internal responsibility contracts with sales functions including debt collection control.
- 5.3 Expand domestic and overseas markets.
- 5.4 Reinforce existing customers and explore new customers.
- 5.5 Increase blanket or standing orders and standardize products to fully untilize resources especially different grades of labour.
- 5.6 Improve product delivery services and before/after sales services.
- (6) Product Strategies
- 6.1 Adjust product mix with major foucs on :
  - 6.1.1 iron & steel cranes
  - 6.1.2 containers cranes
  - 6.1.3 powerstation cranes
  - 6.1.4 remote-controlled & speed-adjusted cranes
- 6.2 Achieve the following new product orders:
  - 6.2.1 QL plastic conveyors for Pudong (Eastern Shanghai)
    Power Station
  - 6.2.2 Crane for Shanghai No.3 Iron & Steel Work
  - 6.2.3 Crane for Shanghai Construction Steel Work

- 6.3 Accomplish the following new product development :
  - multi-frequency and speed-adjusted cranes 5-tonne steel-plate fork-lift
  - 6.3.2
  - 45-tonne electric steel-rod fork-lift 6.3.3
  - 6.3.4 600,000 KW nuclear station material handling sytem
- (7) Technology Rennovation
- 7.1 Joint venture with German counterpart to rennovate the facilities and equipment in the Cranes Manufacturing Workshop
- 7.2 Replace and rennovate some facilities and equipment in other production workshops especially the cranes, conveyors and material handling systems required by steel, power and transportation industries
- (8) Quality Assurance
- 8.1 Quality assurance training to all departments and levels of employees
- Implement ISO9000 international standards 8.2
- Stringent control on : 8.3
  - product quality
  - 8.3.2 production standards and procedures
  - 8.3.3 quality inspection
  - wastage and scrap reduction 8.3.4
  - input materials, components, spares and sub-contract 8.3.5 work quality inspection
- (9) Cost Control
- Cost of manufacturing (use standard costing system) 9.1
- 9.2 Overhead expenses (use budgeting system)
- 9.3 Cost of quality control
- (10) Manpower and Wages Reform
- 10.1 Access manpower requirement in each department/activity
- 10.2 Reduce redundant production workers
- 10.3 Eliminate redundant activities and employees
- Achieve a fairer and better reward and incentive system 10.4 including to incorporate the skill element in wages determination
- Part 2 : Structure (Contents) of Annual Plan
- Sales Budget (by product category, by quantity and by value) 1.
  - 1.1 Sales +
  - 1.2 Closing Inventory 1.3 Opening Inventory =

  - Production\* (to 2.2) 1.4

- Production Budget (by product category, by quantity and by output value)
  - 2.1 Actuals of Last Year
  - 2.2 Production of Current Year\*
  - 2.3 Production by Quarter
- 3. Material Supplies Budget (by category, by quantity and by cost value)
  - 3.1 Production Requirement +
  - 3.2 Closing Stock -
  - 3.3 Opening Stock =
  - 3.4 Purchase Requirement
- Component, Consumable & Power Supplies Budget (by category, by qunatity and by cost value)
  - 4.1 Production Requirement +
  - 4.2 Closing Stock -
  - 4.3 Opening Stock =
  - 4.4 Purchase Requirement
- 5. Pre-Production Preparation Work Schedule
  - 5.1 Job/Contract Number
  - 5.2 Product Description
  - 5.3 Preparation Works
    - 5.3.1 Design Blueprint
    - 5.3.2 Production Technical Information
    - 5.3.3 Facilities & Equipment Specification
    - 5.3.4 Bills of Raw Materials
    - 5.3.5 Bills of Components
    - 5.3.6 Bills of Consumables
- 6. Cash Flow Budget
  - 6.1 Opening Bank Balance +
  - 6.2 Operating Incomes -
    - 6.1.1 Product Sales Income
    - 6.1.2 Other Operation Incomes
  - 6.3 Operation Expenses =
    - 6.3.1 Material Purchases
    - 6.3.2 Energy & Power
    - 6.3.3 Wages & Bonuses
    - 6.3.4 Taxes Paid
    - 6.3.5 Interests Paid
    - 6.3.6 Selling Expenses
    - 6.3.7 Sub-Contracting Fees
    - 6.3.8 Capital Expenditures
    - 6.3.9 Other Expenses
  - 6.4 Closing Bank Balance

- 7. Profit & Loss Budget 7.1 Product Sales Income -7.2 Cost of Sales = Opening Inventory + Cost of Production (1) -7.2.1 7.2.2 7.2.3 Closing Inventory 7.3 Product Sales Gross Profit + 7.4 Other Operating Incomes -7.5 Management Expenses (2) 7.6 Financial Expenses (3) = 7.7 Operating Income + 7.8 Investment Income + 7.9 Non-Operating Net Income = 7.10 Profit Before Tax -7.11 Income Tax Payable = 7.12 Profit After Tax -7.13 Transfer to Capital Reserve -7.14 Transfer to General Reserve 8. Costs Budget (by cost items) 8.1 Actuals for Last Year 8.2 Budget for Current Year Budget Analysis by : 8.3 Direct Production Cost (1) 8.3.1 8.3.2 Production Overheads (1) 8.3.3 Management Expenses (2) 8.3.4 Financial Expenses (3) 8.4 Cost Items : 8.4.1 Raw Materials + 8.4.2 Energy & Power + 8.4.3 Wages + 8.4.4 Depreciation + 8.4.5 Repair & Maintenance + 8.4.6 Interest Payments + 8.4.7 Other Expenses = 8.4.8 Cost of Manufacturing + Opening WIP -8.4.9 8.4.10 Closing WIP = 8.4.11 Cost of Production (1) 9. Production Wages Budget (analysed by quarters) Industrial Production Output Value/ 9.1 9.2 Average Number of Employees = 9.3 Production Output Value Per Employee
- 9.7 Productive Working Hours % 9.8 Total wages Amount

Planning Number of Production Workers

Worker's Attendance %

Available Working Hours %

9.4

9.6

10. Product Quality Budget (standards set for each production department)

- 11. Energy & Power Consumption Budget
  - 11.1 Electricity
  - 11.2 Water
  - 11.3 Coal Gas
  - 11.4 Gasoline
- 12. Technical Rennovation Budget
  - 12.1 Project Number
  - 12.2 Project Title
  - 12.3 Project Description
  - 12.4 Expenditure Requirement
  - 12.5 Responsible Department/Staff
  - 12.6 Period (Beginning/Ending Dates)
  - 12.7 Progress Schedule
- 13. Facility & Equipment Replacement Budget
  - 13.1 Replacement (New)
    - 13.1.1 Title
    - 13.1.2 Description
    - 13.1.3 Expected Delivery/Completion Date
    - 13.1.4 Estimated Cost
  - 13.2 Existing (Old)
    - 13.2.1 Serial Number
    - 13.2.2 Title
    - 13.2.3 Description
    - 13.2.4 Years of Usage
    - 13.2.5 Original Book Value
    - 13.2.6 Department in Use
- 14. Production Facility Repair & Maintenance Budget
- 15. New Product Pilot Test Budget
- 16. Cost Savings Budget (analysed by responsible departments)
  - 16.1 Iron & Steel Materials
  - 16.2 Woodern Materials
  - 16.3 Energy & Power
  - 16.4 Expenses
- 17. Real Estate (Building) Budget
- 18. Safety & Environment Protection Budget
  - 18.1 Current Problem Analysis
  - 18.2 Recommended Solutions
  - 18.3 Estimated Expenditures
  - 18.4 Repsonsible Department
  - 18.5 Cooperation Department(s)
  - 18.6 Completion Date
  - 18.7 Items Included:

- 18.7.1 Safety Education
- 18.7.2 Souldering Smoke/Gas Discharge
- 18.7.3 Ventilation System Rennovation
- 18.7.4 Dust Clearance System Rennovation
- 18.7.5 Waste Water Control System
- 18.7.6 Environmental Control Office
- 18.7.7 Promotion Programmes
- 18.7.8 Vehicle & Lift Inspection
- 18.7.9 Industrial Hygiene Inspection
- 19. Production Safety Budget (analysed by department)
  19.1 Production Accident Rate
- 20. Education & Training Budget

The general short term planning policy adopted by Shanghai Crane & Conveyor Works (SCCW) is "production determined by sales" and "sales determined by targeted profit before income tax" which means profit before income tax growth as agreed with the Shanghai Heavy Mining Mechinery Corporation (SHMMC) is the initial driving force of all the activities. Reference should also be made to the 5-year plan especially to estimate what the sales order potential will be for the new product and market situation in the next year. As from October 1992, SCCW has employed the annual planning or budgeting process as described in section 5.2 (Review Process) above.

Since October 1992, the workshop managers have been involved intensively in this planning process which they believe to be important in setting and negotiating the internal responsibility contracts with the factory manager. The other department heads have also participated carefully in devising their expense budgets which they would be measured against as performance yardsticks.

In view of the rapid changing market conditions, the annual plan review period has been shortened from quarterly to monthly. The factory manager and his deputy managers and chiefs will hold a formal meeting at the beginning of each month to review the financial performance against the annual plans. Amendments or revisions are made once or twice a year according to the significance of the factors affecting the annual plan.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given SCCW more freedom to plan ahead. The government representatives, the bureau and corporation, have almost completely devolved the short-term planning autonomy to SCCW, except to agree on the minimum targets as agreed at the beginning of every year. The top management have involved the middle management or even their subordinates (lower management) in the annual planning process which on one hand is a critical step in materializing the long-term strategic plan, and on the other hand, it is an important motivational factor for the workshop managers and department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence : shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

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#### Internal Responsibility Contracts (IRC) 5.6

Shanghai Cranes & Conveyors Works (SCCW) established its IRC system in 1989 in order to motivate the efficiency, profitability and cost reduction in the production workshops.

The IRC of the "Metal Framework Workshop" is described below :

Department : Metal Framework Workshop
Duration : 1 January to 31 December 1994
Guidelines :

The targets set in this IRC are based on the relevant expectations determined in the current Annual Plan (Budget). References have been made from last year performance and current year distribution policies to determine the reward and incentive which are linked up with various targets in this IRC.

- Terms & Conditions : (A)
- (A1) Equivalent Labour Hours of Output (ELH)

Annual Target : 319,500 ELH Monthly Target : 35,500 ELH

The product mix, specifications and quantities are determined by the Production Planning Department on a monthly basis. The conversion of ELH based on actual monthly output is also calculated by the same department.

- (A2) Product Quality
- A2.1 The 5-50 tonnes Electrical Motors should try to exceed the national standard while the B500-1400TD Belt Conveyors must conform with local government standards.
- A2.2 LD Electical Units should attained first-class standard.
- A2.3 Welding first-class standard > 93% Sample inspection passing rate > 95%
- (A3) Safety Standard

Accident rate < 3% No fatal or serious accidents would be allowed.

- (A4) Operation Management
- A4.1 Attempt to achieve the Quality Management Prize awarded by the local government.
- A4.2 Improve the routine operation and worker discipline in order to attain first-class enterprise standard requirements.
- (A5) Production Facility

Production facilities and equipment fit for use rate > 95% No serious breakdown would be allowed.

(A6) Material Usage

Iron & steel usage rate > 83%

(A7) Basic Wages (whole department)

Annual Target = RMB XXXXX Monthly Target = RMB XXXX

(A8) Overtime Payment (whole department)

Annual Target = RMB XXXX (1% of Annual Gross Wages Paid)
Monthly Target = RMB XXX

(A9) Bonuses (whole department)

Annual Target = RMB XXXX Monthly Target = RMB XXX

- (B) Rights of Contractee (Workshop):
- (B1) Within the priciples laid down by the headquarters, the workshop has the autonomy to assess the performance of its employees and determine their wages and bonues to be awarded individually. Monthly report should be submitted to headquarters for filing.
- (B2) In order to guarrantee the production targets and maintain the predetermined product mix, the workshop has the autonomy to change the labour mix within the labour laws. But report should be made to the personnel department before action.
- (B3) According to the actual needs, the workshop has the autonomy to change the organisation structure but reports should be submitted to the headquarters and personnel department for record and filing.
- (B4) Within the personnel policies, the workshop has the autonomy to evaluate, promote and award its employees, and also to confirm and promote the newly recruited employees.
- (B5) According to the headquarters' policies, the workshop has the autonomy to discipline its employees who have acted against the rules and regulations.
- (C) Performance Evaluation:
- (C1) The Enterprise Management Office is responsible for evaluating the actual performance against the IRC on a monthly basis and calculate the bonuses according to the following terms and conditions. The gross annual bonuses payable can be ajusted during the year end.
- (C2) Efficiency Wages Evaluation
- C2.1 If monthly Equalvalent Labour Hours (ELH) of actual output > 28,000 hours, award efficiency wages of RMB8,971.
- C2.2 If monthly ELH of actual output < 28,000 hours, then for every 1 hour below target, RMB2 of efficiency wages will be duducted and placed temporary into a pool. When the yearly accumulated ELH can meet the target, then the deducted efficiency wages will be distributed out from the pool.
- (C3) Overtime Wages Evaluation

Overtime wages is evaluated every month. Overtime wages will be awarded if monthly ELH of actual output > 28,000 hours.

#### (C4) Bonuses Evaluation

C4.1 Bonus is evaluated on a monthly basis according to the following table:

Monthly ELH of actual output (hours)	Bonus to be awarded
ELH < 24,000	No bonus*
24,000 < ELH < 28,000	RMB0.31 per ELH
28,000 < ELH < 35,500	RMB0.93 per ELH in excess of 28,000 hours
ELH = 35,500	a lump sum of RMB16,000
ELH > 35,500	RMB1.92 per ELH in excess of 35,500 hours

- \* Depending on the performance of individual sections or employees may receive up to 25% of the minimum bonus. Justifications must be made by the workshop manager and approved by the general manager.
- C4.2 The determination of final monthly bonus to be awarded, considerations have to be given to the overall economic performance of the whole enterprise. If the whole enterprise's economic performance is well above budget, a lump sum monthly special bonus will be awarded according to the performance achieved by the workshop per the above table.
- C4.3 If annual ELH of actual output > 252,000 hours, an year-end bonus of RMB70,000 will be awarded disregard the overall economic performance of the whole enterprise. If less than 252,000 hours, then certain amount of year-end bonus will be deducted. If the average level of year-end bonus of the whole enterprise is above the level of this workshop, then the difference will be awarded accordingly.
- C4.4 The bonuses to be awarded to the workshop manager and deputy manager will be 40% and 20% higher than the average monthly bonus per employee of the wrokshop respectively.
- (D) Other Targets Evaluation
- (D1) Quality Targets

If the output products fail to attain the quality assurance policies applicable to this department, 10%-30% of the bonus and 5%-15% of the efficiency wages may be duducted.

(D2) Safety Production

the daily operations violate the safety rules and regulations applicable to this workshop, 5%-20% of the bonus and 5%-10% of the efficiency wages may be deducted.

- (E) Risk Guarantee Money
- (E1) The workshop has to pay RMB20,000 as risk guarantee money.
- (E2) If the annual ELH falls below 80% of the minimum target (i.e. 252,000 hours x 80% = 201,600 hours), then the risk guarantee money will be confiscated.
- (E3) If the annual ELH falls between 80% and 100% of the minimum target (i.e. 201,600 < ELH < 252,000 hours), then 50% of the risk guarantee money will be confiscated.
- (E4) If the following targets are fail, certain amount of risk quarantee money will be confiscated :

Quality Targets : 10%-20% Safety Targets : 10%

E4.3 Management Targets : 5% per target

(E5) If all the targets can be achieved, the risk guarantee money will be refunded. If actual performance exceed the targets, 50%-150% of the risk guarantee money will be awarded as special bonus.

The IRC of the "marketing and sales department" is described below :

Department : Equipment Sales
Duration : 1 January to 31 December 1994

Guidelines :

To enhance and motivate the responsibility and agressiveness of the equipment sales staff, to ensure the economic efficiency target of the whole enterprise and to link up the remuneration according to contribution, the equipment sales manager agrees with the general manager on the following terms and conditions of this internal responsibility contract.

- (A) Terms & Conditions :
- (A1) According to the prevailing selling prices, ensure the sales order targets predetermined with the headquarters are accomplished in quantity and in time as follow.

- A1.1 The current year sales order target should be achieved before the end of August.
- A1.2 60% of the next year sales order target should be achieved in the current year.
- A1.3 The best prices should be achieved when accepting orders. The selling prices should not be lower than the minimum selling prices as determined by the headquarters according to the market conditions at the time of order acceptance.
- (A2) Cash Collection
- A2.1 Within one month after accepting an order, at least 40% of the selling price should be received as prepayment or downpayment.
- A2.2 After delivery of the a sales contract, the balance of accounts receivable must be settled within the specified period of time.
- (B) Performance Evaluation
- (B1) The Equipment Sales Manager is fully responsible for the terms and conditions of this contract. The Enterprise Management Office is responsible for evaluation the sales performance according to the terms and conditions of this contract. The daily operation and management of the equipment sales department should be assessed as well.
- (B2) The equipment sales contracts at allowable selling prices are counted as the basis for evaluation and bonus determination. The cash collected on equipment sales contracts is the criterion for bonus calculation.
- B2.1 1.6% of the sales contract price is calculated as the bonus to be payable. The monthly bonus to be awarded is according to the proportion of cash collected (including the prepayment or downpayment).
- B2.2 If sales contract price exceeds the listed or standard selling price, 2.5% of the excess (after deducting any commission and rebate paid or payable) is calculated as the bonus to be payable according to the cash collected on a monthly basis.
- B2.3 If the equipment sales department can increase the selling prices subsequent to confirming the sales contracts, 2.5% of the increased selling price can be calculated as the bonus similar to B2.2 above.

- (B3) If the 40% prepayment or downpayment and the accounts receivable cannot be settled in time, bonus will be deducted in the following manner.
- B3.1 If the prepayment or downpayment is less than 40% of sales contract price, then the bonus payable will be 1.2% of the contract price.
- B3.2 After delivery of the sales contract, the accounts receivable must be settled within 3 months. If any outstanding accounts receivable exceeds the collection period by one month, then 0.1% on the sales contract price will be duducted from the bonus (i.e. 1.5% at the end of 4th month and 1.3% at the end of 6th month etc.). If any outstanding accounts receivable exceeds 6 months, then 0.2% on the sales contract price will be deducted from the bonus per every month over the limit (i.e. 1.1% at the end of 7th month). For any outstanding accounts receivable exceeds one year, no bonus will be awarded but instead bonus will be deducted according to the outstanding amount.
- (B4) Evaluation of Order Acceptance
- B4.1 Orders for the current year target must be achieved before the end of August. For one month delay, 10% of the year-end bonus will be deducted; two months delay, 25% will be deducted; three months delay, 50% will be deducted; four months delay, 80% will be deducted; and no year-end bonus will be awarded if target cannot be accomplished at the end of the year.
- B4.2 At the end of the year, 60% of the next year order target must be achieved. For any 5% shortfall, 10% of the current year-end bonus will be deducted.
- (B5) Management Performance Evaluation
- B5.1 The equipment sales department must ensure the total quality control of every sales contract from order acceptance, delivery, to debt collection. For any loss control or quality problem, bonuses will be deducted according to the "Enterprise Quality Evaluation Regulations".
- B5.2 The management performance of the equipment sales department is assessed by the enterprise management office. For any significant mistakes, the impact will be quantified and bonuses will be deducted accordingly.
- (B6) Contractee (Equipment Sales Manager) Evaluation

- B6.1 The contractee's performance will be evaluated by the contractor (general mańager). If the targets stipulated in this contract can be achieved or exceeded, the contractee will be awarded a special bonus which is within 2 to 4 times of the average annual bonus per employee in the equipment sales department. Advanced payments will be made on a monthly basis and finalized at the year end.
- B6.2 If the contractee commits any significant mistake or misconduct behaviour during the contract period, assessment and action will be made by the contractor. If the targets stipulated in this contract cannot be achieved, bonus awarded to the contractee will be deducted and in addition, the total bonus awarded to the contractee should not exceed 150% of the average annual bonus per employee in the department.
- (B7) Other Terms and Conditions
- B7.1 Sales order targets described in this contract refers to the sales contracts directly entered into by the equipment sales department, whereas the sales contracts accepted and signed by the tertiary enterprises are not counted.
- B7.2 Once this contract is signed, the contractee can sub-contract the targets to his own subordinate sections or individuals but records should be filed with the enterprise management office.
- B7.3 Any changes needed to be made after signing this contract, mutual agreements from both parties must be sought.
- B7.4 This contract is effective from the date of signatures. Six copies will be made for contractor, contractee, enterprise management office, accounting and finance department etc.

It takes a few months for the factory manager and workshop manager to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval by the annual general metting in next February. This long process indicates that the setting of IRC is not a top-down approach and the workshop managers are very eager on this issue upon which they will be measured against and rewarded thereupon. The IRCs are subject to at least quarterly review but adjustments can only be made if some factors affecting the achievement of targets significantly.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the factory manager has delegated more freedom to the workshop managers in initiating and negotiating their own IRCs, and also involved the accounting and finance personnel intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Because the 4 production workshops in Shanghai Crane & Conveyor Works (SCCW) are manufacturing their own products without any interactions with the other workshops, therefore, internal transfer pricing does not exist. Although the other 5 supporting workshops or departments are supplying materials and services to the 4 production workshops according to the requirement of each job, however, they are all treated as cost centres and no internal profits or transfer prices have to be determined.

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Section 6 : Control System ,

#### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Shanghai Crane & Conveyor Works (SCCW) has three distinct levels of management hierarchy:

- (1) Top Management (factory manager, deputy-factory managers,
  - chief accountant and chief engineer)
- (2) Middle Management (workshop managers and department heads)
- (3) Lower Management (foremen and supervisors)

The deputy-factory managers and the two chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (production lines or sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task which will be explained in the rewards and incentives section.

The major control mechanisms employed by the top management to control the performance of the workshops and departments are by using annual plans and IRCs. As described in section 5.6 above, the most important measurement criteria are production efficiency (i.e. Equivalent Labour Hour of actual output) and cost control set in the IRCs, although some other qualitative targets, such as quality and safety, are employed. However, these are subsidiary ones which have lower weightings in calculating the group wages and bonus.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of SCCW.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

# 6.2 Agreeing Objectives

Shanghai Crane & Conveyor Works (SCCW) sets similar objectives for its production workshops: workshop managers must meet their agreed IRC targets for the year and expect improvement in performance year after year as emphasized by the corporation and bureau in terms of growth rates. The critical occasion, therefore, is the annual planning review. In view of the market economy and macro-economic control policies promulgated by the government, and the keen competition within this industry, the production workshops sometimes feel passive in setting their objectives or targets in the annual plans or IRCs because their activities are depending on the sales demands and the derived production mixes and volumes.

A high pressure to achieve the planned production quantity and efficiency is put on the workshop managers at the quarterly or monthly review. They fully understand that their group wages and bonus are tied in with the annual plans or IRCs and it also depends on the overall performance of the enterprise as a whole. Apart from the production workshops, the other departments, such as purchasing and sales, may have ad hoc or project based IRCs in which they have agreed specific objectives or targets with the factory manager. The promotion, salary and bonus of these functional staff are correlated with these quantitative and non-financial targets.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

## 6.3 Monitoring Results (Reporting & Performance Measurement)

Shanghai Crane & Conveyor Works (SCCW) regards it as essential to catch variances from annual plan or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the workshops and departments submit monthly results on standard forms to their respective divisional heads and also to the chief accountant for vetting and comparison with budgets and IRCs. The production workshops are also required to submit production progress reports to the top management on a weekly basis.

The monthly report format is unique for each department. The contents are mainly corresponding with the annual plan from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the targets. The qualitative targets are usually subjectively measured by the divisional heads and enterprise management office and written in the monthly reports as well. These monthly reports are compiled, through the computer, by the enterprise management office. Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the factory manager for review.

For any serious adverse variances shown on any report, the factory manager will contact with the respective deputy managers, chiefs, workshop managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the top management with the middle management, the factory manager will put forward the monthly results for open discussion. The workshop managers and the department heads may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a workshop manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results will be passed back to the personnel department for calculating the group wages and bonus of each workshop or department for last month. Then the accounting department will process the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization has been recognised by the top management and some stand-alone personal computers have been purchased and used for production planning and control, purchasing and inventory control, sales analysis, and financial planning and analysis. In 1994, SCCW set up a computer centre and installed a mini-computer trying to integrate all the sub-systems. However, the computing staff may not understand the operations and requirements of other workshops and department, and on the other hand, many employees may not understand the functions and constraints of the computer. Therefore, SCCW is planning to undertake intensive training for both computing and management staff in order to enhance their cooperation and to implement a comprehensive MIS via the establishment of LANS.

Now, SCCW views the annual plan or IRC as a contract between the top management and the workshop or department. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from plan.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

The external financial auditing of SCCW is performed by either the Government Audit Department, Shanghai (Municipal) Finance Bureau or Shanghai (District) Finance Department once every year. One of these government authorities will audit SCCW in every year. Apart from the financial audit, the respective Civilization, Facility, Safety and Quality Control authorities will inspect SCCW almost once every year.

Observation of Control Influence: shfit from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# 6.4 Rewards and Incentives

Since 1992, Shanghai Cranes & Conveyors Works has implemented the following "Bonus Evaluation and Distribution Policy":

- (A) Principles
- (A1) The bonus evaluation and distribution should follow the "reward according to work" principle. Bonus means award for extra workdone over the standard or budget on individual basis instead of the "equal share for everybody" or "big rice pot" traditional ideology.
- (A2) The financial source of bonus comes from enterprise's economic efficiency which are corelated with one another. The bonus distribution should be based on the evaluation of internal responsibility contract's accomplishment taking into account of quality and safety which may have the veto power on bonus award.
- (A3) According to the real situation, the bonus evaluation and distribution should put more weighting onto the frontline workers who are directly contributing their physical effort to the economic well-being of the enterprise.

- (A4) The level of bonus award is according to the financial viability of the enterprise. Therefore, all employees should raise the production (administration) output, enhance the enterprise economic efficiency in order to increase their bonus awards.
- (A5) The bonus distribution is on a two-level system. The headquarters or top management evaluate the performance of individual departments and award a lump sum bonus to each department. In turn, each department evaluates its own empolyees and award bonus according to individual performance. The departments can mondify this bonus evaluation and distribution policy to suit their actual needs after obtaining approval from top management.
- (B) Methods
- (B1) Classification of Departments

According to different responsibilities and nature of duties, all the workshops and departments are classified into four categories i.e. A, B, C and D.

(B2) Asscertainment of Bonus Index

The major determining factors of bonus are effeciency and effectiveness index.

## B2.1 Efficiency Bonus Index Table (M1)

Category	Index	Departments
A	1.0 (Direct labour) 0.8 (Indirect labour)	Production Workshops
В	0.75	Heat Treatment, Packing
C	0.7	Tool, Power, Inspection, Sales Electrical Equipment, Planning Purchasing, Technical, R&D
D.	0.65	Others

(a) The amount of bonus awarded to Category A direct labour depends on "utilization rate of available labour hours" as follow:

, Efficiency Bonus formula Utilization rate of available labour hours (per worker per month) ------U = 80%RMB25 U < 80% RMB25 -  $(80\% - U) \times 50*$ 80% < U < 100% RMB25 +  $(U - 80\%) \times 100\#$ U > 100%  $RMB45 + (U - 100\%) \times 150@$ \* If U = 60%, then efficiency bonus = RMB25 - (80% - 60%) x 50 = RMB15  $\times$  1.0 (index) = RMB15 # If U = 90%, then efficiency bonus = RMB25 +  $(90% - 80%) \times 100$ = RMB35  $\times$  1.0 (index) = RMB35@ If U = 110%, then efficiency bonus = RMB45 + (110% - 100%)x150 = RMB60  $\times$  1.0 (index) = RMB60

- (b) Efficiency bonus for Category A indirect labour will be 80% of the direct labour according to the index of 0.8 per above Table M1.
- (c) Efficiency bonus for Category B employees will be 75% of the Category A direct labour's average according to the index of 0.75 per above Table M1.
- (d) Efficiency bonus for Category C employees will be 70% of the Category A direct labour's average according to the index of 0.7 per above Table M1.
- (e) Efficiency bonus for Category D employees will be 65% of the Category A direct labour's average according to the index of 0.65 per above Table M1.
- (f) Calculation of the utilization rate of available labour hour
   (U) is as follow :

\* Equivalent labour hours of actual output is calculated by the production planning & control department according to the Municipal Standard Statement 001 (1992)

# B2.2 Effectiveness Bonus Index Table (M2)

Effectiveness bonus is based on actual expense and expense per equivalent labour hour versus the budgeted targets respectively.

Cat.	Standard Expense (1)	Act Exp/ Act Exp/ Act ELH Std ELH (2) (3)	Departments
A	5/Month@	10-20 5-10	Production Workshops
В	5/Quarter	5-10* 5-10#	Heat Treatment, Packing, Power Tool, Estate Development
С	5/Year	10-15#	Chief Engineer, Technical, Filing, Inspection, Sales, General Affairs, Safety & Environment, Quality Control, Promotion, Education, Hospital, Accounting, Security, Enterprise Management Office
D		10-15#	Other departments without any expense budget

- (1) If actual total expenses at or below standard, the following bonuses will be awarded.
- (2) If actual expenses/actual labour hours at or below standard, the following bonuses will be awarded.
- (3) If actual expenses/standard ELH based on actual output at or below standard, the following bonuses will be awarded. The standard of this ratio is based on last year actual performance. The lower of this ratio, the better the performance. Upper and lower limits have been set.
- @ All figures in RMB
- \* Departmental average
- # Enterprise average as a whole

## B2.1.1 Effectiveness Bonus based on Expense Control

The amount of effectiveness bonus awarded to Category A employees depends on the attainment of expense targets as follow:

Actual Vs Standard Bonus Formula (Refer to Column 1 of

Table M2 above)

At standard RMB5 (per worker per month)

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Above standard 1% above standard, deduct 5% bonus up to

20% above standard\*

+20% above standard, deduct same proportion from the other bonuses up to RMB5#

Below standard 1% below standard, add 5% bonus@

\* If actual expense exceeds standard by 10%, then effectiveness bonus = RMB5 -  $(10 \times 5\% \times RMB5) = RMB2.50$ 

# If actual expense exceeds standard by 40%, then deduct from the other bonuses of RMB5 - (40 x 5% x RMB5) = RMB5

@ If actual expense below standard by 20%, then effectiveness bonus = RMB5 +  $(20 \times 5\% \times RMB5)$  = RMB10

B2.1.2 Effectiveness based on Actual Expense/Actual Labour Hour

The amount of effectiveness bonus awarded to Category A employees depends on the actual ratio of actual expense per actual labour hour against the standard (the lower the better) as follow:

Actual Vs Standard Bonus Formula (Refer to Column 2 of Table M2 above)

At or Below Lower Limit RMB20 (per worker per month)

At Upper Limit RMB10 (per worker per month)

Between Lower & Pro Rata\*
Upper Limit

Over Upper Limit +1% reduce 2% of RMB10 bonus up to +50%

by 1% - 50% then zero bonus

Over Upper Limit +1% reduce RMB1 from other bonuses by 51% or above awarded up to a ceiling of RMB10

\* Actual Ratio - Lower Limit ----- x (RMB20 - RMB10) + RMB10 Upper Limit - Lower Limit

# B2.1.3 Effectiveness based on Actual Expense/Standard ELH

The amount of effectiveness bonus awarded to Category A employees depends on the actual ratio of actual expense per standard equivalent labour hour of actual output against the standard (the lower the better) as follow:

Actual Vs Standard	Bonus Formula (Refer to Column 3 of Table M2 above)
At or Below Lower Limit	RMB10 (per worker per month)
At Upper Limit	RMB5 (per worker per month)
Between Lower & Upper Limit	Pro Rata*
Over Upper Limit by 1% - 50%	+1% reduce 2% of RMB5 bonus up to +50% then zero bonus
Over Upper Limit	+1% reduce RMB0.5 from other bonuses

## B2.1.4 Effectiveness Bonus for Category B Departments

by 51% or above

(a) The calculation of effectiveness bonus based on expense control is similar to Category A departments. It can be assessed either monthly or quarterly.

awarded up to a ceiling of RMB5

(b) The calculation of effectivenss bonus based on actual expense per ELH, but not standard expense per ELH, which is similar to Category A departments except to use either the departmental or whole enterprise average as index or basis. Only the ratio of actual expense/actual labour hour is used to determine bonus.

## B2.1.5 Effectiveness Bonus for Category C & D Departments

(a) The calculation of effectiveness bonus for Category C departments based on expense control is to compare the actuals with the budgets at the end of the year. If on or below budgets an annual bonus of RMB60 (or RMB5 per month) will be awarded. If above the bugets, no bonus will be awarded.

- (b) Under normal circumstances, Category D departments have no expense budgets and their annual expenses are usually below RMB10,000. Therefore, no such effectiveness bonus is awarded.
- (c) The determination of effectiveness bonus for Category C & D departments based on output control is linked up with the actual average bonuses awarded to Category A & B departments which calculations are similar to the latter departments but assessed on an annual basis.
- (B3) Determination of Lump Sum Bonus to Individual Departments

## B3.1 Category A Departments

- (F1) BA = K1 + K2 + K3, where
  - BA = Departmental Gross Bonus for Category A Departments
  - K1 = Gross Bonus for Frontline Budgeted (Allowed) Workers
  - K2 = Gross Bonus for Non-Budgeted Employees
  - K3 = Other Bonuses or Deductions
- (F2)  $K1 = I \times Q \times S \times H1(M1xCA + M2)$ , where
  - I = IRC Score determined by Enterprise Management Office
  - Q = Quality Score determined by QC Department
  - S = Safety Score determined by Safety Control Department
  - H1 = Budgeted (Allowed) number of workers determined by Personnel Department
  - M1 = Average Efficiency Bonus per employee as calculated above by the Production Planning & Control Department
  - CA = Product Mix Index as determinated by the Production & Planning Department
  - M2 = Average Effectiveness Bonus per employee as calculated above by the Accounting Department
- (F3)  $K2 = I \times Q \times S \times H2(0.8M1xCA + M2)$ , where
  - H2 = Number of employees agreed by the Production Department and the Personnel Department
- (F4) K3 are other bonuses or deductions as determined by :
  - (a) The Enterprise Management Office can award a special bonus to a production workshop or department according to its outstanding economic performance but the amount should not be greater than 5% of the calculated gross amount of bonus awarded to that workshop or department already.

- (b) The Production Workshops are encouraged to accept internal orders from the Headquarters in manufacturing components and spare parts. The actual outputs are coverted into Equivalent Labour Hours (ELH) by the Production Planning & Control Department and then passed to the Enterprise Management Office for determining bonuses. If the assignment or order can be completed on or before the specified date, RMB0.5/ELH will be awarded to the workshop. If the order can be completed within one month after the specified date, RMB0.25/ELH will be awarded. If the order cannot be completed one month after the specified date, then no special bonus will be awarded but the ELH will be added into the normal production to calculate the efficiency bonus.
- B3.2 Category B Departments
- (F5) BB = I x Q x S x H2(0.75M1xCB + M2) + K3, where
  - BB = Departmental Gross Bonus for Category B Departments
  - CB = Assignments or Jobs Completion Index determined by the Enterprise Management Office
- B3.3 Category C Departments
- (F6) BC = I x Q x S x H2(0.7M1xCC + M2) + K3, where
  - BC = Departmental Gross Bonus for Category C Departments
- B3.4 Category D Departments
- (F7) BD = I x Q x S x H2(0.65M1xCD + M2) + K3, where
  - BD = Departmental Gross Bonus for Category D Departments
  - CD = Assignments or Jobs completion rate determined by the Enterprise Management Office

Since 1992, SCCW had the autonomy to recruit employees from the labour market without getting the Shanghai Manpower and Wages Bureau involved which is in compliance with the Mechanism Transformation Regulations. Furthermore, since 1993, all the employees have signed employment contracts, which include the "employee contract" and the "in-post contract". The employee contract signed between the factory manager and an employee signifies that he or she has been employed by the enterprise. Whereas, the in-post contract means a formal assignment of a certain post to the employee who is expected to be capable for the job. For the employees without in-post contracts, they may be transferred to the Tertiary (Third) Enterprises which are fully-owned by SCCW and are self-financed.

The effectiveness of implementing the employment contracts is reflected in the conversion of financial losses incureed in 1991 and 1992 to positive profit before tax in 1993 and 1994. This significant improvement in economic efficiency is partly due to the fact that bonues are linked up with efficiency and productivity.

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the SCCW is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. The take-home pays of workers and staff in SCCW are mainly composed of three elements as broken down below:

		Workers	Staff	
(1)	Wages/Salary	50% - 35%	70% - 55%	
(2)	Bonus	40% - 50%	20% - 30 <b>%</b>	
(3)	Allowances	10% - 15%	10% - 15 <b>%</b>	

The average annual gross wages per employee was around RMB7,500 in 1993 and RMB10,000 in 1994. Under the current high inflation rate (overall average 21.7% in China in 1994), SCCW is expected to increase the average annual gross wages to RMB12,500 in 1995.

The wages includes the basic wages and the floating wages where the former is almost fixed (i.e. average RMB200 per month) across the board and increased according to inflation as determined by the Manpower and Wages Bureau. The floating wages is classified into 22 grades depending on the type of work, seniority, efficiency and skill. Grade 22 employees will receive RMB300 floating wages per month while Grade 1 employees will receive RMB150 per month. Therefore, the difference between one grade and the next upper or lower grade is very small i.e. between RMB5 to RMB10 per month.

There are two portions for the "allowances". The first part is determined by the Manpower and Wages Bureau of the Shanghai Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity.

The second part is decided by the SCCW which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowances" is about RMB115 to RMB140 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the workshops, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the factory manager and a workshop manager will decide what level of group bonus will be given to the department. Of course, it is up to the workshop manager to award that lump sum of group bonus to his or her subordinates according to invidual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

Under the "Factory Manager Responsibility System", if there is an overall outstanding or above target performance, the Corporation (SHMMC) will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management). If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of redundant employees will cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives. Another way to reduce redundant employees is to enforce early retirement at the age of 45.

Instead of fully implementing this contract employment system, SCCW has signed "in-post contracts" with most of the employees for periods from one to five years. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive wages (according to grade in the pay-scale), allowances and bonus. Without such a contract, that employee is out of job but he or she is still an employee of SCCW and is allowed to received a basic monthly subsidy of about RMB200. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better.

In relation to the social welfare, since 1993, SCCW has to contribute 25.5% of the monthly gross payroll to the government for sharing the responsibilities of unemployment, retirement and medical allowances. In addition, SCCW has to provide about 14% of the monthly gross payroll for various employee's benefits such as building residential quarters. Furthermore, SCCW has to bear the pension and medical allowance for its 860 retired employees (before 1994) which is a rather financial burden to the overhead expenditures.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, SCCW believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Finance Control" to "Moderate Financial Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Crane & Conveyor Works (SCCW) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	High Corporate	High to Medium Corporate
Review Process*	High Corporate	Medium Corporate
Strategic Themes, Thrusts and Suggestions*	Very High to High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High to Medium Corporate	Medium to Low Corporate
Internal Responsibility Contract	High Corporate	Medium Corporate
Management of Interdepen- dencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.  $\dot{\phantom{a}}$ 

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992]	
Low Corporate	(Strategic Control)	(Financial Control)	

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Crane & Conveyor Works (SCCW) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

Revised: 17 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 13
Report Date : 6 February 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

Name of SOE : Shanghai Metallurgical Equipment General Factory (SMEF)

Staff Interviewed: Mr Weng Wei Shan/Finance Division Manager
(No. of years in this enterprise: 26 years)
Miss Tao Wen Quen/Assistant Finance Manager
(No. of years in this enterprise: 22 years)

Dates of Visits : First Visit - 28 May 1993
Second Visit - 8 September 1994
Third Visit - 6 February 1995

# Section 1 : History & Background

Shanghai Metallurgical Equipment General Factory (SMEF) previously known as Ya Xi Ya Steel Plant which was established in 1929 manufacturing iron and steel sheets and wires. Since the early 19950s, Ya Xi Ya Steel Plant had started to manufacture various alloy foundry casts for the trains of the Ministry of Railways with high quality without the requirement of inspections by the end-users. In 1956, the Ministry of Metallurgy changed this enterprise's name into Shanghai Mechinery Repairs General Factory mainly producing spare parts and components and providing maintenance and repair services for the mechinery and equipment used by the iron and steel munufacturing plants. Under the restructuring of the product lines, in September 1987 the Shanghai Metallurgy Bureau combined the Shanghai Machinery Repairs General Factory and Shanghai No.2 Machinery Repairs Factory into the present Shanghai Metallurgical Equipment General Factory (SMEF) which is a specialized machinery plant for manufacturing whole sets of metallurgical equipment, mechanical and electrical, for the iron and steel industry.

At present, SMEF has a total of 5,000 employees including 450 engineering technical staff, 790 management staff and 2,300 technicians. SMEF has a total fixed asset of over RMB200M at book value and an annual production capacity of over 70,000 tonnes. The highest profit record of RMB25.63M was made in 1988. The accumulated profits and taxes paid to the government as from 1950 to 1992 was RMB420M. The turnover achieved in 1992 was RMB250M but the profit before tax was slipped down to zero mainly due to the inflation of raw materials, heavy employee wages and benefits, keen competition since early 1990s and relatively old and inefficient production facilities and equipment.

SMEF was qualified by the government as a "Second Grade" enterprise in 1988. Over 60% of SMEF's products achieved high quality standard and received a Quality Management award from the Ministry of Metallurgy in 1989. Furthermore, SMEF was also qualified as first class "Information Management" and second class "Energy Saving" awards in 1990.

SMEF has two production sites. One is located at the Yangpu (Eastern Urban) District occupied a land area of over 130,000 square metres and another one is situated at the Putao (Western Urban) District with a land area of over 120,000 square metres.

The various products of SMEF can be classified into the following categories:

- (1) Mechanical Equipment (Smelting, Pressing & Crushing)
  - 1.1 Small Type Arc-Furnace
  - 1.2 Continuous Casting Machine For Billet and Slab
  - 1.3 Sintering Machine, Gas Generating Furnace, Spare Parts for Blast Furnace
  - 1.4 D70013 Air-Blower Roter
  - 1.5 Various Hot and Cold Rolling Mills, Crimping Machines
  - 1.6 Various Draw Benches & Straightening Machines
  - 1.7 Pressing Machine for Ore Powder Compacting
  - 1.8 Various Crushing Machines & their Spare Parts
- (2) Electrical Equipment (Large Size Transformers, Electronic Products and Others)
  - 2.1 Various Arc-Furnace Transformers with Capacity below 40,000kVA
  - 2.2 Various Power Transformers with Capacity below 120,000kVA
  - 2.3 Various Rectiformers
  - 2.4 Various Special Transformers
  - 2.5 Various High-Powered S.C.R. Components (below 1,000A, 3,000V)
  - 2.6 KJW Series Electronic Switch Cabinets
  - 2.7 Lifting Electromagnetic Sucking Disc and its Control Cabinet
  - 2.8 Reforming Large, Medium Size of AC and DC Motors
- (3) Commercial Casts & Forgings (Steel Casts, Iron Casts & Forging Steel)
  - 3.1 Various Alloy & Refined Carbon Steel Casts from 10kg to 10,000 kg
  - 3.2 Various Wear-Resisting Steel Casts for Crushing
  - 3.3 Various Alloy Steel Rools, Spheroidal-Graphite Cast Streel Rolls, Adamite etc.
  - 3.4 Various Deformed Cast Iron Works below 20t each piece
  - 3.5 Various Heat-Resisting & Wear-Resisting Cast Iron Works
  - 3.6 Various Deformed Alloy Forging Works below 0.6 tonnes

In addition, SMEF has set up an inspection centre serving the customers with techniques such as inspecting pressure vessel; testing data of pressure and power energy for rolling mills; protecting the degree of oil contamination for transformers; testing resonating wave above 50 circle per second for electrified wire netting etc. All in all, the factory can be able to serve the users from designing, smelting, casting, forging, fabricating, assembling, measuring and offering whole sets of metallurgical equipment.

Affected by the building of Yangpu Bridge, the longest bridge in China, which one end (entrance) is adjacent to SMEF's Eastern Plant and the environmental protection scheme implemented by the municipal government, since 1994, the iron and steel casting and forging production lines of SMEF have been relocating phase by phase to a new factory situated in Wangdu of Jiading at the southwest suburb of Shanghai. This new production site in Wangdu has a land area of over 170,000 square metres and has invested over RMB90 million but an additional investment of RMB60M is required. The other equipment and appliance production lines will be relocated to the Western Plant in Putao District before 2000.

Since the South China visit by the Chinese top leader, Mr Deng Xiao Ping, the pace of economic development has been speeded up. SMEF has made use of this opportunity in time to reform the internal operation and management systems on one hand, and react to the quick changes in the domestic and overseas markets in order to become a really self-managed, self-financed, self-regulated and self-developed modern enterprise on the other hand. These reforms included the following:

- (1) Organisation Restructuring (see Section 2 below)
- (2) Strategic Themes & Thrusts (see Section 5.3 below)
- (3) Employee Evaluation & Contract (see Section 6.4 below)
- (4) Reward & Incentive Scheme (see Section 6.4 below)

In 1994, the total iron and steel output in China was over 85 million tonnes in which 20 million tonnes were stockpiled because the product mix did not match with the changes of demand due to macro economic control measures implemented by the government since July 1993. As a result, over 20 million tonnes of iron and steel products were imported from the USA, Japan and Korea at lower prices than the national prices. At the end of 1994, the average price of iron and steel products was dropped from RMB4,000 per tonne to RMB3,000 per tonne.

If the iron and steel industry has to change the product mix according to the market demands, then heavy capital investments will have to be made to rennovate the production facility and equipment. However, this industry has been suffering from the tight capital control by the government via the banking system as one of the 12 macro economic control measures imposed since July 1993 because a lot of capital was invested into the expensive real estate (office and residential buildings) and the overheated stock exchange. To resolve this vicious cycle problem, it is hoped that the government will release appropriate capital funds at more favourable terms for the iron and steel industry in early 1995.

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# Section 2 : Legal Form & Organisation Structure

Shanghai Metallurgical Equipment General Factory (SMEF) has been a wholly state-owned enterprise since 1958 and it does not have a concrete plan to convert into a shareholding enterprise in the next few years because of the stringent rules and regulations governed by the Ministry of Finance (MOF) and the Bank of China (BOC). These bodies have so far approved over 3,600 large- and medium-sized SOEs, which have good financial performance track records, to transform into shareholding enterprises since 1990.

SMEF is under the administration of the Shanghai Metallurgy Bureau (a branch of the Ministry of Metallurgy in Beijing) under which all the iron and steel and related industries in Shanghai are placed under its umbrella. The major role played by the Bureau is to maintain an economical balance of the product mix and sales among its member enterprises. It also appoints the top management, such as the party leaders and factory managers, of the enterprises under its supervision. It also assists the arrangement of capital to finance the approved projects or investments for the enterprises. Another important economic function of the Bureau or the government is to purchase the iron and steel raw materials at lower prices (80%-90%) and then sell to various enterprises as a means of maintaining reasonable input costs under high inflation.

Before the economic reforms started in 1979, the central planning system dictated all the planning and control systems of the state-owned enterprises. Therefore, SMEF acted just as a vehicle (or cost centre) to carry out the activities according to the commands directed from the bureau. Since the economic reform started in 1979, instead of dictatorship from the bureau, SMEF has been involved in the 5-year long range plan even though SMEF for most of the time had to take the directives from and give in their negotiations to the authority.

Since the promulgation of the "SOE Operation Mechanism Transformation Regulations" by the People's Congress in July 1992, the Shanghai Metallurgy Bureau has almost delegated all the management autonomy to its enterprises. The short-term planning and operation like purchasing, production and sales autonomy have been fully delegated to SMEF. But the Bureau still oversees the long term development and projects recommended by SMEF and also appoint the top management of SMEF. The investment autonomy such as raising capital for project investment has to be discussed with the Bureau even though the interference is minimal at present. The Bureau is planning to reorganise into a Corporation to provide research, development, design and consultation services to its enterprises only.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

During the organisation restructuing in 1992, SMEF consolidated 26 administrative departments into 1 Enterprise Management Office and 7 Administrative Divisions representing a 60% reduction in management units. The management staff was reduced by 33% from 434 down to 291 in the headquarters. This organisational reform has redefined the authority and responsibility of every individual unit and staff. On one hand, it has released more time for the top management to investigate and solve the critical operational problems and develop long term strategic plans. the other hand, it has increased the responsiveness, initiation, motivation and creativeness of the middle and lower management staff to improve their effectiveness and efficiency.

Under the General Factory Manager, the enterprise management office and 7 administrative divisions are the middle level of management which functions are servicing, coordination, planning and control. The new organisation structure is listed below :

- 7 Divisions (each has a Division Manager)
  - 1.1 Production Division (supervising the 12 Production Factories as shown in 2 below)
  - Sales & Marketing Division 1.2
  - 1.3 Technical & Quality Management Division
  - Accounting & Finance Division 1.4
  - Manpower & Personnel Division 1.5
  - General Affairs Division 1.6
  - 1.7 Enterprise Development Division
- 12 Production Factories\* (each has a Factory Manager) 2.
  - Steel Casting & Forging Factory (Note 1)
  - (Note 1) 2.2 Iron Casting & Forging Factory
  - (Note 1) No.1 Rolling Steel Factory 2.3
  - Metallurgical Framework Factory (Note 2)
  - No.1 Metallurgical Equipment Factory (Note 3) 2.5
  - No.2 Metallurgical Equipment Factory (Note 3) 2.6

  - No.3 Metallurgical Equipment Factory (Note 3) 2.7
  - (Note 4) Special Transformer Factory 2.8
  - (Note 4) Electrical Appliance Factory
  - (Note 4) 2.10 Mechanical Appliance Factory
  - 2.11 Wooden Mould Factory (Note 5)
  - 2.12 Electricity, Water & Gas Supplies Factory (Note 6)
- 3. 12 Tertiary Enterprises\* (each has a Unit Manager under the direct supervision of the General Factory Manager)
  - Metallurgical Products Sales Company 3.1
  - 3.2 Import & Export Sales Company
  - Material Supplies Company
  - 3.4 Transportation Service Company
  - 3.5 Food & Beverage Company
  - Asia Trading Company 3.6
  - Taiwan Steel & Metallurgy Limited Company

- 3.8 Asian Metallurgical Technical Equipment Company
- 3.9 Research & Development Centre
- 3.10 Metallurgical Equipment Inspection Centre
- 3.11 Measurement & Precision Inspection Centre
- 3.12 Education & Training Centre
- \* All the production factories and tertiary enterprises are treated as profit centres measured mainly by internal profits. Most of them have signed Internal Responsibility Contracts (IRC) with the General Factory Manager either on an annual basis or on a single project or job basis. For the details, please refer to section 5.6 below.

Notes: (the transfer price issues are discussed in section 5.7)

- (1) The majority products of these 3 production factories are transferred to the framework factories, equipment factories, transformer factory and appliance factories as input materials.
- (2) Most of the output of metallurgical framework factory will be transferred to the equipment factories, transformer factory and appliance factories as input components.
- (3) The 3 metallurgical equipment factories are manufacturing stand-alone products which are tailor-made to customer's specifications.
- (4) The transformer factory and appliance factories are manufacturing various types and models of products in batch and selling to the end-users directly or via the tertiary enterprises.
- (5) The wooden mould factory are producing moulds to all other production factories according to specifications.
- (6) The supplies factory is providing electricity, water and gas to all the other production factories, tertiary enterprises and headquarters.

SMEF had a total of 5,000 working employees, in which 3,000 are production workers, and 2,000 retired employees at the end of 1994. It is classified as a "large-sized SOE" in China. About 500 of the working employees are involved in 12 "tertiary enterprises" (service enterprise) as listed above. On the other hand, another 500 redundant employees have stopped their jobs or posts and received only basic wages and welfare. All the employees have signed "employment contracts" since 1993 with duration from one year to no limit leaving an optional right to the employees.

.

### Section 3 : Financial Indicators

Total assets RMB 200M (1994)@RMB 250M (1992)Turnover (net of VAT) RMB 360M (1993)RMB 275M (1994)@@

RMB 400M (1995 forecast)

RMB Income before tax OM (1992)

> RMB 5.2M (1993) - 1.4% of sales\* RMB-13.72M(1994) - loss making\*

RMB (1995 forecast) OM

Income tax rate 55% (before 1994)# 33% (from 1994) Bank loan

RMB 140M (1994)

RMB 200M (1995 forecast) (1994 ending) Doubtful debts RMB 8.5M

[without bad debt provision]

Accounts payable RMB 7.5M (1994 ending) :

The total assets value was increased by 21.4% after a

revaluation was performed by the government in 1993. @@ The 24% drop of turnover in 1994 was due to the relocation of a few production lines to the new plant in Wangdu and the market demand.

\* The low profit margin or loss making was mainly because of open and keen competition under the market economy instead of the guaranteed production and sales budgets as assigned by the government before 1992, and also the purchased prices of raw materials like iron and steel (over 52% of turnover) which prices were fluctuating tremendously since 1993 due to significant import from other countries. In addition, selling prices had to be reduced in order to bid the contracts. Furthermore, the following few expenditures could indicate the heavy burden of fixed overheads in 1994 :

Payroll (wages, salaries, bonus & allowances) National contribution (pension, medical &	RMB50M
unemployment allowances)	12M
Other benefits in kind	8M
Electricity	30M
Depreciation	15M
Bank & loan interests	15M
Other management expeneses	15M
Total overheads (52.75% of turnover)	145M
Input materials cost (52.35% of turnover)	144M
Total cost of sales	289M
Actual sales/turnover	275M
Actual loss	14M

In view of the significant loss making in 1994, the local government returned (or subsidised) RMB9.9M of VAT and refunded RMB3.9M of electricity expenses to SMEF. As a result, SMEF actually had a cash profit of RMB80,000 (i.e. RMB9.9M + RMB3.9M - RMB13.72M) and paid a profit tax of RMB26,400 (33% of RMB80,000). It is expected that without such tax and expense concessions, the profit and loss account will be breakeven in 1995.

# Due to the poor financial performance since 1991, both net value added tax (about 6% of turnover) and income tax were exempted in 1991, 1992 and 1993 but value added tax was resumed in 1994.

The financial performance of all the enterprises under the Shanghai Metallurgical Bureau in 1994 was in downturn achieving a total valued added tax of RMB140M and profit before tax of RMB100M. Over 60% of the enterprises incurred losses including SMEF whose sales/production ratio was 90% in 1994 which means 10% of the finished products were still in stock. Apart from the inflation factor, new accounting and taxation systems were other two attributable reasons.

In summary, the critical factors affecting adversely the financial performance of SMEF in the past few years are :

- (1) lack of capital to rennovate the production facilities and invest into new projects to modify the product mix according to the market demands and improve the product quality in order to compete nationally and internationally;
- (2) insufficient market information for product mix and sales forecasts;
- (3) increase in expenses due to high inflation but unable to increase the product selling prices in parallel due to competition and pricing guidance from the bureau;
- (4) macro-economic control measures controlled by the government and inadequate assistance to the inefficient enterprises;
- (5) quality of internal management and control in the enterprises due to insufficient education and training; and
- (6) heavy social responsibilities and financial burden to the enterprises but could not lay-off the redundant employees due to insufficient employment benefits (i.e. unemployment, medical, retirement etc.) offered by the government.

### Section 4: Economic Responsibility Contract System (ERCS)

The Shanghai Metallurgical Equipment General Factory (SMEF) entered into the first Economic Responsibility Contract with the Shanghai Metallurgy Bureau and the Shanghai Finance Bureau (representing the Shanghai municipal government) in 1988.

This first ERC had taken, the following considerations into account:

#### (1) Format

The form of ERC taken was "Target Profit Underwritten". The major reason for adopting this basis was because SMEF was a low-profit making state-owned enterprise and required over RMB90 million of capital for the next five years (1988-1992) investment in production facilities and equipment including RMB56 million for relocating a few production factories from the East Plant to the New Plant in Wangdu Suburb of Jiading (southwest of Municipal Shanghai). It was expected high borrowings and repayments would be incurred in this period.

#### (2) Duration

The duration of the first ERC would be 5 years as from 1988 to 1992.

# (3) Target Base

The first year (i.e. 1988) profit target base was determined at RMB7.72 million after considering the profits achieved by the Eastern and Western Plants in 1987 as follows:

Eastern Plant 1987 actual profit = RMB10.20 million Western Plant 1987 actual profit = RMB 2.01 million \_\_\_\_\_\_ Enterprise 1987 actual profit = RMB12.21 million Less: Prior-year adjustment due to production RMB 0.82 million cost undermined Bank-loan repayment deductable from profit before handover RMB 3.67 million \_\_\_\_\_\_ RMB 7.72 million Profit target base in 1988 

Because of profit downturn since 1991, SMEF was exempted in handing over any profit or tax to the municipal government in 1991, 1992 and 1993. The second (1993-1997) ERC's profit target is zero for the first 3 years and then subject to review for the latter 2 years. Although no profit or income tax would be levied, however, the net value-added tax (6% of turnover) had to be paid since 1994. SMEF is still negotiating with the government to refund and exempt their VAT until 1996.

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# Section 5 : Planning System,

#### 5.1 Organisation Structure

The organisation structure of Shanghai Metallurgical Equipment General Factory (SMEF) was significantly restructured in 1993 in response to the "Operation Mechanism Transformation" promulgated by the government in order to streamline the operation efficiency and reduce the redundant employees. All the production factories and tertiary enterprises are treated as profit centres and measured mainly by internal profits generated. Whereas the 7 divisions in the headquarters are expense centres and their expenses are treated as management expenses and write off to the profit and loss of current period according to the "Accounting Standards for Enterprises" implemented by SMEF in early 1993.

Since 1992, SMEF has been decentralizing more planning responsibility to each division, production factory and tertiary enterprise such as initiating the annual plan and the internal responsibility contract. The production and cost control responsibility primarily lies with the factory and unit manager but the top management keep a surveillance quantity and quality control on each production factory through monthly or weekly report.

The selection and appointment of the top management (i.e. general factory manager and party leader) are still decided by the Shanghai Metallurgy Bureau and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory general manager. If an outstanding or above target performance has been achieved, the factory general manager will be awarded a predetermined lump sum bonus at the year end (see section 4.5 above).

Since 1992, the factory general manager has the autonomy to appoint the senior staff such as the division managers, production factory managers and tertiary enterprise managers. Any major changes of the organisation structure in each division, factory and enterprise should be initiated by the manager and approved by the factory general manager. However, more autonomy of internal management and operation has been delegated to the division, factory and enterprise managers. And in turn, the unit managers involved their workshop managers and department heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, SMEF has a decentralized structure in which the individual division, factory and enterprise managers directly to the factory general manager, and they play a linking and control role between the workshops or departments and the factory general manager.

Observation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

# 5.2 Review Process

Since 1992, Shanghai Metallurgical Equipment General Factory (SMEF) has implemented a more formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). In October, the factory general manager evaluates the internal and external environmental factors with his division, factory and enterprise managers in order to determine some major targets such as sales, production and profit targets. Then these targets will be used as guidelines for the individual division, factory and enterprise managers to formulate their own annual plans and IRCs. At the end of October, they have to submit their annual plans to the Enterprise Management Office for preliminary review and consolidation before putting forward to the general manager for perusal. The Accounting & Finance Division will also compile an annual financing plan based on the individual annual plans in order to match with the overall profit target.

In November, the general manager calls upon all the unit managers to discuss with their budget submissions and if there is any gap, then the general manager will negotiate with the unit managers or ask them to revise their plans until compromise can be reached in the subsequent meetings. Much emphasis is placed on the internal profit targets which cater for both revenue generating and cost saving without any trade-off with product quality or failure of customer's specification. These are the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts. This iterative exercise carries on until all the annual plans and contracts are mutually agreed and approved in January.

The approved annual plans are broken down into quarterly and monthly plans to cater for production cycle, delivery dates, demand, holiday and other factors. All the individual annual plans will be consolidated into a booklet and distribtuted to all senior staff. The factory general manager has to report the consolidated annual plan to the AGM (all the employees can attain) held in February. The annual plans are formally reviewed in every April and September and adjustments on significant deviations are allowed to make after detail discussion and approval from top management.

Before 1992, the division, 'factory and enterprise managers did not participate so intensively in this annual planning review process and the government and the bureau gave directions to the general manager on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, etc. Since 1992, under the legislative changes and market economy promotion, the government and bureau have almost delegated full automomy to SMEF in formulating its strategic directions. As a result, all the division, factory and enterprise managers are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long-term plan.

Therefore, the factory general manager has less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

The production and marketing features of the Shanghai Metallurgical Equipment General Factory (SMEF) are as follow:

- (1) unique, small batch, non-standard, tailor-made products according to customer's specification without much general brand-names;
- (2) each production factory is close-ended plant manufacturing its own products and selling to its own external markets or ther internal production factories; and
- (3) the traditional end-users of the products are metallurgical industry, mechanical equipment industry and electrical equipment industry.

Under the old centralised economic planning system by the government and in view of the above production and marketing features, SMEF could hardly well develop and expand its operation and management in order to follow suit the current economic reforms and market economy changes. To break through the long existing constraints, SMEF promulgated the following strategic themes and thrusts since 1993.

- (1) Improve the production efficiency and capacity in order to maintain a higher output growth.
- (2) Enhance the economic efficiency and development potential.

- (3) Increase employee's remuneration and their unity.
- (4) Delegate more autonomy to middle and lower management.
- (5) Convert the production cost centres into profit centres and deal with the markets directly.
- (6) Reorganise and convert some adminstrative cost centres into independent profit centres (i.e. tertiary enterprises) to provide servies to other production and administration units on a self-financing basis.
- (7) Establish "Internal Banking" system to determine the internal transfer prices and to handle the transactions between the production factories, administrative divisions and tertiary enterprises.
- (8) Establish arms-length "Internal Marketing" system by entering into internal contracts when production cooperation and service are required among the production factories, administrative divisions and tertiary enterprises.
- (9) Penetrate existing markets and develop new markets.
- (10) Enhance product and production quality.
- (11) Reduce resources (i.e. materials, energy, power, etc.) consumption.
- (12) Improve customer before- and after-sales services.
- (13) Shorten production cycles.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in SMEF still from time to time make suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. Despite this fact, the top management has given more freedom to the unit mangers to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets. The top management follow the financial indicators and performance closely on monthly and quarterly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.4 Long-Term Plans (Resource Allocation)

Since the early 1950's, Shanghai Metallurgical Equipment General Factory (SMEF) had followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system. The commencement of the economic reforms in 1979 started to allowed SMEF to participate in the 5-year's planning with the Shanghai Metallurgy Bureau and the Shanghai Municipal Government but specific directives and suggestions were always coming from the top by using the term "macroeconomics control and adjustment" as an excuse.

The changing role of municipal government and bureau since 1990's has encouraged SMEF, for the first time, to formulate their own long term strategic plan (1991-1995). However, many internal factors and uncertainties have affected the validity and reliability of this long term plan which has been subject to review and changes every year. During the last year (1995) of the 5-year long term plan, the factory general manager initiates the next 5-year plan before discussions with the unit managers started. After lengthy discussion, the next 5-year plan will be emerged and submitted to the bureau for review or any comments. The 5-year plan will be reviewed every year and adjustments will be made through the annual planning exercise.

The followings are the major long term plans or projects laid down for the nineth 5-year plan (1996-2000) although a few of them have been started during 1991-1995.

#### (a) Facility Relocation

Affected by the building of Yangpu Bridge, the longest bridge in China, which one end (entrance) is adjacent to SMEF's Eastern Plant and the environmental protection scheme implemented by the municipal government, since 1994, the iron and steel casting and forging production lines of SMEF's East Plant have been relocating phase by phase to a new factory situated in Wangdu of Jiading at the southwest suburb of Shanghai. This new production site in Wangdu has a land area of over 170,000 square metres and requires a total capital expenditures of RMB150 millions financed by the government (RMB100M) and the bank loan (RMB50M). The other equipment and appliance production lines will be relocated to the Eastern Plant in Putao District before 2000. Part of the site of old eastern plant will construct a high commercial buidling to house the headquarters (including the 7 divisions and the 12 tertiary enterprises) and rent out some floors to generate recurring incomes. The rest of the vacated space will be sold (right of land-use only) to obtain RMB300M extraordinary incomes repay the bank loan of RMB200M and leave RMB100M for constructing the headquarters building.

#### (b) Joint Ventrues

In order to explore the overseas market, one of SMEF's production factories established a joint-venture with a Taiwanese Corporation in casting and forging iron and steel products. In 1992, this joint-venture attained an output of 900 tonnes at a cost value of RMB4.5 million and had an export income of US\$700,000. In the same year, SMEF entered into another joint-venture with a Japanese Corporation in producing iron and steel products for the construction industry. In 1993, this Sino-Janpanese corporation achieved an output of 3,000 tonnes at a cost value of RMB20 million and generated an export sales of US\$1.4 million.

Other than the above two joint-ventures, SMEF has entered into other cooperative agreements with foreign counterparts to diversify the product mix, enhance the product quality to international standards and increase the export business to the USA, Japan, Australia, Italy, Middle-East, Hong Kong, Taiwan etc.

# (c) Product Development

Significant changes in the infrastructure have been occured in recent years under the transition from planned economy to market ecconomy. In turn, similar cha.ges have been tNEertake. in the metallurgical industries. SMEF has envisaged that traditional and standard products for existing metallurgical industries have been declined. On the other hand, high technology, high quality, heavy non-standard and customer-order sales are on increase coming from iron and steel, mechanical equipment and electrical equipment industries. In order to cope with this market trend, SMEF has been exploring into this new product mix by using its own R&D and cooperation with foreign counterparts. Furthermore, SMEF is promulgating its "all-through services" of equipment sales by offering research, design, manufacturing, assembly, packing, delivery, installation, testing, repair and maintenance before and after sales services.

#### (d) Competitive Edge

SMEF has been facing keen competition from many other manufacturers of similar kinds of products in other big cities like Shanyang, Beijing, Xian, Hangzhou, Suzhou, Wanzhou whose facilities and equipment are relatively new. To maintain at least the market share and competitive edge against these counterparts, SMEF has to invest millions of Reminbi in production facility rennovation in order to manufacture higher quality, tailor-made and cost-effective products.

# (e) Market Development

To penetrate into the domestic market and capture higher market share, the sales personnel has been seggregated into geographic teams with different marketing strategies and tatics such as holding regular meetings with and paying visits to the existing and new customers. Discounts and other benefits in kind may be given to the customers in order to gain the orders. In addition to the advertising campaign, SMEF has participated in local and foreign (USA and Thailand) trade fair. The IRC signed with the Sales Department links up the remuneration directly with the sales volume and the accounts receivable (or cash collected) in order to motivate the sales and marketing effort.

#### (f) Overseas Markets

Less than 5% of SMEF's products are directly exported and less than US\$5 millions foreign exchange has been achieved which are unable to be qualified as a free import and export enterprise. SMEF is working closely with the bureau to negotiate with the government in obtaining the import and export right (also the foreign exchange usage right) so that they can explore the overseas markets such as Southeast Asian, South American and Eastern European Countries.

### (g) Sources of Capital

Due to capital intensive nature and long production cycle (6 to 18 months), SMEF had an outstanding bank loan of over RMB140M (for both fixed assets and current assets financing purposes) at the end of 1994 and paid over RMB15M of bank interest in the same year. In order to finance the above long term projects, at least an additional RMB100M is required in the next few years. One way to capture additional capital is getting loans from foreign banks through the joint-venture arrangement or cooperation. source of captial is to transform SMEF into a shareholding enterprise and issue shares to its employees, other enterprises But the latter avenue involves a lot of and individuals. political and economic problems related to the government, ministry and bureau. Another source of capital is to transfer the land-use right of the vacated land in the Eastern Plant after relocation (completed before 2000) to other enterprises and generate extraordinary incomes.

#### (h) Computerization

At present, stand-alone personal computers are employed by individual divisions, production factories and tertiary enterprises without any connections. For example, the accounting and finance division has been using a personal computer for wages, financial reporting and cost analysis only without any integration. There is a wrong conception that some SMEF's management believe computerization will lead to more redundant staff. But the top management have realised the importance of untilising computers. Therefore, SMEF is planning to purchase a mini-computer and establish a computer centre in 1995. At the same time, training and education will be provided to different levels of management staff so that the ultimate aim of setting up a LANs system can be materialised in 2000.

The current 5-year plan (1991-1995) was compiled after long discussion between the Bureau and the SMEF's top management. Although the division, factory and enterprises managers have been involved in this planning process, they were playing a consultation role only.

As far as the next 5-year plan (1996-2000) is concerned, the bureau has almost fully delegated the planning autonomy to SMEF for them to initiate the blueprint on their own. However, the division, factory and enterprise managers are mainly concerned with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the factory manager at least on a monthly basis. Therefore, the long term planning and review process are using a top-down approach in the belief that the factory general manager has better experience and knowledge of the external environment and even the internal operations of the factories and enterprises.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Bureau has devolved its central planning role to SMEF since 1992. Now, the top management of SMEF is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short term planning policy adopted by Shanghai Metallurgical Equipment General Factory (SMEF) is "production determined by sales" and "sales determined by targeted profit before income tax" which means profit before income tax growth (either positive or zero) as agreed with the Shanghai Metallurgy Bureau is the initial driving force of all the activities. Reference should also be made to the 5-year plan especially to estimate what the sales order potential will be for the new product and market situation in the next year. As from October 1992, SMEF has employed the annual planning or budgeting process as described in section 5.2 (Review Process) above.

Since October 1992, the production factory managers have been involved intensively in this planning process, in particular determining the production and sales quantity, mix, cost and internal profit, which they believe to be important in setting and negotiating the internal responsibility contracts with the factory general manager. The other division managers and tertiary enterprise managers have also participated carefully in devising their income and expense budgets which they would be measured against as performance yardsticks.

In view of the rapid changing market conditions, the annual planning review period has been shortened from quarterly to monthly although the formal performance measurement and group bonus calculation are done within one week after the end of each quarter. The factory general manager and all the unit managers hold a formal meeting at the beginning of each month to review the financial performance against the annual plans. Amendments or revisions are made once or twice a year according to the significance of the factors affecting the annual plan.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given SMEF more freedom to plan ahead. The government representatives and the bureau have almost completely devolved the short term planning autonomy to SMEF, except to agree on the minimum profit targets as agreed at the beginning of every year. The top management have involved the middle management or even their subordinates (lower management) in the annual planning process which on one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the factory managers and other unit managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

#### 5.6 Internal Responsibility Contracts (IRC)

Shanghai Metallurgical Equipment General Factory (SMEF) established its IRC system in 1989 in order to motivate the efficiency, profitability and cost reduction in the production workshops.

The IRC of one of the production factories is described below:

Department : No.1 Metallurgical Equipment Factory
Duration : 1 January to 31 December 1994

Guidelines

In accordance with the guidelines promulgated by the 14th People's Congress held in October 1992 in relation to the further reforms in state-owned enterprises, SMEF has to enhance the initiation and motivation of all its employees, improve the internal management and increase the productivity and economic efficiency. In order to realise these objectives, the following new version/format of internal responsibility contract is signed between the general manager and the factory manager.

- Responsibility Targets : (A)
- (A1) Financial Target (Per Month)
  - Internal Profit = Sales Cost of Sales Management Expenses - National Contribution - Interest on Fixed Capital - Interest on Current Capital - Administration Charges - Welfare Fund Deficit +/- Internal Bank Interest +/- Other Incomes/Expenses
  - Management Expenses = allowed for the production factory own management expenses = RMB600 x beginning year headcount
  - National Contribution = 25.5% of gross wages handover to the the government for pension
  - Interst on Fixed Capital = fixed assets (book value) acquired before 1993 x 2.5% + fixed assets (book value) acquired after 1993 x 1.0%
  - Interest on Current Capital = average current assets (monthly opening + monthly closing)  $/2 \times 1$ %
  - Administration Charges = headquarters allocation = RMB50 x beginning year headcount

Welfare Fund Deficit = actual welfare expenses (i.e.medical, nursary, housing etc.) - standard welfare provision (i.e. 14% of gross wages)

Internal Bank Interest = interest credited to or charged on monthly ending balance in the internal bank account

# (A2) Production Targets

- A2.1 Production Quantity
- Production Value at Cost A2.2
- Equivalent Labour Hours of Finished Products Degree of Completion of Contract A2.3
- A2.4
- A2.5 Product Quality
- A2.6 Others

#### (A3) Management Targets

- Quality Management A3.1
- Safety Management A3.2
- A3.3 Technical Management
- A3.4 Material Consumption Management
- A3.5 Operational Management

#### (B) Duties & Rights :

- (B1) According to the terms and conditions of this contract and the relevant rules and policies of the enterprise, the contractor (i.e. general factory manager) has the right to supervise, inspect and evaluate the performance of the contractee (i.e. production factory).
- (B2) According to the terms and conditions of this contract, the contractor has the duties to maintain the rights of the contractee and assist the contractee to resolve operational problems encountered.
- (B3) The contractee must accomplish the financial targets as agreed in this contract.
- (B4) The contractee should well untilize the autonomy as authorised by this contract and the headquarters to enhance the internal management, improve the operation and explore the existing and potential markets.
- The contractee must observe the government's laws and (B5) regulations, enterprise's management systems and standards in order to self-regulate seriously.
- (C) Incentive Scheme :

(C1) Upon completion of all targets, gross amount of -

Basic wages = RMBXXXX
In-post wages = RMBXXXX
Bonuses = RMBXXXX

Total wages & bonuses = RMBXXXX

- (C2) In general, any RMB1 internal profit exceeds the target, an additional RMB1 wages or bonus can be awarded (i.e. 1 : 1 ratio), and any RMB1 falls below the target loss, instead of profit target, an additional RMB0.5 wages or bonus can be awarded (i.e. 1 : 0.5 ratio).
- (C3) If actual performance exceeds targets, the contractee will be awarded an extra bonus.
- (C4) If any one of the targets is failed, 2% 5% of the total wages & bonuses will be deducted.
- (C5) If the financial target (i.e. internal profit) is failed, the shortfall should be made up from the total wages & bonuses. In addition, administrative penalty may be taken.
- (D) Evaluation:
- (D1) Financial and production targets are formally evaluated quarterly and finalised at the year end.
- (D2) Except complying with the "in-post wages policy" announced by the personnel department on 2 December 1992, the contractee has the autonmy to manage its own manpower and distribution policies, but any increase or decrease of headcounts above or below the allowed establishment will not affect the total wages and bonuses as targeted in this contract.
- (D3) The contractee should reserve a portion of the awarded wages and bonuses in order to make up the months of poor performance.
- (E) Others:
- (E1) Both parties should not changed the terms and conditions of this contract without proper discussion and agreement.
- (E2) This contract becomes effective after sign, seal and delivery.
- (E3) Both parties should hold a copy of this contract respectively.

The IRC of one of the Sale's & Marketing Division is described below :

Department : Sales & Marketing Division : 1 January to 31 December 1994 Duration

Guidelines

In accordance with the guidelines promulgated by the 14th People's Congress held in October 1992 in relation to the further reforms in state-owned enterprises, SMEF has to enhance the initiation and motivation of all its employees, further develop the national and overseas markets, improve the internal management and increase the productivity and economic efficiency. In order to realise these objectives and clearly define the responsibilities and benefits, the following internal responsibility contract is signed between the general manager and the sales and marketing manager.

#### Responsibility Targets: (A)

A1.2 Type 2 Equipment Sales

# (A1) Financial Targets

	Description	Target (\$000)	Allowed Expenses	Over/Below Target Allowed Expenses
A1.1	Type 1 Equipment Order received Internal profit Cash collected	Sales 20,000 400 20,000	1.2% 5.0% 1.0%	1.5%* 8.0% 1.2%

- \* (1) If order received valued 22,000,000, then allowed expenses =  $20,000,000 \times 1.2\% + 2,000,000 \times 1.5\%$ = 270,000
  - (2) If order received valued 18,000,000, then allowed expenses =  $20,000,000 \times 1.2\% - 2,000,000 \times 1.5\%$ = 210,000

	Order received	20,000	1.3%	1.5%
	Internal profit	1,000	3.0%	5.0%
	Cash collected	20,000	1.0%	1.2%
A1.3	Type 3 Equipment	Sales		
	Order received	20,000	0.8%	1.2%
	Internal profit	2,000	2.0%	5.0%
	Cash collected	20,000	0.8%	1.0%

	Description	(\$)	000)	Allowed Expenses	
A1.4	Type 4 Equipment Sa Order received Internal profit Cash collected	les 20,000		0.8% 2.0% 0.8%	
A1.5	Type 1 Iron & Steel Order received Selling price	8,500 toni	ne t	RMB25/t RMB10/t	
	<pre># (1) If order rece expenses = 8, (2) If order rece expenses = 8,</pre>	$500 \times 25 + ived is 8,0$	500 x 000 to	35 = 230, onne, then	.000 allowed
A1.6	Type 2 Iron & Steel Order received		nne	RMB1/t	
A1.7	Cash received for I: Type 1 & Type 2				0.12%
A1.8	Other Sales Internal profit	1,000		15%	20%
A1.9	Overall Performance Sales delivered Internal profit Cash received	350,000		0.15% 3.00% 0.15%	1.0%
(A2)	Guaranteed Targets				
A2.2	Contract completion Quality control Serious accident		100% deter 0	rmined sepa	arately
(A3)	Management Targets	(according	to se	eparate red	gulations)

- (A3) Management Targets (according to separate regulations)

  - A3.1 Quality Management
    A3.2 Safety Management
    A3.3 Technical Management
    A3.4 Operational Management

- (B) Duties & Rights:
- (B1) According to the terms and conditions of this contract and the relevant rules and policies of the enterprise, the contractor (i.e. general factory manager) has the right to supervise, inspect and evaluate the performance of the contractee (i.e. sales & marketing division).
- (B2) According to the terms and conditions of this contract, the contractor has the duties to maintain the rights of the contractee and assist the contractee to resolve the operational problems encountered.
- (B3) The contractee must accomplish the financial targets as agreed in this contract.
- (B4) The contractee should well untilize the autonomy as authorised by this contract and the headquarters to enhance the internal management, improve the operation and explore the existing and potential markets.
- (B5) The contractee must observe the government's laws and regulations, enterprise's management systems and standards in order to self-regulate seriously.
- (C) Incentive Scheme :
- (C1) Upon completion of all targets, 16% of the allowed expenses will be treated as the total allowed salaries for the year while the other 84% are classified as selling and travelling expenses which should be claimed on actual basis according to enterprise regulations.
- (C2) Interest based on bank lending rate will be calculated and charged for accounts receivable overdue for one month.
- (C3) All the targets in this contract will be assessed on a quarterly basis and finalised at the year end.
- (C4) The terms and conditions of this contract are assessed on the management staff of the sales & marketing division.
- (C3) The contractee should reserve a portion of the awarded wages and bonuses in order to make up the months of poor performance.
- (D) Others:
- (D1) Both parties should not change the terms and conditions of this contract without proper discussion and agreement.

- (D2) This contract becomes effective after sign, seal and delivery.
- (D3) Both parties should hold a copy of this contract respectively.

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[SMEF is planning to replace the "internal profit" (financial target) by the "return on investment" in 1996 which means the profit centres will be converted into investment centre.]

It takes a few months for the general manager and division and factory managers to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval by the annual general meeting in next February. This long process indicates that the setting of IRC is not a top-down approach and the division and factory managers are very eager on this issue upon which they will be measured against and rewarded thereupon. The IRCs are subject to at least quarterly review but adjustments can only be made if some factors affecting the achievement of targets significantly.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the factory and tertiary enterprise managers in initiating and negotiating their own IRCs, and also involved the accounting and finance personnel intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Management of interdependencies means the contral influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the factories, and exploitation of a shared resource are examples that happen in Shanghai Metallurgical Equipment General Factory (SMEF) that need headquarters' intervention.

The interactions among the factories, divisions and tertiary enterprises are shown in the table below and their transfer pricing issues are described as follow.

```
Transfer 1 : (Note 1)
       Steel Casting & Forging Factory } iron & steel products
Iron Casting & Forging Factory } supply to (4), (5), (6),
No.1 Rolling Steel Factory } (7), (8), (9) & (10)
(3)
Transfer 2 : (Note 2)
      Metallurgical Framework Factory ) supply to (5) - (10) below
Transfer 3 : (Note 3)
       No.1 Metallurgical Equipment Factory } external sales
No.2 Metallurgical Equipment Factory } directly or via
No.3 Metallurgical Equipment Factory } tertiary enterprises
(6)
Transfer 4 : (Note 4)

    (8) Special Transformer Factory } same as (5), (6), (7) selling
    (9) Electrical Appliance Factory } in batch directly or via the
    (10) Mechanical Appliance Factory } tertiary enterprises

Transfer 5 : (Note 5)
(11) Wooden Mould Factory } supply moulds for (1) - (10) above
Transfer 6 : (Note 6)
(12) Electricity, Water, Gas Supplies } supply to all the above
       Factory
                                                           } factories and (13) & (14)
Transfer 7: (Note 7)
(13) 12 Tertiary Enterprises (see section 2)
(14) 7 Administrative Division (see section 2)
```

# Notes:

(1) The processed iron and steel products of these 3 factories can either be transferred to the other factories for further processing or sell to the outside customers as intermediate products although there is an obligation and priority as suggested by the production planning division to satisfy the internal consumptions first.

The "market price" is used as the major reference for the supplying and receiving factories to determine the appropriate transfer prices which are usually predetermined in the "internal contracts" agreed on an annual basis or ad hoc basis. Of course, a certain percentage of discount in terms of administration and selling cost savings would be allowed for in order to motivate the users to buy internally. The unsettled arguements in transfer price, quantity and timing will be arbitrated by the headquarters i.e. production planning division or the general manager.

- (2) The raw materials for manufacturing the frameworks come from the internal produced fron and steel, and also the external suppliers. The finished frameworks will be mainly transferred to the equipment and appliance manufacturing factories as components. Some frameworks are tailor-made for the external customers as well. The determination of transfer prices and quantities are the same as described in note (1) above.
- (3) The 3 metallurgical equipment factories are manufacturing tailor-made whole sets of equipment according to customer's specifications. They can either sell directly or through the sales department (i.e. contract value over RMB10 million) or trading tertiary enterprises as listed in section 2 above.
- (4) The transformers and appliances are produced in batches and sell directly to end-users or via the trading tertiary enterprises as described in note (3) above.
- (5) The majority of moulds produced are supplied to the other production factories according to their designs and specifications. Occassionally, sub-contract works are obtained from outside customers. The transfer prices may either be determined by using standard cost plus profit margin or referring to market price if there are competable or similar products available.
- (6) Electricity, water and gas are supplied to all the production factories, tertiary enterprises and administrative divisions as arms-length transactions. Standard cost plus profit margin is employed to predetermine the transfer prices by the headquarters at the beginning of the year and changes may be made if inflation during the year is significant.
- (7) The 12 tertiary enterprises are treated as profit centres as the 12 production factories and measured by "internal profit" as specified in the IRCs. The products supplied or services rendered involve the transfer prices which are predetermined in the "internal contracts" as agreed or compromised at the outset. Sometimes, arbitration from the headquarters is required.
- (8) Although the 12 administrative divisions (headquarters) are treated as expense centres, however, they are considering to convert themselves into semi-profit centres and charge their services provided to the other internal units through the "internal contract" mechanism.

The above internal product and service transfers system has been implemented since 1993 bearing the following objectives in mind:

- (1) to allow more autonomy to all the factories, enterprises and divisions (business units) to negotiate and compromise among themselves and minimize the interference from the top mangement or headquarters as far as possible;
- (2) to convert most of the business units into profit centres to motivate their income generating and cost control conscience so that economic efficiency can be enhanced for the enterprise as a whole; and
- (3) to induce the business units to provide quality products or services to both the internal and external end-users.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# Section 6 : Control System

#### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Shanghai Metallurgical Equipment General Factory (SMEF) has three distinct levels of management hierarchy:

- (1) Top Management (general manager, divisional managers, chief accountant and chief engineer)
- (2) Middle Management (factory managers and department heads)
- (3) Lower Management (foremen and supervisors)

The divisional and factory managers can decide on their own organisational structures, staffing and their roles and functions, and interactions between their sub-units (production lines or sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task which will be explained in the rewards and incentives section.

The major control mechanisms employed by the top management to control the performance of the factories and divisions are by using annual plans and IRCs. As described in section 5.6 above, the most important measurement criteria are internal profit and production efficiency and cost control set in the IRCs, although some other qualitative targets, such as quality and safety, are employed. However, these are subsidiary ones which have lower weightings in calculating the group wages and bonus.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of SMEF.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.2 Agreeing Objectives

Shanghai Metallurgical Equipment General Factory (SMEF) sets similar objectives for its production factories: factory managers must meet their agreed IRC targets for the year and expect improvement in performance year after year as emphasized by the corporation and bureau in terms of growth rates. The critical occasion, therefore, is the annual planning review.

In view of the market economy and macro-economic control policies promulgated by the government, and the keen competition within this industry, the production factories sometimes feel passive in setting their objectives or targets in the annual plans or IRCs because their activities are depending on the sales demands and the derived production mixes and volumes.

A high pressure to achieve the planned production quantity and efficiency is put on the factory managers at the quarterly or monthly review. They fully understand that their group wages and bonus are tied in with the annual plans or IRCs and it also depends on the overall performance of the enterprise as a whole. Apart from the production factories, the other divisions or tertiary enterprises may have ad hoc or project based IRCs in which they have agreed specific objectives or targets with the factory general manager. The promotion, salary and bonus of these functional staff are correlated with these quantitative and non-financial targets.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Shanghai Metallurgical Equipment General Factory (SMEF) regards that it is essential to catch variances from annual plan or IRC before they have gone too far. To this end the top management monitor each factory or department results on a monthly and quarterly basis. The quarterly reporting is the formal assessment of performance and determination of quarterly group bonus. The following is the second quarterly report of the Steel Casting & Forging Production Factory in 1994 (April to June):

- (A) Format (column numbers and descriptions, one line for each target):
- (1) Target description\* [max. 15 targets see (B) below]
- (2) Measurement unit
- (3) Annual target
- (4) Month 1 target
- (5) Month 2 target
- (6) Month 3 target
- (7) Quarterly target (4+5+6)

```
(8)
     Year-to-date target
(9) Month 1 actual
(10) Month 2 actual
(11) Month 3 actual
(12) Quarterly actual (9+10+11)
(13) Year-to-date actual
(14) Completion % (12/7*100%)
(15) Completed (tick if yes)
(16) Not-Completed (tick if no)
(17) Marks added (if completed) and deducted (if not-completed)
(18) Base marks
(19) Actual score# (17+18)
(20) Remarks
(B)
      Target Descriptions* (Re A1) Measurement Unit (Re A2)
(B1)
      Electro-furnace steel
                                              tonne
      Casting steel
(B2)
                                              tonne
      Rolling steel
(B3)
                                              tonne
                                              cost value in RMB
(B4)
      Output value
      General products completion rate percentage Special products completion rate percentage Extra products completion rate percentage
(B5)
(B6)
(B7)
      Inventory % output value
(B8)
                                             percentage
      Cost reduction rate
                                              percentage
(B10) Furnace material cost
                                              cost per tonne output
(B11) Electricity consumption
                                              KWH per tonne output
      (total allowed)
(B12) Electricity consumption
                                              KWH per tonne output
      (per actual output)
(B13) Metal consumption
                                             Kg per tonne output
(B14) Other material consumption (B15) Input/output ratio
                                              Kg per tonne output
                                              percentage
(C)
      Bonus Calculation :
(C1)
      Total marks scored# (sum of A19 column) = 142.91
(C2)
      Bonus per 100 marks per employee per month = RMB40
(C3)
      Budgeted headcount for the quarter
                                                       = 894
      Quality management score for the quarter
(C4)
                                                       = 0.936
      General management score for the quarter = 0.978
(C5)
      Total group bonus for the quarter = C1/100*3*C2*C3*C4*C5
(C6)
      = 142.91/100*3*40*894*0.936*0.978 = RMB140,345
      Security expenses contribution = RMB1 per employee
(C7)
      Environment expenses contribution = RMB1 per employee
(C8)
(C9)
      Civilisation & discipline penalties & other deduction
(C10)
      Net group bonus for the quarter = C6-C7-C8-C9
      = RMB140,345 - RMB1*894 - RMB1*894 - RMB500 = RMB138,057
```

The monthly report format is unique for each factory such as the above one for a production factory. The contents are mainly corresponding with the annual plan from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the targets. The qualitative targets are usually subjectively measured by the factory managers and enterprise management office and written in the monthly reports as well. Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the factory general manager for review.

For any serious adverse variances shown on any report, the factory general manager will contact with the respective divisional managers and factory managers to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the top management with the middle management, the factory general manager will put forward the monthly results for open discussion. The divisional and factory managers may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a factory manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results will be passed back to the personnel division for calculating the group wages and bonus of each factory or division for last month. Then the accounting division will process the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization has been recognised by the top management and some stand-alone personal computers have been purchased and used for inventory control, sales analysis, payroll, financial reporting and analysis. However, production planning and control have not been computerized because it is believed by doing so some redundant staff will be laid off. In 1995, SMEF will invest RMB1 million to set up a computer centre and instal a mini-computer trying to integrate all the sub-systems. However, the computing staff may not understand the operations and requirements of other workshops and department, and vice versa, the other personnel may not understand the functions and constraints of the computer. Therefore, SMEF is planning to undertake intensive training for both computing and management staff in order to enhance their cooperation and to implement a comprehensive MIS via the establishment of LANS.

Now, SMEF views the annual plan or IRC as a contract between the top management and the factory or division. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from plan.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# 6.4 Rewards and Incentives

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of redundant employees will cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives. Another way to reduce redundant employees is to enforce early retirement at the age of 45.

Since September 1993, SMEF has implemented this "Employment Contract System" and signed contracts with every individual employee. In addition, SMEF has signed "In-Post Contracts" with most of the employees on an annual basis. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive wages (according to grade in the pay-scale), allowances and bonus. Without such a contract, that employee is out of job but he or she is still an employee of SMEF and is allowed to received a basic monthly subsidy of about RMB300 or transfer to the tertiary enterprises their employees. At the end of 1994, SMEF had 500 employees who did not have the in-post contracts. Before entering into the in-post contract, each employee should be assessed through written examination, practical test or skill training. The new system has imposed pressure onto the employees who are motivated to work hard on the job and enhance their technical and academic skills through internal and external education and training. All in all, both the quality of the enterprise itself and the employees themselves would be improved.

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the SMEF is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. The average annual gross wages per employee was around RMB7,500 in 1993 and RMB10,000 in 1994.

Under the current high inflation rate (overall average 21.7% in China in 1994), SMEF is expected to increase the average annual gross wages to RMB12,500 in 1995. The total wages include basic wages, in-post wages, skill wages, bonus and allowances composed in the following ratios:

Basic wages	40% -	20%
In-post wages	30% -	40%
Bonus	20% -	25%
Allowances	10% -	15%

Since the beginning of 1993, SMEF has implemented the "more work more pay" policy in the Electrical Furnace Section of the Steel Casting & Forging Factory. The group bonus was directly related to the output quantity according to predetermined standards. This trial run was proved very sucessful in terms of workers' motivation, cooperation and ambition. Soon, many other production factories and departments followed and extended the same evaluation and remuneration policy. For those jobs or posts which wages or bonus cannot be measured by output or piece-rate, SMEF is planning to use a "point-system" in 1995. The performance of each employee is evaluated and a total point or score is awarded, then this total is multiplied by the unit wages per point as predetermined to derive the wages and bonus to be payable (the allowances are calculated seperately).

The wages includes the basic wages and the in-post wages where the former is almost fixed according to the grade, such as,

General manager	RMB240	per	month
Divisional manager	RMB220	per	month
Chief accountant	RMB200	per	month
Unit chief	RMB180		
Supervisor	RMB150	per	month
Worker/Clerk	RMB130	per	month

where the differences are small. The in-post wages depend on the technical skills required.

There are two portions for the "allowances". The first part is determined by the Labour Bureau of the Shanghai Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity. The second part is decided by the SMEF which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowances" is about RMB115 to RMB140 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the workshops, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the factory general manager and a production manager will decide what level of group bonus will be given to the department. Of course, it is up to the factory manager to award that lump sum of group bonus to his or her subordinates according to invidual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

Under the "Factory Manager Responsibility System", if there is an overall outstanding or above target performance, the Bureau will award a lump sum of "special bonus" to the factory general manager at the end of the year. But under no circumstances, the remuneration package of the geneeral manager can be greater than three times the total earnings of a department head (middle management). If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

In relation to the social welfare, since 1993, SMEF has to contribute 25.5% of the monthly gross payroll to the government for sharing the responsibilities of unemployment, retirement and medical allowances. In addition, SMEF has to provide about 14% of the monthly gross payroll for various employee's benefits such as building residential quarters. Furthermore, SMEF has to bear the pension and medical allowance for its 2,000 retired employees which is a rather heavy financial burden to the overhead expenditures.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, SMEF believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Metallurgical Equipment General Factory (SMEF) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	High Corporate	Medium/Low Corporate
Review Process*	High Corporate	Medium/Low Corporate
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High/Medium Corporate	Low Corporate
Internal Responsibility Contract	High Corporate	Medium Corporate
Management of Interdepen- dencies* (Transfer Pricing)	High Corporate	Medium Corporate
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

 $<sup>\</sup>star$  Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992]	
Low Corporate	(Strategic Control)	(Financial Control)	

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Metallurgical Equipment General Factory (SMEF) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

Revised: 19 March 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

: Professor Clive Emmanuel Supervisor

Student Name : Joseph Yau Shiu Wing (Hong Kong) : "Responsibility Accounting In China" Research Title

: Data Analysis 14 Report Title Report Date : 28 February 1995

Introduction: A total number of 22 State-owned Enterprises (SOE) have been visited during the period from September 1991 to December 1993 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

Name of SOE : Shanghai No.2 Cotton Mill (SCM2)

Staff Interviewed : Miss Zhou Wei Min

(No. of years in this enterprise: 15 years)

Dates of Visits Visit - 10 September 1993

Second Visit - 12 September 1994

Third Visit - 8 February 1995

# Section 1 : History & Background

Shanghai No.2 Cotton Mill (SCM2) was established in 1914 just three years after the Last Emperor, Pu Yi, stepped down from his throne. The two major categories of product are yarn and cloth of which the former products are the input materials for the latter products. The quality or grade of yarn is measured in terms of numbers of count which means the higher the count, the more refined the product. In 1994, the average count of all the yarn products manufactured in China was about 30, whereas SCM2's average count achieved 42 in 1993 already. For example, the monthly yarn production of No.3 Spinning Factory in 1994 was 300 tonnes in which over 70% of the produce is over 60 count. The highest count of yarn product achieved by SCM2 is 120.

Shanghai No.2 Cotton Mill (SCM2) is an ambitious and creative shareholding enterprise making significant progress since the economic reforms started in 1978. Under the economic reforms, open-door policies and operation mechanism transformation, SCM2 insists the strategic theme of "textile is the mainstream business and diversification is the breakthrough venture". SCM2's long-term visions are to maintain textile manufacturing as the core business, enhance the product quality and increase export as the driving force, develop tertiary enterprises as the diversification strategy, and establish advanced management techniques as a modern enterprise.

Operating under the competitive market economy, SCM2 agressively adjust its product mix and organisation structure. To actualise the technology advancement as the first production strategy, since 1990s SCM2 has invested RMB50 millions in importing 75 modern and advanced spinning and weaving machines in order to upgrade the product variety and quality. As a result, SCM2 was qualified as the "high count kingdom" (means high grade products) by the mayor of Shanghai in January 1994. SCM2 is developing 75 new high grade products and trying to explore the overseas markets.

Subsidiary to the main business of textile, SCM2 has reserved 20,000 square metres of land space for establishing various "tertiary enterprises" including commercial office block, securities trading company, storage and transportation service, beverage wholesales market, food and oil future market, motel, restaurants and amusement centre which are expected to bring in RMB10 million before the end of 2000.

The competitive edge of SCM2 is offering high count and high density (quality measurement of cloth) yarn and cloth to sustain the market share. Furthermore, SCM2 had been the first cotton mill in China to use the advanced combing machine (for aligning the cotton fabric) imported from the USA during the 1950s, to manufacture a protective yarn during the 1970s, to produce a coal gas polished yarn of 80-100 count for weaving into T-shirts exporting to the USA during the 1980s, and to invent a purely cotton made rain-coat selling domestically during the 1990s. These new and high technology products had won many prizes awarded by the municipal and central government authorities.

Before the oil-shortage crisis in 1993, SCM2 had produced cotton-synthetic (a by-product of crude oil) cloth and supplied to a large clothing factory for manufacturing the "Smart" shirt which is a famous brand name in Hong Kong as well. In addition, SCM2 started to produce and supply low-price yarn (6-10 count) for other weaving factories to manufacture denim (jeans) in 1993. This low-price yarn used cheaper cotton (raw material) costing RMB10,000 per tonne compared with those high count (80-120) using cotton costing RMB40,000 per tonne. However, this low-count yarn could generate good profit because the production cycle of this low-count was shorter and output volume was greater. In the same year, SCM2 produced high-count (80-100) cotton cloth and supplied to a large clothing factory for manufacturing a delux gentleman shirt with the brand name called "Seashell".

SCM2 supplies 92% of its yarn and cloth to other textile and clothing industries for further processing and exporting the final products overseas. Only 3% of SCM2's products (mixture of cotton and linen cloth) exported directly (i.e. Australia) and the other 5% are sold domestically. The production and sales ratio of SCM2 have been maintained at 1:0.95. Unlike the last few decades, the demands of textile products, in particular the old cotton mills such as SCM2, in China have been declining since the early 1990s due to the following reasons:

(1) The production plants and equipment are rather out-dated such as before 1994, SCM2 were still using very old machines manufactured in the 1920s, 1930s and 1940s. Productivity, efficiency and quality of these retiring machines are low compared with the other developed countries like the USA, Japan and Europe or even the many newly developed small-sized cotton mills located in small towns and cities all around China which have the ability to imported advanced equipment and machines from overseas.

- (2) Lacking of capital, either coming from retained earnings or bank loans, makes the large- and medium-sized and long-established cotton mills (there are 30 cotton mills in Shanghai) unable to rennovate their out-dated plants and equipment. Therefore, they can mainly manufacture lower quality or class of products and only a small portion of them belong to the higher counts for futher processing into high quality products such as the shirts and T-shirts with famous brand names as mentioned above.
- (3) The surging of too many small-sized township cotton mills increases the total supply in excess of the total demand. Under this unfavourable situation, the old cotton mills including SCM2 can hardly compete with them in terms of price and quality.
- (4) In the 1980s, SCM2 has entered into joint-ventures in terms of associated enterprise mode with two old cotton mills in Shandong and Jingsu provinces (major raw cotton producing places in China). SCM2 has invested capital, equipment and technology into these two enterprises in order to revive their deteriorating performance. This kind of assistant programme as imposed by the government has diverted the resources of SCM2 from own development purposes.

In spite of the above difficulties, SCM2 obtained RMB29.65 millions of 5-year bank loan in 1990, half of which was used to import 48 mordern weaving machines from Japan, 2 coal-gas polished spinning machines from Germany, and the other half was used to rennovate the production building and facilities. In the bank loan application proposal, it had estimated these new production facilities and machines could increase profit by RMB500,000 per month or RMB6 millions per year to repay the 5-year bank loan. However, due to some internal and external factors, this profit target has not been achieved and the outstanding balance of this bank loan was RMB25 millions at the end of 1994.

The following are some factors hindering the market development of SCM2's own products and then the derived product (i.e. cloth):

- (1) the quality of the final products manufactured by the clothing industrial customers cannot attain international standards and compete with overseas competitors although the cloth produced by SCM2 is among the top three in Shanghai;
- (2) many small- and medium-sized cotton mills in other developing cities and economic zones are enjoying some favourable policies, such as low import and export taxes, given by the municipal government so that they are very cost competitive;

- (3) therefore, SCM2 product selling prices may not be competable with the younger and smaller brothers and sisters in this industry; and
- (4) furthermore, the local governments of these districts do not allow buying in the textile products from the other provinces or cities (local trade protectionism), and as a result over 90% of SCM2's products are selling locally in Shanghai.

Depsite of the above unfavourable conditions, the goodwill of SCM2 has been well established mainly due to its quality products, high technology and good management. It is ranked within the top three cotton mills in Shanghai.

# Section 2 : Legal Form & Organisation Structure

Shanghai No.2 Cotton Mill (SCM2) has been a wholly state-owned enterprise since 1950 and under the administration of the Shanghai Textile Bureau (a branch of the Ministry of Textile in Beijing). All the cotton mills and related industries such as textile machines manufacturing are under the umbrella of the Shanghai Textile Bureau. Since the textile industrial restructuring in early 1990s, many cotton mills have been grouped under three large corporations in Shanghai. One of these three large textile corporations is Xin Da Corporation which has the following subsidiaries:

- (1) Shanghai No.2 Cotton Mill
- (2) Shanghai No.6 Weaving Factory
- (3) Shanghai Industrial Cloth Factory
- (4) Xin Da Real Estate Development Company
- (5) 10 Trading/Import and Export Companies
- (6) Representative Offices in the USA, Australia and Macau

In 1991, Xin Da Corporation was registered in Pudong (Eastern Shanghai) which is a special economic development zone enjoying many favourable policies granted by the municipal government, such as income tax of 15% for shareholding enterprises compared with the 33% of the counterparts registered in old Western Shanghai city. In May 1992, Xin Da Corporation was transformed into a shareholding entity by issuing shares to the government (63%), other enterprises (27%) and other individuals (10%) including employees working for Xin Da Corporation (i.e. SCM2's employees). The shares owned by the individuals, at an issue price of RMB3 per share, were listed in the Shanghai Stock Exchange at the same time. Therefore, SCM2 is a 100% shareholding subsidiary of Xin Da Corporation.

The major role played by Xin Da Corporation is to supervise the financial performance and appoint the top management such as general manager and party leader (rectified by the Shanghai Textile Bureau) of each subsidiary. Another important function of the corporation is to raising capitals for the approved projects or investments initiated by the subsidiaries. Despite the latter fact, SCM2 has the autonomy to obtain bank loan independently.

Before the economic reforms started in 1979, the central planning system dictated all the planning and control systems of the state-owned enterprises. Therefore, SMC2 acted just as a vehicle (or cost centre) to carry out the activities according to the commands directed from the Shanghai Textile Bureau. Since the economic reform started in 1979, instead of dictatorship from the bureau, SCM2 has been involved in the 5-year long range plan even though SCM2 for most of the time had to take the directives from and give in their negotiations to the authority.

Since the promulgation of the "SOE Operation Mechanism Transformation Regulations" by the People's Congress in July 1992, the Shanghai Textile Bureau has fully delegated the management autonomy to Xin Da Corporation which in term has given almost full authority to SCM2 to manage its own business such as the short-term planning and operation like purchasing, production and sales.

The fixed assets of SCM2 were revaluated in 1989 and 1992. The first time was done by the State Assets Administration Bureau in order to ascertain the current values of government's investment in SCM2, whereas the second time was initiated by SCM2 when it was transformed into a shareholding enterprise.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

Since SCM2 is a shareholding enterprise, it has a Board of Directors constituted by the following 11 members:

Chairman Vice-Chariman Directors

- Chairman of Xin Da Corporation
- General Manager of SCM2
- 3 representatives from other enterprises holding shares of Xin Da
- 1 representative from Shanghai Textile Bureau
- 1 representative from Communist Party Office
- 1 representative from Labour Union
- Chief Accountant of Xin Da Corporation
- Deputy-General Manager (Production) of SCM2
- Deputy-General Manager (Operation) of SCM2

According to the Company Law implemented in January 1994, SCM2 has established a Supervision Committee overseeing the planning and control policies made by the Board of Directors, and also to ensure they are in compliance with laws and regulations. The Supervision Committee includes the following 7 members:

Chairman Members

- Party Leader of SCM2
- 3 representatives from other enterprises holding shares of Xin Da
- 1 representative from Shanghai Textile Bureau
- 1 representative from Labour Union
- Chief Accountant of Xin Da Corporation

Obviously there are some overlapping of personnel between the Board of Directors and Supervision Committee and they are playing dual roles in policy making and control. As a result, it seems that the supervision committee is just like a formality and always agrees with the plans and policies determined by the board of directors. There have not been any significant arguments and discrepancies between the two reports submitted by the committee and the board to the annual general meeting of shareholders held in May each year. Many legislators, officials, academics and managers have suggested to leave the supervisory role of shareholding enterprises to the auditors of the Government Audit Bureau and the CPA firms as well as the other authorities such as the Finance Bureau and Tax Bureau.

Under the Factory General Manager, who has an Enterprise Management Office, the organisation structure of SCM2 is listed as follow:

- 1. Production Department (headed by a Deputy-General Manager)
  - 1.1 No.1 Spinning Factory\*
  - 1.2 No.2 Spinning Factory\*
  - 1.3 No.3 Spinning Factory\*
  - 1.4 Weaving Factory\*
  - 1.5 Production Support Factory (supplying electricity, gas, wager, consumables, spares, tools etc.)\*\*
  - 1.6 Technical Support Section (headed by Chief Engineer)
  - 1.7 Production Planning Section (headed by Chief Engineer)
  - 1.8 Production Facilities Section
  - 1.9 Quality Control Section
- 2. Operation Department (headed by a Deputy-General Manager)
  - 2.2 Purchasing Section
  - 2.3 Sales Section
- 3. Organisation & Personnel Department@
  - 3.1 Personnel Section
  - 3.2 Manpower & Wages Section
  - 3.3 Organisation & Discipline Section
  - 3.4 Education & Training Section

- 4. Safety & Security Department@
  - 4.1 Safety Section
  - 4.2 Security Section
  - @ headed by the same Depduty-General Manager
- 5. Accounting & Finance Department (headed by Chief Accountant)
  - 5.1 Accounting & Finance Section @@
  - 5.2 Internal Audit Section
- 6. Promotion Department (headed by the Party Leader)
  - 6.1 Promotion Section
  - 6.2 Party Office
- 7. Labour Union Office
- 8. Third Enterprises# (headed by a Deputy-General Manager) (see section 5.4 below)
- \* All the production factories have a factory manager, a deputy factory manager, section supervisors and group leaders. Each factory is responsible for its own repair and maintenance work.
- \*\* All the production factories and tertiary enterprises are treated as profit centres. But the production support factory is a cost centre and allocates its operating costs to the other production factories or departments according to actual usages.
- \*\*\* All the production factories have signed Internal Responsibility Contracts (IRC) with the General Manager on an annual basis. For the details, please refer to section 5.6 below.
- @@ In addition to the 21 staff in the accounting and finance department in the headquarters, there is one accounting staff in each production factory and tertiary enterprises reporting to both the unit manager and chief accountant.
- # The third enterprises are independent profit centres having their own management teams and bank accounts, and they have signed IRCs with the General Manager on an annual basis.

SCM2 had a total of 4,860 working employees (10% are administrative staff) and 5,200 retired employees (annual pension RMB14 millions) at the end of 1994. It is classified as a "medium-sized SOE" in China. About 350 of the working employees are involved in the "tertiary enterprises" (established since mid-1993) as described in section 5.6 below.

On the other hand, 350 redundant employees have stopped their jobs or posts and received about RMB300 basic wages per month. All the employees have signed "employment contracts" since 1993 with duration from one year to no limit leaving an optional right to the employees.

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#### Section 3 : Financial Indicators

Total assets : RMB 40M (1994)
Turnover : RMB 180M (1992)
RMB 200M (1993)
RMB 180M@ (1994)

RMB 200M@ (1995 forecast)

Income before tax\*\* : RMB 7.0M (1992) - 3.9% of sales

RMB 4.0M (1993) - 2.0%\* of sales RMB 5.1M# (1994) - 2.8% of sales RMB 4.0M##(1995) - 2.0% of sales

Income tax rate : 55% (before 1992)

15% (from 1992)###

@ Including sales of tertiary enterprises.

- \* The low profit margin was mainly because of a fire occured in May 1993 and No.1 Spinning Factory was burnt down lossing RMB4 millions of assets after claiming insurance. In addition, selling prices or quotations have to be reduced in order to bid the orders. Furthermore, inflation and heavy payroll and benefits in kind (including retired employees) increased the total expenditures or fixed overheads. The purchase prices of raw materials (i.e. cotton) have been increased from RMB11,000 per tonne in 1993 to RMB18,000 per tonne in 1994 (or 64% increase) due to reduction of domestic production. The farmers do not have the incentive to grow cotton because of low selling prices set by the government and high inflation of input materials like fertilisers. The domestic produced cotton is centrally purchased and distributed by the Ministry of Textile (and also the corporations under its umbrella), Ministry of Commerce and Ministry of Agriculture at predetermined pricds. In view of domestic short supply, 45% of the cotton demand was imported from foreign countries in 1994. SCM2 is importing overseas cotton via the import and export right of its holding Xin Da Corporation.
- \*\* Income before tax has deducted the value added tax already which is 17% on sales but only 13% on cotton purchased can be deducted according to the new taxation system implemented in January 1994. As a result, the VAT paid in 1994 was RMB10 millions (6% of turnover) which is RMB500,000 higher than the previous known sales tax in 1993.

# The tertiary enterprises generated RMB2 millions of profit before tax in 1994 which achieved only 40% of the budget. target for 1995 will be RMB2.5 millions of profit before tax.

## To support a few capital projects started in 1990, SCM2 obtained a RMB29 millions 5-year bank loan and interest payment of RMB3 millions has been capitalized into the work-in-progress. Since all the projects were completed in 1994, both the interest of outstanding loan (RMB25 millions) and the depreciation of a total RMB4.5 millions has to be charged to profit and loss as from 1995. Therefore, the potential profit level of RMB8.5 millions (including RMB2.5 millions coming from the tertiary enterprises) will be reduced to RMB4 millions in 1995.

### All the profit before tax belongs to the Xin Da Corporation which is registrated in Pudong (Eastern Shanghai) and subject to 15% of income tax rate in this economic development zone.

# Section 4: Economic Responsibility Contract System (ERCS)

The Shanghai No.2 Cotton Mill (SCM2) entered into the first five-year Economic Responsibility Contract with the Shanghai Textile Bureau and the Shanghai Finance Bureau (representing the Shanghai municipal government) in 1988. The major financial target set in this ERC was based on the target income tax which was 55% of net profit. The target income tax (base) in the first year (1988) was agreed at RMB5 millions with a 2% annual growth in the subsequent years. SCM2 exceeded the target income tax every year until 1992. In addition, the annual total gross wages was linked up with this financial target as well. The ERC was ceased in 1993 after SCM2 had been tranformed into a shareholding enterprise and subject to a preferential income tax rate of 15%.

In general, the labour efficiency and productivity have been increase after shareholding conversion compared with the ERC system because without good profit there would be no handsome dividends distributed and the share maket price would be affected However, under the ERC system, once the target profit as well. has been achieved, the predetermined wages, bonuses and benefits-in-kind will be awarded plus other favourable terms like bank loan repayment could be tax deductable. Therefore, all the personnel in SCM2 have been facing higher pressure and challange to enhance the overall economic efficiency year after year.

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# Section 5 : Planning System '

#### 5.1 Organisation Structure

The holding company of Shanghai No.2 Cotton Mill (SCM2), Xin Da Corporation has delegated full autonomy to SCM2 in managing its own organisation structure except appointing the general manager and the party leader. The organisation structure of SCM2 was consolidated from over 20 departments into 6 major departments in 1992 when coverting into a shareholding enterprise. Since then the number of employees has been reduced from over 5,500 to 4,860 at the end of 1994.

The board of directors is mainly a policy making body while the operational funtions have been delegated to the top management who in turn has been decentralizing more planning responsibility to each production factory and department such as participation in formulating the annual plan and the internal responsibility contract. The production and cost control responsibility primarily lies with the production manager but the top management keep a surveillance quantity and quality control on each production factory through monthly or weekly report.

The selection and appointment of the top management (i.e. general manager and party leader) is still decided by the Xin Da Corporation and endorsed by the Shanghai Textile Bureau, and a "Factory Manager Responsibility System" is in force. This system adopts the previous Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the general manager. If an outstanding or above target performance has been achieved, the general manager will be awarded a predetermined lump sum bonus at the year end.

Since 1992, the general manager has the autonomy to appoint the senior staff such as the production managers and department heads. Any major changes of the organisation structure in each unit should be initiated by the deputy-general managers and approved by the general manager. However, more autonomy of internal management and operation has been delegated to the deputy-general and factory managers since 1992. And in turn, the deputy-general and factory managers have involved their workshop supervisors and section heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, SCM2 has a decentralized structure in which the individual deputy-general and department managers are reporting directly to the general manager, and they play a linking and control role between the factories or departments and the general manager.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

#### 5.2 Review Process

Since the conversion into a shareholding enterprise in May 1992, Shanghai No.2 Cotton Mill (SCM2) has implemented a more formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). In October, the general manager calls for a board meeting to discuss with the directors concerning the next year targets such as production output value, sales, profit, capital requirements and other important events. The board will also evaluate the internal and external environmental factors in order to determine whether the above targets are realistic or not. If there is any gap, then the general manager will negotiate with Xin Da Corporation until compromise can be reached. Based on these preliminary targets, the general manager will assign them to the production managers and other department heads for them to formulate their own plans or budgets for the next year. Much emphasis is placed on the production value, internal profit and cost control which are the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

At the end of November, all the factories and departments submit their initial plans to the Enterprise Management Office for consolidation before review and discussion by the general manager with the board of directors. If the overall predetermined targets cannot be met, the board will try to enforce and insist the factories and departments to revise their annual plans accordingly. Although back and forth iterative discussions are allowed in December, it does not leave much rooms for negotiation for the factory and department managers unless they can provide very strong evidence such as the deficiency in the production facilities. Eventually, the annual plans must be approved by the board of directors in January next year for implementation and reporting in the annual general meeting held in May.

The approved annual plans are broken down into quarterly and monthly plans to cater for demand, holiday and other factors. The annual plans are formally reviewed in July and adjustments on significant deviations are allowed to make after detail discussion and approval from the board of directors.

Before 1992, the production managers and department heads did not participate this annual planning review process at all and the general manager, under the direction of the bureau, gave directions to the factories and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, expense levels etc. Since 1992, under the legislative changes and market economy promotion, the Shanghai Textile Bureau has delegated higher automomy to Xin Da Corporation and SCM2 in formulating its strategic directions. As a result, all the factories and departments are involved in the planning process but the key variables are still determined and controlled by the top management.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as macro-eocnomic control (1994), operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc.

As mentioned in the Introductory section at the very beginning, the Shanghai No.2 Cotton Mill has laid down the following strategic themes and thrusts since 1992:

- (1) Textile is the mainstream business.
- (2) Production facilities should be rennovated to further enhance product quality.
- (3) Expand the domestic market share and explore the overseas markets.
- (4) Diversification is the breakthrough venture such as developing tertiary enterprises.
- (5) Streamline the organisation structure and reduce the number of employees.
- (6) Sustain steady profit growth and maintain a resonable return to shareholders.

(7) Employ advanced management techniques to achieve a modern enterprise system.

The above strategic themes and thrusts are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise. SCM2 has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets on the other hand.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in SCM2 still from time to time make suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. Despite this fact, the top management has given some limited freedom to the factory managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

The top management follow the financial indicators and performance closely on monthly and quarterly basis and are quick to make suggestions if they do not match the overall long- and short-term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.4 Long-Term Plans (Resource Allocation)

Since the transformation of Shanghai No.2 Cotton Mill (SCM2) into a state-owned enterprise in 1950, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system. The commencement of the economic reforms in 1979 started to allowed SCM2 to participate in the 5-year's planning with the Shanghai Textile Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomics control and adjustment" as an excuse.

The changing role of the Bureau and the formation of Xin Da Corporation since 1991 has encouraged SCM2, for the first time, to participate in the first long-term strategic plan (1991-1995). However, many internal factors and uncertainties have affected the validity and reliability of this long-term plan which has been subject to review and changes every year. This year is the last year of the 5-year long-term plan, the board of directors is discussing with Xin Da Corporation and trying to formulate the next 5-year plan (1996-2000) although formal long-term planning is not required by the corporation nor the bureau.

The followings are the major long-term plans or projects envisaged by the Xin Da Corporation and SCM2 to be implemented in the next 5-year plan (1996-2000) although some of them have been started during 1991-1995.

### (A) Product Development

Significant changes in the textile industry have been occured in recent years under the transition from planned economy to market economy. Now SCM2 has to promote and sell its products in a highly competitive market. The goodwill of SCM2 has been well established mainly due to its quality products, high technology and good management. Taking this advantage, SCM2 has to bias its product mix to the higher end by manufacturing upper grades of yarn and cloth (higher counts and density) and selling to the clothing industry for producing final products of high quality. By aiming at the higher quality and price market segment, SCM2 will be able to sustain steady profit growth and maintain reasonable returns to the shareholders.

### (B) Competitive Edge

SCM2 has been facing keen competition from many small- and medium-sized cotton mills in other developing cities and economic zones which are enjoying some favourable policies, such as low import and export taxes, given by the municipal governments so that they are very cost competitive To maintain at least the market share and fliexible. competitive edge against these counterparts, SCM2 has to manufacture higher quality products but this strategy needs capital for reinvestment and rennovation in plant and It is unlikely to be successful to raise fresh capital through right issue or new issue in the Shanghai Stock Exchange because it has been a bear market since the middle of 1994. Furthermore, the banks are reluctant to grant substantial loans to SCM2 in view of its mild profit level and the macro-economical control policies laid down by the central government since July 1993. Xin Da Corporation and SCM2 are negotiate hardly with the banks for capital loans.

#### (C) Joint Ventures

The cost of production in the textile industry is getting higher and higher since 1990s mainly due to shortage in cotton grown in China and inflation on wages and other overheads. SCM2 is looking for joint-venture opportunities in other developing countries such as Russia, Vietnam, Philippines etc. However, sources of capital is the major hurdle to be overcome before entering into any foreign joint-ventures.

# (D) Market Development

To penetrate into the domestic market and capture higher market share, the sales personnel has been seggregated into geographic teams with different marketing strategies and tatics such as regular visits to the existing customers. The IRC signed with the Sales Department links up the remuneration directly with the sales volume and the accounts receivable (or cash collected) in order to motivate the sales and marketing effort.

### (E) Overseas Markets

SCM2 is making use of the trading subsidiaries and the import and export right of Xin Da Corporation to explore the overseas markets such as Southeast Asian, South America and Eastern European Countries.

#### (F) Tertiary Enterprises

Diversification is one of the strategic themes promulgated and implemented since July 1993 and one year after SCM2's transformation into a shareholding enterprise. The following tertiary enterprises have been or will be established within the present premises and absorbed over 350 redundant employees from the textile business. They are all self-financed profit centres which are expected to generate surplus for SCM2.

#### (F1) Ao Men Business City

This is a 5,000 square metres business complex started operation in May 1994. The facilities include 62 motel rooms, 8 conference rooms, audio visual room, beauty and hair saloon, tennis court, air-conditioning, long-distance telephone, and fax, typing, printing, copying services provided in the business centre.

# (F2) Tai Xiang Yan Hotel

This is a 4,000 square metres hotel started business in September 1994. The facilities include 60 standard rooms, air-conditioning, long-distance telephone, restaurant, conference rooms and business centre.

#### (F3) Xin Da Restaurant

This restaurant occupies 1,000 square metres and employs over 70 staff. Other than serving meals to both SCM2's employees and outsiders, this restaurant also provides dancing hall, karaoke lounge, coffee house and meeting room to customers.

### (F4) Shanghai Beverage Wholesale Market

This 7,000 square metres beverage wholesale market has invited over 400 manufacturers to display and sell their beverage products in large quantities to the retailers. Rental charges and commissions have to be paid to SCM2 on a monthly basis. Other facilities inside this market include 43 meeting rooms, a 1,500 square metre storeroom, a 300 square metre canteen and 50 sets of long-distance telephones. This wholesale market is a joint venture with the Shanghai Commercial Bureau and is the largest one of its kind in Shanghai.

#### (F5) Jianli Beverage Factory

A small beverage factory of 400 square metres has been established to process the packaging and delivery for the beverage manufacturers, and also supply to the beverage wholesale market.

# (F6) Daily Necessity Wholesale Market

A total floor space of 1,000 square metres has been leased to a Taiwan trading company to establish a daily necessity wholesale market.

#### (F7) Grain & Oil Forward Market

A 1,000 square metres grain and oil forward market has been established and invited many manufacturers and wholesellers to display their products and transact with the retailers. This forward market will bring in rental charges and commissions.

# (F8) Xinye Futures Sales Company

This is a joint-venture with the Shanghai Flour Factory having a floor area of 400 square metres, 20 sets of personal computers, 14 meeting rooms and 1 large trading hall for transacting futures sales of various types of goods.

# (F9) Security Trading Company

A total floor space of 300 square metres has been leased to the Nanjing Transportation Bank to establish a security trading company. The annual rental charges is RMB700,000.

# (F10) Banking Office

A total floor space of 400 square metres has been leased to the Agricultural Bank to establish a branch. The bank pays a cheaper rental charge because a reduced loan interest rate is given to SCM2.

The budget (1994), actual (1994) and forecast (1995) profits of the above 10 tertiary enterprises are shown as follow:

	Enterprise (Notes)	Profit Budget 1994	Level in Actual 1994	
(1)	Ao Men Business Centre (1)	500	200	300
(2)	Tai Xiang Hotel (1)	500	100	200
(3)	Xin Da Resturant (1)	800	200	200
(4)	Beverage Wholesale Market (2)	1,000	400	500
(5)	Jinli Beverage Factory (3)	200	100	100
(6)	Daily Necessity Wholesale Market (4)	500	100	300
(7)	Grain & Oil Forward Market (2)	400	200	200
(8)	Xinye Futures Sales Company (2)	300	200	200
(9)	Security Trading Company (5)	400	100	100

(10)	Banking Office		400	400	400
	_	f			
	Total annual profit		5,000	2,000	2,500

The 1994 total profit generated from the 10 tertiary enterprises had been over-estimated due to the following reasons:

- (1) The using or occupying rates were unsatisfactory because they were new facilities without adequate promotion and the fixed overheads (including depreciation) were subject to high inflation.
- (2) About 40%-60% of the counters were leased out and the running expenses were subject to high inflation.
- (3) The operating capacity was 70% and the running expenses were subject to high inflation.
- (4) The Taiwan trading company cancelled the leasing contract and only paid a compensation of RMB100,000.
- (5) In order to obtain a future loan from the Nanjing Transportation Bank, the rental charges was reduced by RMB200,000. The running expenses increased by RMB100,000.

SCM2 is planning to form a "Motorcycle and Bicycle Wholesale Market" in 1996.

#### (G) Merger and Takeover

In May 1993, as suggested by the Shanghai Textile Bureau, SCM2 took over the 600 employees (including 300 retired) and the plant and equipment valued at RMB10 millions of the Shanghai No.36 Weaving Factory while the premises were left to the Shanghai Liberal Army Publication House. This merger did not bring into immediate benefits to SCM2 but did increase the payroll and pension. Depending on the municipal planning and policy, it is possible to have other such merger or takeover in the 9th 5-year plan (1996-2000) which is one of the solutions to solve the headache problems of thousands of ailing state-owned enterprises. This policy means to let the profitable enterprises to take up the burden of the loss-making enterprises.

The current 5-year plan (1991-1995) was compiled after long discussion between the Bureau, Corporation and the SCM2's top management without much participation by the middle management who were playing a consultation role only. As far as the next

5-year plan (1996-2000) is concerned, the Xin Da Corportion and SCM2 are trying to maintain and further develop the above long-term strategies.

The factory managers and department heads are mainly concerned with how the milestones set in the long-term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the general manager at least on a monthly basis. Therefore, the long-term planning and review process are using a top-down approach in the belief that the general manager and the holding corporation has better experience and knowledge of the external environment and even the internal operations of the factories and departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Shanghai Textile Bureau has devolved its central planning role to the Xin Da Corporation and in turn individual enterprises under the latter's umbrella since 1992. Now, the top management of SMC2 is taking the initiative to formulate its own long-term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short-term planning policy adopted by Shanghai No.2 Cotton Mill (SCM2) is "production determined by sales" and "sales determined by targeted profit before income tax" which means profit before income tax growth as agreed with the Xin Da Corporation is the initial driving force of all the activities. During the board meeting held in October, the directors will review and discuss the following four most important issues:

- (1) present and future production and operation situations;
- (2) current and future financial positions including capital, assets and liabilities mamagement;
- (3) next year profit target agreed with Xin Da Corporation; and
- (4) domestic and overseas market changes.

At the end of the day, the board lays down some guidelines and targets to the factory managers and department head to compile their individual annual plans or budgets. First of all, based on the production quantity and mix targets, the production factories draft their production plans and submit to the deputy-general manager (production) for consolidation and then send copies to the accounting and finance department for compiling financing plans (i.e. profit and loss, balance sheet, cash flow). At the mean time, the technical support and quality control sections also determine its production quality plans in order to ensure the production technology and facilities are capable to achieve the production plans.

In parallel, the wages and manpower section will ascertain the labour hours and total payroll required which are directly linked up with the sales, profit or production value growth rates. On the other hand, the tertiary enterprise managers figure out their income and expense budgets as well. Finally, all the pieces are consolidated and reviewed by the enterprise management office before submission to the next board meeting for consideration. The other steps in the annual planning or budgeting process are as described in section 5.2 (Review Process) above.

Since October 1992, the factory managers, department heads and tertiary enterprise managers have been involved in this planning process which they believe to be important in setting and negotiating the internal responsibility contracts with the general manager subsequently.

(The above annual planning or budgeting process is summarised in a flowchart as shown in Appendix 2.)

In view of the rapid changing market conditions, the annual plan review period has been shortened from quarterly to monthly. The general manager, deputy managers, factory managers, department heads and tertiary enterprise managers hold a formal meeting at the beginning of each month to review the financial performance against the annual plans. Appropriate corrective actions may be taken to rectify any problems identified or deviations from the plan. Amendments or revisions are seldom made unless some significant uncontrollable factors are affecting the annual plan.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given SCM2 more freedom to plan ahead. The bureau and corporation have almost completely devolved the short-term planning autonomy to the board of SCM2, except to agree on the minimum targets as agreed at the beginning of every year. Nevertheless, the bureau and corporation can still influence the planning process by their representatives sitting in the board of directors. The top management have involved the middle management in the annual planning process which on one hand is a critical step in materializing the long-term strategic plan, and on the other hand, it is an important motivational factor for the factory managers, department heads and tertiary enterprise managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

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# 5.6 Internal Responsibility Contracts (IRC)

Shanghai No.2 Cotton Mill (SCM2) established its IRC system in 1993 in order to motivate the efficiency, profitability and cost reduction in the production workshops.

The IRC of the "Production Factory" (standard format) is described below:

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Department : Production Factory

Duration : 1 January to 31 December 1994

# (A) Aims and Objectives:

1994 is a year of further economic reform and leading the enterprise into market economy. In order to achieve these aims, SCM2 has laid down the following four strategic themes:

- (1) to realise the management system's transformation;
- (2) to emphasize both textile business and tertiary enterprises;
- (3) to focus on economic efficiency; and
- (4) to aim at increasing profit.

This IRC is formulated in accordance with the guidelines of these strategic themes.

- (B) Targets:
- (B1) Total Output Quantity = XXXXX tonnes (or metres'000)
- (B2) Share of Enterprise Management Expenses = RMBXXXX (based on 1993 actual central allocation)
  - Non-Operational Expenses = RMBXXXX (based on 1993 actual)
- (B3) Internal Profit = Market Selling Price Total Costs = RMBXXXX Internal Profit shared by Headquarters : Factory = Y% : Z% Excess Profit shared by Headquarters : Factory = M% : N% Actual Profit < Target Profit : Deduct 5% of Total Wages
- (B4) Product Quality must achieve the predetermined enterprise standards and be all acceptable by the customers.
- (B5) No serious safety accidents would be allowed.
- (B6) Operation management should be enhanced gradually.

The performance of all the above targets (B1) - (B6) are linked up with the incentive scheme or the total remuneration which are defined separately. Two of which are:

- (B7) If the above financial targets cannot be achieved, the surplus profits of previous years or future years can be used to calculate the total wages and bonus.
- (B8) For every RMB1 in excess of the target profit, the total wages and bonus can be increased by RMB0.6.
- (C) Rights of Factory Manager (Contractee)
- (C1) Employment, assignment, transfer and termination of factory employees.
- (C2) Distribution of remuneration among the factory employees.
- (C3) Managing the factory internal affairs.
- (C4) Participating in the enterprise's operation.

- (D) Responsibilities of General Manager (Contractor)
- (D1) To balance the resource allocations in the planning process of the whole enterprise.
- (D2) To ensure the adequate supply of raw materials.
- (D3) To coordinate with the service department to provide appropriate and adequate support.
- (D4) To conduct performance evaluation in accordance with the terms and conditions of this contract and other enterprice's rules and regulations.

It takes a few months for the general manager, factory managers and tertiary enterprise managers to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval by the board meeting in next January. This long process indicates that the setting of IRC is not a top-down approach and the factory and tertiary enterprise managers are very eager on this issue upon which they will be measured against and rewarded thereupon. The IRCs are subject to at least quarterly review but adjustments can only be made if some factors affecting the achievement of targets significantly.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the factory managers, department heads and tertiary enterprise managers in initiating and negotiating their own IRCs, and also involved the accounting and finance personnel intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Management of interdependencies means the control influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the factories, and exploitation of a shared resource are examples that happen in Shanghai No.2 Cotton Mill (SCM2) that need headquarter's intervention. As shown in the organisation structure (section 2 above), 60% and 10% of the outputs (yarn) in No.2 and No.3 Spinning Factory are transferred to the Weaving Factory for manufacturing cloth. The "market price" is used as the major reference for the supplying and receiving factories to set the appropriate transfer prices which are usually predetermined monthly depending on the fluctuation of the yarn prices in the open market. The transfer quantities are also predetermined in the production plans which are broken down into monthly targets and reviewed or adjusted on a weekly basis.

Therefore, there is no much rooms for negotiation between the spinning and weaving departments in both transfer prices and quantities because the spinning factories do not have much autonomy to sell the intermediate products externally and it seems to be indifferent to sell internally or externally as long as the transfer prices are equal to the market prices. Even under the situation when the cost of production is higher than the market selling price, the production factories are compelled to improve production efficiency and reduct costs in order to maintain the internal profit targets as set down in the IRCs. All the yarn products in No.1 Spinning Factory are sold via the sales department externally and it does not involve in the transfer pricing issue.

The Production Support Factory is providing electricity, gas, water, consumables, spares, tools etc. to the other production factories, service departments and tertiary enterprises. This supporting factory is treated as a cost centre and allocates its operating costs to the users according to actual usages. Therefore, it does not involve in the transfer prices but only some arguments in the transfer costs and quantities.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# Special Notes

In 1994, over 80% of the cotton mills in China were loss-making. Some economic reforms since 1980s affecting the textile industry are elaborated below.

(1) Many textile enterprises, especially the old ones, may not get used to the transformation of central planning system to the market economy environment partly because they have not possessed relevant and sufficient market information, and partly due to some internal factors (i.e. management reliance and reluctance to change) and external factors (i.e. inflation and bank credit control).

- (2) Too much emphasis has been put into "tertiary enterprises" as a means to settle down the redundant employees and to contribute small amounts of profits. Instead of creating wealth to the society, some of them such as trading companies and retailing shops may consume resources of the main business. The fast expansion of tertiary enterprises in SCM2 has not brought into very significant profit yet up to the end of 1994.
- (3) Contrary to point (2) above, the government has not put enough investments into the "first enterprise" (i.e. farming, mining, fishing, etc.) and the "second enterprise" (i.e. manufacturing, electricity, transportation, housing, tele-communication, etc.). For examples, the reduction of cotton produces and lacking of capital or credit support are adversely affecting the developing of SCM2. Without good foundations in or insufficient supplies from the first and second enterprises, the general living standards of the people cannot be raised. As a result, the people's purchasing power cannot affort to spend in the tertiary or third enterprises such as reastaurant, entertainment, retailing, taxi, security market, insurance, etc.
- (4) Due to the factors described in (2) and (3) above, SCM2 could only attain 7 millions tonnes of total output in 1994 which was just 70% of the full capacity. Looking at the financial position, the current asset ratio at the end of 1994 was dropped down to 0.82: 1. The accounts payable was RMB40 millions, whereas the accounts receivable was RMB30 millions in which a significant portion has been in outstanding for more than a year. Furthermore, short-term or current bank loan reached RMB48 millions at the end of 1994 and had to pay RMB5 millions interest per annum.
- (5) As mentioned in the introductory section 1 above, SCM2 has been facing very keen competition from those small- and medium-sized cotton mills established in the towns and villages. They can obtain more and cheaper cotton because their locations are closer to cotton farms. In addition, their wages and other expenses are lower than their counterparts in the big cities like Shanghai. Furthermore, they can easily accumulate and obtain capital funds to rennovate their production facilities which can enhance their flexibility and adaptability to the fast changing market enconomy.

The following are some ways suggested by SCM2 to revive the prosperity of the textile industry in China.

- (1) The government and bank should provide lenient sources of capital to rennovate the production facilities and technologies in order to enhance the product quality and competition in the market.
- (2) The increase of total textile output should be controlled, whereas, the export of high quality products should be increased to create better profit and foreign exchange.
- (3) The economic responsibility contract and taxation system (i.e. value-added and income taxes) should allow some favourable terms for the textile industry to retain more earnings for working capital.
- (4) The government should increase the investments and policy support into the cotton farming in order to expand the output and reduce the price.

#### Section 6 : Control System

#### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Shanghai No.2 Cotton Mill (SCM2) has four distinct levels of management hierarchy:

- (1) Board of Directors (including members of supervisory committee)
- (1) Top Management (general manager, deputy-general managers)
- (2) Middle Management (factory managers, department heads, chief accountant, chief engineer, tertiary enterprise managers)
- (3) Lower Management (foremen, supervisors, section heads)

As mentioned before in section 2 and section 5.1 above, the board of directors has delegated the daily operation and management to the top management of SCM2 except if there is any sudden and important issues to be interferred or decided by the board. Since five out of the eleven board members are management staff or employees of SCM2 itself, the line between ownership and management is not very clear-cut and it seems that the board still has some sort of control over the operation side of the whole enterprise.

The deputy-general managers, factory managers and tertiary enterprise managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (production lines or sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of employment with any staff is a difficult task which will be explained in the rewards and incentives section.

The major control mechanisms employed by the top management to control the performance of the factories and departments are by using annual plans and IRCs. As described in section 5.6 above, the most important measurement criteria are internal profit, production efficiency and cost control set in the IRCs, although some other qualitative targets, such as quality and safety, are employed. However, these are subsidiary ones which have lower weightings in calculating the group wages and bonus. Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of SCM2.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

# 6.2 Agreeing Objectives

Shanghai No.2 Cotton Mill (SCM2) sets similar objectives for its production factories and tertiary enterprises: production and tertiary enterprise managers must meet their agreed IRC targets for the year and expect improvement in performance year after year as emphasized by the board of directors and the corporation in terms of growth rates. The critical occasion, therefore, is the annual planning review. As mentioned before, in view of the market economy and macro-economic control policies promulgated by the government, and the keen competition within this industry, the production factories and tertiary enterprises sometimes feel passive in setting their objectives or targets in the annual plans or IRCs because their activities are depending on some internal and external factors which are sometimes out of their control.

A high pressure to achieve the planned production quantity and efficiency is put on the production managers at the quarterly or monthly review. They fully understand that their group wages and bonus are tied in with the annual plans or IRCs and it also depends on the overall performance of the enterprise as a whole. Apart from the production factories, the other department, such as purchasing and sales, and the tertiary enterprises may have annual or project based IRCs in which they have agreed specific objectives or targets with the general manager. The promotion, salary and bonus of these functional staff and independent profit centre staff are correlated with these quantitative and non-financial targets as well.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# 6.3 Monitoring Results (Reporting & Performance Measurement)

Shanghai No.2 Cotton Mill (SCM2) regards it as essential to catch variances from annual plan or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the factories, departments and tertiary enterprises submit monthly results on standard forms to their respective deputy-general managers and department heads, and also to the chief accountant for vetting and comparison with budgets and IRCs. The production factories are also required to submit production progress reports to the top management on a weekly basis.

The major performance measurement criterion is "internal profit" as shown in the IRC section. Without much autonomy on setting the selling or transfer prices, the production factories can only control the costs by employing the "responsibility costing" system implemented in 1992. This cost control system mainly sets quantitative standards such as material consumptions. In addition, the "full costing" system was employed in the same year by allocating all the non-manufacturing overheads, including administration, selling, distribution and management expenses, to all the production or profit centres. The basis used to apportion these overheads is "total wages paid" which tends to be reduced (i.e. by reducing headcount) by the profit centre in the last few years in order to undertake less allocated overheads. Of course the full costing concept does not measure the performance of the centre managers and affect their rewards.

The repair and maintainance which amounted to over RMB3.5 millions in 1993 but it was reduced by almost 90% in 1994 under the full costing system as a means to measure the performance of the whole profit centre. Obviously, there will be a serious long-term hidden problem because the plant and machinery are not well maintained.

The monthly report format is unique for each factory or department. The contents are mainly corresponding with the annual plan from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the targets. The qualitative targets are usually subjectively measured by the deputy-general managers and enterprise management office and written in the monthly reports as well. These monthly reports are compiled, by the enterprise management office. Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the general manager for review.

For any serious adverse variances shown on any report, the general manager will contact with the respective deputy managers, chiefs, factory managers, department heads or tertiary enterprise managers to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the top management with the middle management, the general manager will put forward the monthly results for open discussion. The chief accountant will also report the financial performance of individual units. The factory managers, department heads and tertiary enterprise managers may be asked to explain briefly the significant variances.

Consistent failure (say over 12 months) in meeting the targets which are controllable by a factory manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results will be passed back to the manpower and wages department for calculating the group wages and bonus of each factory, department and tertiary enterprise for last month. Then the accounting department will process the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization has been recognised by the top management and some stand-alone personal computers have been purchased and used for production planning and control, purchasing and inventory control, sales analysis, and financial planning and analysis. In spite of this piece-meal computer utilisation, SCM2 does not have a concrete plan to purchase more personal computers or instal a mini-computer for networking. The major stumbling block is lacking of fund for this kind of investment which is at low priority compared with many other perceived important projects like rennovation of production facility, plant and equipment.

Now, SCM2 views the annual plan or IRC as a contract between the top management and the factory, department and tertiary enterprise. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no unit goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from plan.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

#### 6.4 Rewards and Incentives

Since 1992, The Shanghai No.2 Cotton Mill (SCM2) had the autonomy to recruit employees from the labour market without getting the Shanghai Manpower Bureau involved which is in compliance with the Mechanism Transformation Regulations. Furthermore, since 1993, all the employees have signed employment contracts, which include the "employee contract" and the "in-post contract".

The employee contract signed between the general manager and an employee signifies that he or she has been employed by the enterprise. Whereas, the in-post contract means a formal assignment of a certain post to the employee who is expected to be capable for the job. For the employees without in-post contracts, they may be transferred to the Tertiary (Third) Enterprises which are fully-owned by SCM2 and are self-financed.

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the SCM2 is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. Under the new taxation system implemented in January 1994, the enterprise's payroll can exceed the two limits but the excess will not be income tax deductable. The take-home pays of workers and staff in SCM2 are mainly composed of three elements as broken down below:

		Workers	Staff	
(1)	Wages/Salary	55% - 65%	70% - 60%	
(2)	Bonus	30% - 25%	20% - 25%	
(3)	Allowances	15% - 10%	10% - 15%	

The average annual gross wages per employee was around RMB5,500 in 1993 and RMB7,000 in 1994 (total wages RMB38 millions in 1994) which were about 30% less than the metallurgical industry and 40% less than the retailing industry. Under the current high inflation rate (overall average 21.7% in China in 1994), SCM2 is expected to increase the average annual gross wages to RMB9,000 in 1995.

The wages includes the basic wages and the floating wages where the former is almost fixed (i.e. average RMB200 per month) across the board and increased according to inflation as determined by the Manpower Bureau. The floating wages is classified into different grades depending on the type of work, seniority, efficiency and skill. The average floating wages is about RMB150 per month.

There are two portions for the "allowances". The first part is determined by the Manpower Bureau of the Shanghai Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity. The second part is decided by the SCM2 which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowances" is about RMB100 to RMB120 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the factories, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the general manager and a factory manager will decide what level of group bonus will be given to the department. Of course, it is up to the factory manager to award that lump sum of group bonus to his or her subordinates according to individual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

The calculation of "bonus" for the non-manufacturing employees is based on an "index" (scale) and then multiplied by the average monthly bonus achieved by the workers. The index scale is as follow:

General Manager	1.6
Deputy-General Manager	1.5
Chief Accountant/Chief Engineer	1.4
Section Head	1.3
Supervisor	1.2
Clerks	1.1

Under the "Factory Manager Responsibility System", if there is an overall outstanding or above target performance, the Xin Da Corporation will award a lump sum of "special bonus" to the general manager at the end of the year. But under no circumstances, the remuneration package of the general manager can be greater than three times the total earnings of a department head (middle management).

If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus. The year-end bonus ranged from RMB500 to RMB800 for 1994.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of redundant employees will cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives. Another way to reduce redundant employees is to enforce early retirement at the age of 45.

Instead of fully implementing this contract employment system, SCM2 has signed "in-post contracts" with most of the employees on an annual basis. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive wages (according to grade in the pay-scale), allowances and bonus. Without such a contract, that employee is out of job but he or she is still an employee of SCM2 and is allowed to received a basic monthly subsidy of less than RMB300. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better. In fact, 25%-30% of SCM2 employees, in particular the non-manufacturing staff, are still redundant but reluctant to lay off due to some social constraints. On the other hand, a few hundreds of workers are employed from the other provinces who are hardworking and paid less wages than the local workers.

In relation to the social welfare, since 1993, SCM2 has to contribute 25.5% (or RMB800,000 per month) of the monthly gross payroll to the government for sharing the responsibility of pension. Fortunately SCM2 is able to claim more than its 25.5% contribution from the government because its retired employees exceeded its working employees at the end of 1994. In addition, SCM2 has to provide about 14%-16% (standard rate and tax deductable) of the monthly gross payroll for various employee's benefits such as medical, unemployment and building or buying residential quarters. But the actual monthly employee's benefits cost was RMB100,000 over the standard in 1994 and was not income tax deductable).

Therefore, many old-aged state-owned enterprises, including SCM2 are proposing to handover the standard provision i.e. 16% of monthly gross payroll to the municipal government who will reimburse the actual cost of benefits incurred by the enterprises.

The 3rd Plennary Session of the 8th People's Congress held from 3-15 March 1995 will discuss and most likely approve this social welfare policy. SCM2 spent RMB3 millions in purchasing apartments for employee's quarters. Furthermore, SCM2 has to bear the medical allowance for its 5,200 retired employees which is a rather heavy financial burden to the overhead expenditures.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, SCM2 believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: sift from "Finance Control" to "Moderate Financial Control" since 1992

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai No.2 Cotton Mill (SCM2) belonged to before and after 1992.

Influences			
Planning Influences :			
Organisation Structure*	High/Medium Corporate	Medium/Low Corporate	
Review Process*	High Corporate	Medium/Low Corporate	
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corporate	
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate	
Short-Term Plan/Budgeting* (Resource Allocations)	High/Medium Corporate	Low Corporate	
Internal Responsibility Contract	High Corporate	Medium Corporate	
Management of Interdependencies* (Transfer Pricing)	Corporate	Medium Corporate	
Control Influences :			
Organization Control*	Financial	Moderate Financial	
Agreeing Objectives*	Tight Financial	Moderate Financial	
Monitoring Results*	Tight Financial	Moderate Financial	
Rewards & Incentives*	Financial	Moderate Financial	

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence		
	Tight Strategic	Tight Financial	
High Corporate	(Strategic Programming)	(Financial Programming)	
Medium Corporate		[Pre-1992]	
Low Corporate	(Strategic Control)	(Financial Control)	

# Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai No.2 Cotton Mill (SCM2) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting from "Financial Programming" (Pre-1992) to the boarder of "Financial Control" (Post-1992) which indicates the change is not very significant.

28 February 1995

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

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Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)
Research Title : "Responsibility Accounting In China"

Report Title : Data Analysis 15
Report Date : 31 March 1995

Introduction: A total number of 22 State-owned Enterprises (SOE) have been visited during the period from September 1991 to December 1993 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

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Name of SOE: Shanghai Xinhu Iron & Steel Works (SXSW)

Staff Interviewed: Mr Ni Zhong Fong (Deputy-Chief Accountant)
(No. of years in this enterprise: 4 years)
Mr Zhang Ke Qin (Financial Accountant)

(No. of years in this enterprise : 27 years)

Dates of Visits : First Visit - 11 September 1993 Second Visit - 7 September 1994 Third Visit - 12 January 1995

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# Section 1 : History & Background

Shanghai Xinhu Iron & Steel Works (SXSW) is a wholly state-owned enterprise specializing in producing medium and small sized iron and steel products. Founded in 1939, SXSW, after over 55 years of development, has become one of the key enterprises under the Ministry of Metallurgy and a large profit making enterprise in Shanghai. SXSW obtained the import and export right or autonomy from the government at the end of 1994.

Employing 5,600 workers and staff and covering an area of 204,000 square metres, SXSW produces 600,000 tons of steel, 400,000 tons of billet and 12,000 tons of rolled steel annually. SXSW maintains eight workshops including billet mill, five shaped steel rolling mills, one rolled steel casting workshop and one processing workshop. SXSW was awarded the title of First-Class Enterprise of the State and National Labor Day (1st of May) Certificate of Merit in 1990.

SXSW manufactures 10 general categories of products with 1,500 different specifications for building construction, aerospace, ship building, light industry, textile, farm machinery, automobile and other industries. Over 150 specifications are the only steel products manufactured by SXSW in China. SXSW has been invested heavily in research and development in order to launch about 10 new products every year. Some of the products are exported to over twenty countries and regions in the world. From 1973 to 1993, total amount of 440,000 tons of rolled steel had been exported and US\$154 millions had been earned. However, the export quantity has been declined since 1993 because the average selling prices are higher than the steel products manufactured by other Asian countries such as Japan, Korea, Taiwan, Malaysia etc.

Over 85% of the output have achieved international standards. All major products are awarded top quality titles conferred by Shanghai Municipal Government and Ministry of Metallurgy. The window's frame steel products have won the State Quality Recognition Certificate. Thread (Deformed) bar, round bar, window's frame steel, U-bar and angle bar have been honoured with the title of "Shanghai Top Quality Export Commodity".

With strong technical expertise and advanced manufacturing technology, SXSW has kept on upgrading its production facilities. At present, SXSW is installing an annual 300,000-ton model steel and round bar production line, importing a newest continuous rolling mill from Pomini Company of Italy and an electronic automatic control system from ABB Company of Sweden, which are expected to start production in 1995. SXSW is committed to satisfying its customers with products of more variety and higher quality.

The major 10 categories of SXSW products are :

- Rolled Steel (i.e. seamless steel pipe, thin plate)
- (2) Window's Frame Steel (for buildings)
- Deformed (Thread) Bar (for building construction) (3)
- Steel for automobiles and farm tools (4)
- (5) Steel for spinning and weaving machines
- (6) Steel for standard parts
- Steel for sewing machine (7)
- (8)
- Steel for electrical appliance Steel for aviation and ship building
- (10) Other section and figured bar steel \_\_\_\_\_\_\_

#### Section 2 : Legal Form & Organisation Structure

Shanghai Xinhu Iron & Steel Works (SXSW) has been transormed into a wholly state-owned enterprise since the early 1950s and there is no plan to transform into a shareholding enterprise in the next five years because it is a government policy to keep a macroeconomic control over the steel industry in China.

Since SXSW is a wholly SOE, it is under the administration of the Shanghai Municipal Government and the Shanghai Metallurgical Bureau. Before the economic reforms started in 1979, the central planning system dictated all the planning and control (long-term and short-term) in the SOEs. Therefore, SXSW was just acted as a vehicle (or cost centre) to carry out the activities according to the commands directed from the Municipal Government and the Metallurgical Bureau. Since the economic reforms started in 1979, instead of dictatorship from the authorities, the top management of the SXSW have been involved in the 5-year long range plan even though SXSW for most of the time had to take the directives from and give in their negotiations to these two authorities.

The situation has been changing rapidly since 1992. municipal government only appoints the general manager and party leader of SXSW and oversees the major development and projects, mainly long-term ones, recommended by the SXSW. On the other hand, the Metallurgical Bureau is resolving into a "Trade Association" (something like a semi-governmental body) and its objective is trying to maintain a balance of the overall iron and steel production quantities and varieties produced by the plants located in Shanghai. In addition, it is providing market information for the steel industry in Shanghai in order to help those enterprises to sell their products to the right market at the right time.

Gradually, these authorities have been taking away their visible hands from and leaving more operating autonomy to the local steel industry since 1992 after the pronouncement of the legislative changes.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

Under the General Manager, who has an Enterprise Management Office, the organisation structure of SXSW can be divided into the following four Divisions:

- (1) Production Division (headed by one Deputy-General Manager)
  - 1.1 Production Planning Department (headed by Deputy-Chief Economist\*)
    - 1.2 Production Technical Department (headed by Deputy-Chief Engineer\*)
    - 1.3 Quality Control Department
    - 1.4 No.1 Refine Rolling Factory#
    - 1.5 No.2 Refine Rolling Factory
    - 1.6 No.3 Rolling Factory
    - 1.7 No.1 Steel Factory
    - 1.8 No.2 Steel Factory
    - 1.9 No.3 Steel Factory
    - 1.10 No.4 Steel Factory
- (2) Operation Division (headed by one Deputy-General Manager)
  - 2.1 Operation Planning Department
  - 2.2 Purchasing Department
  - 2.3 Sales Department

  - 2.5 Internal Audit Department
- (3) Support Division (headed by one Deputy-General Manager)
  - 3.1 Repair & Maintenance Department
  - 3.2 Energy Supply Department (electricity, gas & water)
- (4) Administration Division (headed by one Deputy-General Manager)
  - 4.1 Personnel Department
  - 4.2 Manpower & Wages Department
  - 4.3 General Affairs Department
    - 4.3.1 Education & Training
    - 4.3.2 Safety & Security
    - 4.3.3 Estate & Quarters
    - 4.3.4 Canteen
    - 4.3.5 Medical
- \* The deputy chiefs are one rank lower than the deputy general managers.

# Each production factory has a few production sections, support sections, 1 repair and main tenance section and 1 administration section (including personnel, wages, accounting and statistics).

@ All the production factories and service departments are treated as cost centres.

SXSW had a total of 5,600 employees (4,000 workers) and 1,800 retired employees at the end of 1993. It is classified as a "Medium SOE" in China.

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#### Section 3: Financial Indicators

Total assets : RMB 540M (historical cost)

Turnover : RMB 946M (1992) : RMB1,335M (1993)

: RMB1,236M (1994)\*

: RMB1,300M (1995 forecast)

Income before tax : RMB 15M (1992) - 1.6% of sales : RMB 19M (1993) - 1.4% of sales

: RMB 13M (1993) - 1.4% Of sales #

: RMB 10M (1995 forecast)

Income tax rate : 33%

\* The 7.4% decrease in turnover (including 17% of VAT) was mainly due to the government macro-economic control policies (i.e. contraction of certain industries and availability of capital) and keen competition under the market economy.

# The decrease in net profit margin was mainly due to reduced selling prices (affected by cheaper imported products) and high inflation (affected the cost of production). Another reason to cut selling prices was to reduce inventroy and obtain cash to repay the long-outstanding creditors. Contrary, SXSW had a total of doubtful debts (accounts receivable) of RMB200M at the end of 1994

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# Section 4: Economic Responsibility Contract System (ERCS)

Shanghai Xinhu Iron & Steel Works (SXSW) signed its first 5-year Economic Responsibility Contract (ERC) with the Shanghai Municipal Government in 1989. The major target set in the ERC was income before tax of RMB2.4 million in the first year and then an annual compound growth rate of 5%.

The ERC was ceased at the end of 1993. Since 1994, SXSW has been subject to income tax of 33%.

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# Section 5 : Planning System

#### 5.1 Organisation Structure

The guiding theme of the structure of Shanghai Xinhu Iron & Steel Works (SXSW) is simplicity and accountability. It goes to some length to create stand-alone business units e.g. the 7 factories as independent responsibility centres that are run by individual factory managers with clear lines of responsibility. SXSW goes further in decentralizing responsibility such as initiating the annual budget or internal responsibility contract and setting up of sections within individual factory. The production, manpower and cost control responsibilities lie with the factory managers. Section, group and sub-group leaders are seen as extensions of each individual factory.

The selections and appointments of the factory managers and a few key positions (e.g. senior engineers) are controlled by the headquarters' top management. Furthermore, any major changes of the organisation structure must seek approval from the headquarters. More autonomy of internal management and operation has been delegated to the factory managers since 1992.

(Please refer to Q5.1.1-4 on the questionnaire extracts in Appendix 1.)

In summary, SXSW has decentralized structures in which the individual factories report directly to the headquarters, and the factory managers play a linking and surveillance role between the factories and the headquarters.

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

#### 5.2 Review Process

Since 1992, Shanghai Xinhu Iron & Steel Works (SXSW) has implemented a more formal and rigorous planning process for reviewing, discussing and sanctioning the annual plan and internal responsibility contract (IRC) of each factory. This process starts in October each year and ends in February the next year.

After intensive internal and external environmental studies by the general manager with his deputy managers and three chiefs, a set of preliminary sales and production targets will be determined. Other than these quantitative targets, many other qualitative targets (described in section 6.3 "monitoring results" below) using as guidelines are also laid down by the top managment.

The general manager will provide these quantitative and qualitative guidelines to al'l the factory and department managers for them to initiate their own annual plans or budgets in which some key criteria will be be used as the measurement yardsticks in the subsequent agreed internal responsibility contracts.

The Enterprise Management Office with the assistance of the Accounting and Finance Department in the headquarters will validate and consolitate all the individual annual plans or budgets into a master plan or budget for submission to the top management for review. Then, formal and informal meetings and discussions will be held between the headquarters and the factories and departments either collectively or individually. This iterative exercise will be finished until all the plans, budgets and contracts are mutally agreed in late January and subimitted to the annual general meeting (attended by representatives from all levels of employees) for approval after the Chinese New Year in February.

Before 1992, the sole purpose of this annual budget review process was to agree what should be done over the next 12 months within the context of a few key indicators e.g. production volume and sales as agreed between the Shanghai Municipal Government and SXSW. Since 1992, under the legislative changes and market economy promotion, SXSW has been given higher automomy in formulating and reviewing its strategic directions. As a result, the production factories are encouraged to extend their planning horizon beyond one year but the contents are still mainly production and financial oriented. Therefore, the headquarters has less involvement in the factory level planning decisions, but without reducing their tight financial control.

(Please refer to Q5.5.2 , Q5.5,6 & 5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

#### 5.3 Strategic Themes, Thrusts and Suggestions

Shanghai Xinhu Iron & Steel Works (SXSW) promulgates the following three strategic themes as the spirit of the enterprise:

- (1) Unity of all the employees.
- (2) Truthfulness to customers, employees and other outsiders.
- (3) Innovation of product and management quality.

SXSW also spells out clearly the following strategic thrust in its enterprise brochures and on many walls:

- Adjust the product mix according to market needs.
- (2) Enhance the product quality.
- (3) Develop new products.
- (4) Develop existing and new markets.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

Technological improvement (long- and short-term), efficiency enhancement and capacity expansion (described in next section) are the strategic thrusts that SXSW always emphasizes in the planning process. There have been significant manufacturing technology and production efficiency advancement since the late 1980s by importing new plants and machines for the European Countries and the USA. These production facility renovations have always been receiving top priorities in the capital appropriation budget which is formed an integral part of the annual budget.

The above strategic theme and thrusts are initiated by the headquarters which has a positive role to play in creating the strategic plans with the individual factories. However, since 1992, the factory managers have been encouraged to make strategic or tactical suggestions to realise these themes and thrusts in both short- and medium-term i.e. suggest capital investment projects.

Before 1992, the top management in SXSW from time to time made suggestions on specific issues relating to the planning review process such as production quantity and mix amendments, and material and energy consumptions. The headquarters followed financial indicators and performance closely on a monthly or quarterly basis and were quick to make suggestions if they did not match with the overall long- and short-term plan. To facilitate the implementation of the legislation in 1992, the headquarters has left more freedom to the factory manager to adjust their planning and operation as long as it would not deviate much from the long-term plan and the annual budget in aggregate.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.4 Long-Term Plans (Resource Allocation)

Shanghai Xinhu Iron & Steel Works (SXSW) has been following the "Central 5-Year Planning Policy" of the government since the 1950s. The early 5-year long-term plans focused mainly on the production volume as directed by the government without paying due regards to the efficiency, profitability and market demand. After starting the economic reforms in 1979, these factors have been taken into account. In the current 5-year plan (1991-1995 inclusive), the following strategic directions have been laid down. Some of them will be carried forward into the 9th 5-year long-term plans (1996-2000).

# (a) Plant Relocation

As part of the environmental protection planning, most of the iron and steel enterprises located in the city have to be moved to the suburb districts of Shanghai. Since 1994, SXSW has been relocating part of its production lines to the northeastern suburb which requires substantial sources of capital coming from government investment and bank loan.

# (b) Product Differentiation and Diversification

The improvement of product features and varieties to match the changes of market demand (i.e. construction industry) under the present open-market economy is one of the major strategies. Since 1990s, SXSW's R&D can develop about 10 new products to replace the declining products. In parallel, improving the product quality is another successful factor to maintain and expand the market share.

# (c) Production Technology and Facility Enhancement

SXSW has phased out all the production plant and machinery purchased during the 1940s and 1950s. On the other hand, advanced and improved production plants and facilities have been imported from the European Countries (i.e. Italy in 1995) and the USA since the late 1980s. Further enhancements will be made in No.2 and No.4 Steel Factory in order to maintain an annual total output of 600,000 tons. On the other hand, this long-term strategy can improve the production efficiency, product quality and material consumption.

# (d) Merger and Takeover

Since 1993, SXSW has invested over RMB400M (including RMB100 long-term bank loan in 1995) to takeover a few small iron and steel factories located in the northeast suburb of Shanghai in order to phase out the old production lines in

the original plant which is the government policy for the reason of new town planning and environmental protection. This strategy will continue in the 9th 5-year long-term plan (1996-2000) so as to maintain the total production capacity at a level of 700,000 tons.

# (e) Production Capacity

The production capacity of SXSW was dropped from 600,000 tons in 1993 to 510,000 tons in 1994 due to market condition and inflation although the government via the bureau has implemented an economic policy to purchase the outputs from the steel industry at lower prices and sell them the required industries. SXSW is planning to revive the annual production capacity to 600,000 tons in the next 5 years mainly through the long-term strategies described in (a), (b), (c) and (d) above. In addition, cost reduction such as laying off redundant employees is another important factor.

# (f) Sources of Capital

In 1994, the total iron and steel output in China was over 93 million tons in which 20 million tons were stockpiled because the product mix did not match with the changes of demand due to macro economic control measures implemented by the government since July 1993. As a result, over 20 million tons of iron and steel products were imported from the USA, Japan and Korea at lower prices than the national prices. In order to compete with the foreign counterparts and clear the stock, the average price of iron and steel products was dropped from RMB4,000 per ton to RMB3,000 per ton at the end of 1994. Ultimately, some iron and steel enterprises incurred losses in the same year.

If the iron and steel industry has to change the product mix according to the market demands, then heavy capital investments will have to be made to renovate the production facility and equipment. However, this industry has been suffering from the tight capital control by the government via the banking system as one of the 12 macro economic control measures imposed since July 1993 because a lot of capital was invested into the expensive real estate (office and residential buildings) and the overheated stock exchange. To resolve this vicious circle problem, it is hoped that the government will release appropriate capital funds at more favourable terms for the iron and steel industry in early 1995. SXSW is actively searching different sources of capital to finance the projects stated in (a) - (d) above and to support the working capital (inclduing RMB200M short-term bank loan in 1995) as well. The government returned RMB200M of VAT and income tax to SXSW in 1993 and 1994 as a means of capital investment.

# (g) Market Penetration

Since early 1990s, SXSW has established some sales agencies in different big cities in order to promote various products. Furthermore, the sales personnel are dividied into different geographical locations to provide support to the sales agents and visit them on a regular basis.

#### (h) Computerisation

At present, stand-alone personal computers are employed by individual department and production factories without any For example, the accounting and finance connections. department has been using a personal computer for wages, financial reporting and cost analysis only without any There is a wrong conception that some SXSW's integration. employee believe computerisation will lead to more redundant staff, but the top management have realised the importance of utilising computers. Provided sufficient fund is available, SXSW will purchase a mini-computer and establish a computer centre in the next few years. At the same time, training and education will be provided to different levels of management staff so that the ultimate aim of setting up a LANS system can be materialised in 2000.

#### (i) Manpower and Training

The abolishment of "Three Iron Bowls" (iron employment, iron position and iron wages) or "Life-Long Employment" can not be effectively implemented in SXSW because cutting off, let's say, 20% of the labour force will create many social problems in the light of the current insufficient employment social welfare and benefits existed in China. (Please refer to Q5.2.1-3 on the questionnaire extracts in Appendix 1.)

One way to tackle this headache problem ("Big Rice Pot") is to transfer the excess workers (about 200 at the end of 1994) to the newly established "Service Enterprises" (Third Enterprises) within the SXSW organisation structure. These service enterprises include restaurants, groceries, trading and repair service so that they can be self-financed on their own. SXSW is planning with care to expand the third or tertiary enterprises, which can actually creat wealth and be self-financed, in order to absorb more redundant employees. Another means to reduce excess employees is to encourage early retirement (age of 45-50). Of course, training and education are indispensible planning elements for SXSW in order to crystalize its strategic themes and thrusts in long-term.

# (j) Cost Reduction

Since the promulgation of "market economy" in 1993, basically the selling prices of over 95% commodities and services in China are determined by supply and demand factors. In order to be profitable, competitive or survive, cost reduction is a must. All the above long-term plans can directly or indirectly achieve this aim.

Before the 1990s, the 5-year long-term plans were compromises between the local government and the SXSW without any involvement from the middle management from the factories. The current 5-year plan (1991-1995) has been formulated through substantial analysis, evaluation and discussion among the top management in the headquarters and the senior staff of the production factories. However, SXSW anticipates that it is very difficult to formulate the 9th 5-year plan (1996-2000) because of a lot of fast-changing external factors such as macro-economic control, market economy, enterprise reform, credit control, triangle (doubtful) debts, etc.

As a result, the long-term plan is reviewed at least annually and suggestions may be directed by the headquarters because of government's macro-policy changes or market condition changes. However, the factory managers seldom initiate changes in their respectively plans. They are mainly concern how the milestones set in the long-term plan will affect their next year plans or internal responsibility contracts which will have tight financial surveillance coming from the headquarters at least on a monthly basis.

Therefore, the long-term planning and review process is using a top-down approach in the belief that the top management in the headquarters have the better experience and knowledge of the external environment and even the internal operations of the factories.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, from no involvement in long-term planning to some participation by the factory and department managers (middle management), it is a big step of advancement signifying that their participations are an important part of the responsibility accounting system through which they will be assessed and rewarded.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short-term planning policy adopted by Shanghai Xinhu Iron & Steel Works (SXSW) is "production determined by sales" and "sales determined by targeted profit before income tax" which means profit before tax growth (either positive or zero) as agreed with the Shanghai Metallurgy Bureau is the initial driving force of all the activities. Reference should also be made to the 5-year plan especially to estimate what the sales order potential will be for the new product and market situation in the next year. However, the promulgation of market economy is still in its infant stage, therefore, it is difficult to predict the sales mix and quantities which are subject to many external variables. As from October 1992, SXSW has employed the annual planning or budgeting process as described in section 5.2 (Review Process) above.

Since October 1992, the production factory managers have been involved intensively in this planning process, in particular determining the production quantity, sales mix, material and energy consumptions, which they believe to be important in setting and negotiating the internal responsibility contracts with the general manager. The other division and department managers have also participated carefully in devising their income and expense budgets which they would be measured against as performance yardsticks.

(The above annual planning or budgeting process is summarised in a flowchart as shown in Appendix 2.)

In view of the rapid changing market conditions such as demand, supply and inflation of raw materials in the last two years, the annual planning review period has been shortened from quarterly to monthly although the formal performance measurement and group bonus calculation are done within one week after the end of each quarter. The general manager and all the factory and department managers will hold a formal meeting at the beginning of each month to review the financial performance against the annual plans. Amendments or revisions are made on a quarterly basis according to the significance of the factors affecting the annual plan.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism transformation legislation and the market economy have given SXSW more freedom to plan ahead. The municipal government and bureau have almost compeltely devolved the short-term planning autonomy to SXSW, except to agree on the profit targets as agreed in the ERC.

The top management have involved the middle management or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long-term strategic plan, and on the other hand, it is an important motivational factor for the factory managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence : shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

#### Internal Responsibility Contracts (IRC) 5.6

Shanghai Xinhu Iron & Steel Works (SXSW) established its IRC system in 1988. The following was an IRC of a production factory in 1993.

Factory : No.1 Refine Rolling

Duration : 1 January to 31 December 1993

Guidelines

The purposes of entering into this IRC are :

- to accomplish the whole enterprise's production targets; (1)
- to motivate the effectiveness and efficiency of workers; (2)
- (3)
- to motivate the initiation of supporting staff; to enhance the management and administration efficiency; (4)
- to define the economic responsibilities of various parties; (5)
- to link up the employee's reward with the enterprise's (6) profitability and government benefits.

#### Targets

- Quality is a "Veto Factor". If the factory cannot achieve (1) the required quality standards, bonuses will not be awarded.
- (2) Production targets: 194,500 213,000 tons.
- Production bonus is awarded on a quarterly basis and (3) determined as follow:

Actual output in tons (A)	Bonus per employee per month
A < 194,500	No bonus
194,500 < A < 203,750	RMB10
203,750 < A < 213,000	RMB20
A > 213,000	RMB30

- (4)If the following targets cannot be attained, production bonus as determined in (3) above will be deducted accordingly:
  - Product Quality : 35% (details refer to 1989 Quality Assurance Regulations)
  - Input/Output Ratio : 20% 4.2
  - Cost of Production : 20% 4.3 (according to the standard costing system monitored by the accounting and finance department)
  - 4.4 Safety Production (minor injury rate > 1.5/1,000 employees, deduct 10% -50% bonus; serious injury = 1, deduct 50% bonus; fatal accident = 1, deduct 100% bonus)
  - Energy Consumption : 10% 4.5 (Gas - 6%; Electricity - 3%; Water - 1%)
  - New Product Success : 5% (trial production) 4.6
- (5) If the actual output exceeds the upper target (i.e. 213,000 tons) and simultaneously the input/output ratio can be achieved, then the following "Extra-Output Bonus" per employee per month will be awarded accordingly :

Factory	For every ton exceeded Up Standard Input/ Output Rate	pper Target at : Ideal Input/ Output Rate
No.1 Refine Rolling	RMB3	RMB 5
No.2 Refine Rolling	RMB6	RMB10
No.3 Rolling	RMB3	RMB 5
No.2 Steel	RMB6	RMB10
No.4 Steel	RMB6	RMB10

#### Evaluation

- One-twelves of the annual production bonus will be awarded (1) on a monthly basis. The production performance is assessed on a quarterly basis and any over-awarded bonus will be deducted in the subsequent months after evaluation. Final assessment will be done at the year end.
- (2) Extra-output bonus is evaluated and determined on a monthly cummulative basis. The shortfall of last month will be loaded into this month's or subsequent month's actual production.
- (3) The monthly and quarterly evaluations are performed by the Operation Planning Department and reports should be submitted to the Enterprise Management Office for validation and Manpower & Wages Department for bonus calculation on or before 5th and 7th in the next month respectively.

- (4) This contract is checked and evidanced by the Internal Audit Department.
- (5) 2 copies of this contract are kept by the factory (contractee) and 18 copies are retained by the headquarters (contractor).

Since 1992, the IRCs have been initiated by the factories during the budgeting process (October - February). After back and forth discussions and negotiations with the headquarters, the IRCs are agreed and signed by the general manager and the factory managers. In the same year, the factory managers started to sign second level of IRCs with their own production sections or production lines without any involvement from headquarters. The top management believe that this second-tier IRC system can further motivate the lower level of management and hold their accountability to the factory managers.

The IRCs are reviewed quarterly in parallel with the budget review but both the headquarters and the factories are trying to avoid adjusting the targets unless there are significant changes affecting their validity. Because frequent adjustment to the targets will cause confusion to all levels of management.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the headquarters have delegated more freedom to the factory managers in initiating and negotiating their own IRCs, and also the full autonomy to breakdown the responsibility or targets into the second-level of IRCs to be shared by their subordinates.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

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Management of Interdependencies means the central influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions needed to be managed. Cross-supply and transfer pricing between the factories, and exploitation of a shared resource are examples that happened in Shanghai Xinhu Iron & Steel Works (SXSW) that need headquarters' intervention.

As illustrated in the organisation structure in section 2 above, the six of the seven manufacturing factories are in a continuous process and have some interdependencies in the following manner:

- No.3 Rolling Factory [casted & rolled iron goto (2) (6)] (1)
- No.1 Refine Rolling Factory [output for sales]
  No.2 Refine Rolling Factory [output for sales]
  No.2 Steel Factory [output for sales] (2)
- (3)
- (4)
- (5) No.3 Steel Factory [output for sales]
- (6) No.4 Steel Factory [output for sales]
- No.1 Steel Factory\* [output for sales]
- \* No.1 Steel Factory is a stand-alone manufacturing plant transforming semi-finished inputs into customer's products.

Since all the production factories are treated as cost centres and the sales of intermediate products (both quantities and prices) are controlled by the headquarters' sales department, therefore, all the internal transfer prices are based on standard costs without any profit mark-up. In this respect, material consumption and cost controls are crucial in order to avoid unfairness in internal transfers.

(Please refer to Q5.9.1-12 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence : shift from "Very High-High Corporate" to "High Corporate" since 1992. \_\_\_\_\_\_

Section 6 : Control System

#### Decentralisation and Control

As far as the organisation structure is concerned, Shanghai Xinhu Iron & Stell Steel Works (SXSW) has decentralised its production function into 16 semi-autonomous factories or responsibility centres according to the nature of production in each factory. The factory managers can decide on their own organisation structures, staffing and their roles and functions, interactions between their sub-units (sections and groups).

The IRC has agreed the target number of employees in each factory which is an important figure to calculate the gross wages to be paid out per annum. However, within the limit of the gross wages, a factory manager has the autonomy to increase (unlikely) or decrease its manpower. If some redundant staff resign or transfer to other factories and "third enterprises", then less employees will share the fixed amount of gross wages (or a portion of the excess will be transferred to a designated welfare fund for that factory).

The factory managers are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of employment with any staff is a difficult task as explained in section 5.4(i) above.

The major control mechanisms employed by the headquarters to control the performance of the factories are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are production quantity and cost control as set in the IRCs, although some other economic and qualitative targets (non-financial) are employed, however, they are subsidiary ones which do not have very significant effects on the group bonus calculation. But the infringement of veto factors (i.e. safety and quality) will have substantial reductions in the group bonus.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are dominated in the control mechanisms used in the decentralized operation of SXSW.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.2 Agreeing Objectives

Shanghai Xinhu Iron & Steel Works (SXSW) sets similar objectives for its factories: factory managers must meet their agreed budget figures or IRC targets for the year and improvement performance year on year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. SXSW is trying to set for the next year a stretching standard of performance that factory managers are committed to achieve.

Two kinds of pressure are put on factory managers at the annual or quarterly review: to submit a budget they can achieve; and at the same time, to aim for results that are, if possible, better than the previous year's. They fully understand that their group bonus are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. Therefore, the headquarters does not tell the factories what their targets (e.g. production quantities and costs) should be, but tries to "energize" the ambitions of the factory management teams to do better year by year.

In addition to the formal annual or quarterly review process, many ad hoc meetings and informal communications are made between the headquarters and factories, and also among the factories themselves.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence : shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

6.3 Monitoring Results (Reporting & Performance Measurement)

Shanghai Xinhu Iron & Steel Works (SXSW) employs both quantitative and qualitative yardsticks as stated in the annual plan and IRC to measure the performance of production factories and other servicing departments. As mentioned in the "review process" (section 5.2) above, the top management at the beginning of the annual planning process (i.e. October) will lay down the following performance guidelines (e.g. 1990) :

#### (1) ERC Targets

- 1.1 Production Quantity & Value

  - 1.1.1 Production Quantity 606,000 tons
    1.1.2 Production Value RMB380 million
- Economic Efficiency 1.2
  - 1.2.1 Tax and Profit - RMB85 million
  - 1.2.2 Production Value Per Employee RMB83,000
  - 1.2.3 Working Capital Turnover 40 days
    1.2.4 Production Completion Rate 100%
- 1.3 Consumption & Cost Control
  - 1.3.1 Input : Output Ratio 1.000 : 0.984
  - 1.3.2 Cost Reduction Per Employee RMB1,000

#### Safety 1.4

- 1.4.1 Safety Production (per month) 0% death
  - 0% serious injury
  - 0.1% injury
    - 0.3% minor injury
- 1.4.2 Equipment Minor Problem Rate 10%
- 100% 1.4.3 Employee Safety Training
- Capital Projects 1.5
  - 1.5.1 Electric Furnance Renovation before 1 July
  - 1.5.2 No.1 & 2 Open-Air Pre-Heat Furnance before 15 June 1.5.3 Rolling Steel Refining Facility before 31 December

- (2) Quality Targets
- 2.1 Product Quality
  - 2.1.1 Window Frame's Steel upgrade from silver to gold medal award
  - 2.1.2 Top Quality Products 50%
- 2.2 International Standard
  - 2.2.1 International Standard Products 15%
  - 2.2.2 Marginal Standard Products 809
- 2.3 Product Passing Rate
  - 2.3.1 Internal Inspection Rate 99.5%
  - 2.3.2 External Inspection Rate 90%
- (3) Research & Development Targets
- 3.1 Research Project
  - 3.1.1 Complete 3 Research Projects
- 3.2 New Product
  - 3.2.1 Develop 6 New Products
- 3.3. Technology Project
  - 3.3.1 Complete 2 New Technology Projects
- 3.4 Technical Problem
  - 3.4.1 Solve 10 Production Technical Problems
- 3.5 QC Activity
  - 3.5.1 QC Training 6.5 per 1,000 employees
  - 3.5.2 QC Proposal 2 proposals accepted by Bureau
  - 3.5.3 QC Group 2 groups recognised by Bureau
- 3.6 Technical, Management & Others Proposals leading to a total savings of RMB7 million
- 3.7 Quality Management
  - 3.7.1 Enhance process quality control and maintain steady output quality
  - 3.7.2 Achieve international standard on new product line inspected by the government
  - inspected by the government
    3.7.3 Implement QC responsibility system to individual production and service departments
  - 3.7.4 QC responsibility should be assigned down to individuals
  - 3.7.5 Identify the key elements in QC management system and fully documented according to GB/T10300 standard
  - 3.7.6 Implement QC costing system
  - 3.7.7 Improve the quality of inspection system
  - 3.7.8 Implement process QC system and documentation

# (4) Management Targets

- 4.1 Energy & Environment
  - 4.1.1 Save 1,000 tons coal consumption
  - 4.1.2 Average coal consumption per ton of steel < 73.8 kg
  - 4.1.3 Oil tank renovation of No.2 Steel Factory
  - 4.1.4 Wastage disposal passing rate > 76.6%
  - 4.1.5 Implement 15 environmental protection projects
  - 4.1.6 Complete 11 green projects
- 4.2 Facility Management
  - 4.2.1 Implement the <<State-owned Industrial Enterprise Facility Management Regulations>> enacted by the government
  - 4.2.2 Amend and implement the facility management system designed by the enterprise
  - 4.2.3 Facility availability rate > 98%
  - 4.2.4 Casting & rolling machine working rate > 90%
  - 4.2.5 Serious facility breakdown = 0%
  - 4.2.6 Complete all major repair and maintenance projects
- 4.3 Operation Management
  - 4.3.1 Balancing and smoothing production schedules
  - 4.3.2 Maintain "Shanghai Civilized Enterprise" award
  - 4.3.3 Maintain "Shanghai Hyginic Enterprise" award
  - 4.3.4 Achieve "Clean Enterprise" title
  - 4.3.5 Strictly observe the enterprise rules & regulations
  - 4.3.6 Material & consumable supplies in right quantities and at right time
  - 4.3.7 Complete, accurate and concise original records
  - 4.3.8 Maintain reasonable and better standard posts and number of employees
- 4.4 Section & Shift Management
  - 4.4.1 Standardize section and shift management system
  - 4.4.2 Define duties and rights of section and shift in the production factories
- 4.5 Modern Management
  - 4.5.1 Implement management by objective system
  - 4.5.2 Develop computer control in on-line data collection, management information network system, quality and safety software
  - 4.5.3 Establish modern management performance awards
- 4.6 Financial Control
  - 4.6.1 Enhance financial control and achieve Grade 2
    Financial Control Award
- 4.7 Employee Welfare
  - 4.7.1 Allocate 60-80 quarters to employees
  - 4.7.2 Renovate the assembly hall

- 4.7.3 Improve the canteen service and food quality
- 4.7.4 Enhance medical facilities
- 4.7.5
- 100% adhere to one child policy Improve kindergarten and baby care facilities 4.7.6
- (5) Political Targets
- 5.1 Enterprise Politics
  - 5.1.1 Enhance the political mind of employees
  - Improve the political environment 5.1.2
- 5.2 Democratic Management
  - 5.2.1 Major policies must be decided by the Employee Representative Meeting
  - 5.2.2 Enhance employee consultation system
  - 5.2.3 Implement the resolution passed in the Employee Representative Meeting
- Ethical Conduct 5.3
  - 5.3.1 Implement the codes of conduct
  - 5.3.2 Design the ethical conduct evaluation system
  - 5.3.3 Encourage management to praticipate in physical work
  - 5.3.4 Supporting departments are providing services to production factories
  - Comply with economic laws and regulations 5.3.5
  - 5.3.6 Protect enterprise legal rights
- 5.4 Management Standardisation
  - Design and implement systems for standardisation for 5.4.1 the whole enterprise
  - 5.4.2 Determine working procedural standards
  - Suppliment, amend and enhance management work 5.4.3 standards
  - Document all the standardised system and evluate by 5.4.5 external experts
- (6) Lont-Term Targets
- 6.1 Education & Training
  - 6.1.1 Political training > 20% of employees
  - 6.1.2 Intermediate technician training > 8% of employees

  - 6.1.3 Senior technician training > 1% of employees
    6.1.4 Management staff training > 15% of employees
- 6.2 Medium- & Long-Term Planning
  - 6.2.1 Amend 1990-92 Enterprise Management Plan
  - 6.2.2 Amend 1990-95 Enterprise Development Plan

Each of the above target is clearly assigned to respective departments with two levels of responsibility - (A) is primary responsibility and (B) is secondary responsibility.

Shanghai Xinhu Iron & Steel Works (SXSW) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the headquarters monitor results on a monthly and quarterly basis. All the 7 factories submit monthly results directly to the headquarters on standard forms. They are also required to submit key production figures to the headquarters on a weekly basis.

The monthly condensed report format is unique for each factory. The contents are corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly, quarterly and yearly accumulative actuals are compared with the budgets and the yearly accumulative actuals are also compared with the last year accumulative actuals.

These monthly reports are compiled, by the management and accounting staff in each individual factory who have staff relationship with the headquarters' accounting and finance department. Any variances plus or minus 5% will be highlighted in order to bring the attention to the factory managers and the top management in the headquarters.

Each monthly report must be reviewed and signed by the factory manager before submitting to the Enterprise Management Office in the headquarters for vetting and consolidating. The accounting personnel in the headquarters will rearrange and consolidate some of the financial and non-financial figures to generate a master report with similar comparisons with budgets, IRC and actuals of last year. Then the master and individual monthly reports are submitted to the top management for review.

For any serious adverse variances shown on any report, the general manager or deputy-general managers will contact the respective factory manager or his subordinates to dig out the underlining reasons or ask him to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the top management and factory managers, the general manager will put forward the monthly factory reports for open disscussion. The factory managers may be asked to explain briefly the significant variances. The unsatisfactory results will sometimes make the factory managers embarassed if they were due to the results of management fault. Consistent failure (say over 10 months) the targets which are controllable by a factory manager, probably he will be replaced by somebody else. It is very common in an SOE to see a factory manager step down from his office and go back to the shop floor and become a technician or worker again.

On the other hand, the favourable results will be openly praised by the top management and sometimes a special bonus will be announced in the same occasion.

After the monthly meeting, all the approved results will be passed back to the headquarters' manpower and wages department for calculating the group bonus of each factory for last month. The group bonus result sheets will be sent to the accounting and finance department for verification before submitting to the general manager for final approval. Then the accounting department will process the bonus payments at the end of the month (i.e. this month pays bonus for last month).

SXSW views a budget or IRC as a contract between the headquarters and the factory. The monitoring process is used to maintain the pressure for performance. Headquarters' close surveillance of results enables them to ensure that no factory goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget. Where the business is stable, this knowledge enables the headquarters to judge next year's budget without the elaborate planning processes. But when the business environment is unpredictable such as the steel industry experience in 1993, the headquarters may not be able to see the edge of the cliff or catch the factory manager before he hits the bottom. As a result, SXSW appears to avoid unstable products and markets, especially those with fierce competition.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Financial Control" since 1992.

# 6.4 Rewards and Incentives

The take-home pay of each employee in SXSW is mainly composed of three elements as broken down below :

(1) Basic Wages 40% - 30% (2) Bonus 40% - 45% (3) Allowances 20% - 25%

The average annual gross wages per employee was around RMB8,000 in 1993 and RMB10,500 in 1994. Under the fierce competition from the other steel works within the same Baoshan District (the second largest steel works in China - Baoshan Steel Works - is also located in this area), SXSW is expected to increase this average figure to RMB12,000 in 1995. In addition, the high inflation rate (21.7% overall in China in 1994) adds a lot of pressure to increase the remuneration for the workforce of SXSW.

Since 1994, SXSW has been using a "pointing system" to determine the basic wages. The points are calculated based on grade, seniority, qualification, technical skill and supervisory duty etc. The total point or score of individual employee will be multiplied by a "wages per point" factor which is adjusted according to the financial performance of the enterprise as a whole on a monthly basis. In the past, the increments from year to year are not substantial and the parity between a factory manager and a front-line worker is not great. Now this pointing system can differentiate the basic rewards between different types of works and employees. The "basic salary" paying to all the management and administrative staff in SXSW is very similar to the "basic wages" paid to the workers.

There are two portions for the "allowance". The frist part is determined by the Manpower and Wages Bureau of the Shanghai municipal government at least once in each year mainly for the purpose of combatting inflation in food, transportation, gas and electricity. The second part is decided by the SXSW which may include housing, meals, travel, child, attendance, overtime, inflation, stoppage, hair-dressing, festival gifts etc., which are trying to balance the relatively low basic wages or salaries and maintain a reasonable standard of living for the employees.

The calculation of "bonous", as described in the above sections, is based on the accomplishment of the IRC. The IRC signed between the top management and the factory manager will decide what level of group bonus will be given to the factory. Whereas, the IRCs agreed between a factory manager and his sections or production lines will be used as a basis to distribute that total amount of group bonus to the respective sections.

And of course, it is up to the section heads to award that lump sum of group bonus to his or her individual subordinates working in the section. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

The bonus determined for the management and administrative staff is based on the "monthly average bonus per worker in all the factories" multiply by an "individual index" according to different grades of staff, i.e.

General Manager	=	2.0
Deputy General Manager	=	1.8
Production Manager	=	1.6
Deputy Chiefs	=	1.6
Head of Department	=	1.5
Supervisor	=	1.4
Senior Clerk	=	1.2
Junior Clerk	=	1.1

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the Bureau will award a lump sum of "special bonus" to the general manager at the end of the year. But under no circumstance, the remuneration package of the general manager can be greater than three times the total earnings of a factory manager. This system is still in practice although the ERC was ceased at the end of 1993. If the annual profit before tax can achieve much better than the planned level, an "additional bonus" may also be awarded to all the employees and distributed in a way very similar to the monthly bonus.

One of the 57 clauses in the "SOE Mechanism Transformation Regualtions" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. However, as mentioned earlier in section 5.4(i), that the redundant employees will create many social problems in light of the current insufficient empolyment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Despite the fact that many employees voiced their adverse opinion against this new system in the Employee Representative Meeting (or AGM) held in February 1993 (which is supposed to the highest decision-making authority in a SOE with representatives from all levels of employees), SXSW decided to implement this contract employment system across the board in 1993. The contract durations will be various from one to three years subject to review and renewal. In addition to these employment contracts, SXSW has signed "in-post contracts" with most of the employees for periods from one to three years. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive wages, allowances and bonuses. Without such a contract, that employee is allowed to receive a basic monthly susidy of about RMB150. This measure may not impose a serious threat to the laszy employees, but it can motivate the marginal employees to work better.

In relation to the social welfare, since 1993, SXSW has been contributing 25.5% of the monthly gross payroll to the government for sharing the responsibilities of unemployment and retirement allowances. In addition, SXSW has to provide about 16% of the monthly gross payroll for various benefits such as medical and education. Furthermore, SXSW has to bear the pension and medical allowance for its retired employees (before 1994) which is a rather financial burden to the overhead expenditures.

As a result of too many redundant employees coupled with out-dated production facilities in most of the iron and steel enterprises in China, the productivity per employee is far lower than the steel industry in other Asian countries. Furthermore, the cost of manufacturing and selling prices are higher than the foreign counterparts, leading to substantial import of iron and steel products in 1993 and 1994 as mentioned in section 5.4(f) above. (Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, SXSW believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

# Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Shanghai Xinhu Iron Steel Work (SXSW) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	Very High/ High Corporate	Medium Corporate
Review Process*	High Corporate	Medium/Low Corporate
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High/Medium Corporate	Medium/Low Corporate
Internal Responsibility Contract	High/Medium Corporate	Low Corporate
Management of Interdepen- dencies* (Transfer Pricing)	Very High to High Corporate	•
	Before 1992	After 1992
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Financial
Rewards & Incentives*	Tight Financial	Moderate Financial

\* Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence	
	Tight Strategic	Tight Financial
High Corporate	(Strategic Programming)	(Financial Programming)
Medium Corporate		[Pre-1992]
Low Corporate	(Strategic Control)	(Financial Control)

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Shanghai Xinhu Iron Steel Works (SXSW) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been changed from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a very strong-form (very low corporate) of financial control style as described by Goold's and Campbell's Strategic Style.

Revised: 22 March 1996

### UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

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Post-graduate Programme: PhD in Accounting

: Professor Clive Emmanuel Supervisor

Student Name : Joseph Yau Shiu Wing (Hong Kong) Research Title

: "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 16 Report Date : 7 April 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate	Tight Strategic	Strategic Programming(1)
High Corporate	Tight Financial	Financial Programming(2)
Low Corporate	Tight Strategic	Strategic Control (3)
Low Corporate	Tight Financial	Financial Control (4)

: Guangzhou Lonkey Industrial Co. Ltd. (GLIL) Name of SOE

Staff Interviewed : Miss Huang Yan Qing/Finance Manager

(No. of years in this enterprise: 9 years)

: First Visit - 29 October 1993 Dates of Visits

> Second Visit - 1 April Third Visit - 12 August 1994

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#### Section 1 : History & Background

The origin of Lonkey was Guangzhou Chemical Oil Refinary Factory which was established in 1959. The company's name has been changed three times in the past 35 years. At present, Lonkey is one of the largest cleaning consumables manufacturers in China. Lonkey was ranked in the top 500 Chinese Industrial enterprises in the years of 1990, 1991 and 1992. The current plant site is located at the Eastern suburb of Guangzhou city occupying a total area of 100,000 square metres. The production capacity is able to manufacture over 50 product types of 100,000 tons of washing powder (clothing), 10,000 tons of soap and 20,000 tons of liquid detergent. In addition, it can produce two categories of industrial cleaning materials. The total output quantity was 103,331 tons in 1992 and 120,000 tons in 1993.

1993 was a critical turning point of Lonkey since the Guangzhou municipal government has approved Lonkey as one of the first four state-owned enterprises in Guangzhou to issue shares to the public and list the shares in the Shanzhen Stock Exchange. This breakthrough has brought Lonkey more capital for future development and higher autonomy in operation and management.

The major performance indicators in 1992 had significant growth compared with the previous years. The "industrial output value" attained RMB354 million which represented an increase of 24.4% from 1991. The "turnover" was increased by 20.9% against 1991 and achieved RMB397 million. Whereas, the "income before tax" was RMB46.15 million with a growth rate of 23.5%. After the transformation into a listed public company in 1993, the growth rates of output value, turnover and income before tax during the first six months were 24.4%, 34% and 43% respectively compared with the same period in 1992.

Lonkey presently has 6 production lines, 12 servicing departments and 5 employee's collective companies. The total number of employees is 1,300 of which one-third of them are degree or diploma graduates and over 300 employees are holding professional titles. Lonkey has initially established a computer network system integrating production and planning, sales, quality control, material control, personnel and finance.

Other than the domestic sales (95%) to various provinces and cities, Lonkey has been approved the "import and export right" to sell its products to North America, Western Europe, Africa, Middle East, Hong Kong, Macau and other Southeast Asian countries. The newly reorgainised Marketing and Sales Department is drawing a blue-print to further promote its existing and new products to the diversified local and overseas market.

Lonkey is manufacturing the following 3 major categories of products:

- (1) Washing Powder
  - 1.1 Ordinary Type
  - 1.2 Condense Type
  - 1.3 BIO Special Type
- (2) Detergent Liquid
  - 2.1 Kitchen Use
  - 2.2 Bathroom Use
  - 2.3 Toilet Use
  - 2.4 Glass Use
  - 2.5 Metal Use
  - 2.6 Fabric Softener
  - 2.7 Fabric Pre-wash
- (3) Bathing Consumables
  - 3.1 Soap
  - 3.2 Foan Bath
  - 3.3 Shampoo
  - 3.4 Hair Conditioner

# Section 2 : Legal Form & Organisation Structure

Guangzhou Lonkey Industrial Co. Ltd. (GLIL) has been a wholly state-owned enterprise since 1959 and it was converted into a shareholding enterprise and listed in the Shenzhen Stock Exchange on 8 November 1993 by issuing 15% of the authorized shares to the employees and 25% to the general public. The local government is the majority shareholder by holding 60% of the shares. A total of RMB140 million of share capital was raised to finance a series of long term projects.

Since Lonkey is a state-owned enterprise, it is under the administration of the Guangzhou Light Industrial Bureau. In responding to and implementing of the "SOE Operation Mechanism Tranformation Regulations" enacted by the People's Congress in July 1992, the bureau has delegated the planning and control responsibilities to the top management of Lonkey to run their own business. Furthermore, the investment autonomy has been delegated and raising capital for project investment can be arranged by Lonkey on its own. The roles played by the Bureau are appointing the chief executives (i.e. chairman, general manager and party secretary), reviewing major capital investment projects and supplying information on government policies.

Lonkey's Board of Directors composed of the following members:
Chairman (also the General Manager)\*
Vice-Chairman (also the Party Secretary)
Directors - 3 Deputy-General Managers
Chief Engineer

\* The terms of the chairman is usually 5 years. The board of directors usually hold a meeting every month.

Under the Factory General Manager, who has a General Manager Office, the organisation structure of Lonkey is as follow:

- Production Department (headed by a Deputy-General Manager) (1) No.1 Washing Powder Factory\* No.2 Washing Powder Factory\* Soap Factory\* @ 1.4 No.1 Liquid Detergent Factory\* @ 1.5 No.2 Liquid Detergent Factory\* 1.6 Energy & Power Factory\*
  Production Planning Department (2) (in-charged by the Chief (3) Technical Support Department Engineer) (4) Engineering Department\*\* (5) Research Department Quality & Inspection Department (6) Marketing Department (7)(headed by a Deputy-General (8) Sales Department Manager) Import & Export Department (9) (10) Purchasing Department (headed by a Deputy-General (11) Finance Department Manager) (12) Personnel Department (13) Security Department (14) Party & Labour Union Office (15) Employee's Collective Companies# 15.1 Repair & Maintenance Service Company 15.2 Transportation Service Company 15.3 Industrial Trading Service Company
- 15.5 Human Resource Service Company (16) Branch Office in Hong Kong##
- \* The five production factories and the supporting factory are all treated as profit centres having a factory manager, a deputy manager, a few supervisors, technicians and clerical staff. There are three 8-hour production shifts in each workshop. Each shift has a leader, deputy leader, group leaders and workers who are all concerning the production target setting very much. They all have entered into Internal Responsibility Contracts (IRCs) with the Factory General Manager on an annual basis.

15.4 Packaging & Container Service Company

- \*\* Mainly provides spare parts, repair and maintenance services.
- @ The Soap Factory and No.1 Liquid Detergent Factory were transferred into a joint-venture with the P&G Corporation of the USA in 1994. Therefore, they have become a separate legal entity and their IRCs were ceased in the same year. Their products are sold back to Lonkey for selling to the end-users.

# The five collective companies are separated legal entities formed and managed by some Lonkey's employees. In order to support the formation of these servicing or "tertiary enterprises", Lonkey has charged them the rent of premises and other facilities including energy and power provided. They are providing various supporting services to the production factories and other departments of Lonkey. They are free to sell their services to outside customers. However, they are not formally included in the organisation structure of Lonkey.

## The branch office in Hong Kong is responsible for importing raw materials (subject to 7% custom duties) for production in Guangzhou and exporting some final products to overseas countries.

Lonkey had a total of 1,450 full-time (including 1,000 workers) and 500 retired employees at the end of 1993. It is classified as a "medium size state-owned enterprise" in China. All the employees have signed "employment contracts" with duration from one to ten years since 1993.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

# Section 3 : Financial Indicators

Total assets : RMB 279M (1993)@ : RMB 397M (1992)Turnover RMB 530M (1993)

RMB 610M (1994)@@

Income before tax : RMB 30M (1992) - 7.6% of sales

RMB 43M (1993) - 8.1% of sales RMB 44M (1994) - 7.2% of sales\*

: 55% (before November 1993) 15% (from Novmber 1993)# Income tax rate

- @ The total assets (fixed + current) have been revaluated once when changing into shareholding in November 1993.
- @@ The slow down of sales growth was due to keen competition of this industry in Guangzhou and Shenzhen with foreign invested joint-ventures such as from Hong Kong. In addition, the effects of macro-economic control policies implented by the government in July 1993 was surfaced out in 1994 and 1995.
- \* In light of high inflation in Guangzhou (30% in 1993 and 20% in 1994), Lonkey's profit margin was declined significantly in 1994. However, Lonkey is subject to some limitations from the government in raising the selling prices because its products are daily necessities for the general public.

# Since Lonkey is a shareholding enterprise located in one of the 14 economic development cities, it can enjoy a reduced income tax rate of 15% instead of 55% (before 1994) or 33% (from 1994) applied to the other state-owned enterprises. Furthermore, the VAT is 17% instead of the previous sales tax of 14% and as a result, the turnover tax has been increased by 0.5% as from 1993.

# Section 4 : Economic Responsibility Contract System (ERCS)

Guangzhou Lonkey Industrial Co. Ltd. (GLIL) signed the first 5-year (1986-1990) ERC with the Guangzhou Finance Bureau in 1986. Based on the profits of the previous three years and substiantial negotiation, the first year target profit was set at RMB14.55 million with an annual growth rate of 5%. The income tax for the target profit level was 55% and any excess profit over the target would be split 25/75 between the government and Lonkey. For example, at the end of 1986, the actual profit before income tax was RMB18.18 million, hence,

Actual profit before income tax Target profit before income tax	RMB'000 18,180 14,550
Surplus profit before income tax 25% split to the government	3,630 900
75% retained by the enterprise	2,730
55% income tax on target profit (14,550 x 55%) 25% surplus profit before income tax	8,000 900
Total profit and tax paid to the government	8,900 =====
Target profit retained by enterprise (14,550 x 45%) 75% surplus profit retained by enterprise	6,550 2,730
Total profit retained by enterprise	9,280

Therefore, total resultant income tax rate = 8,900/18,180 = 49%.

Lonkey exceeded the profit targets in all the 5 years during the first ERC. In 1991, Lonkey signed the second ERC (1991-1995) with similar terms and conditions. This second ERC was terminated in November 1993 when Lonkey was transformed into a shareholding enterprise and no profit target has been assigned since then.

The adoption of ERCS seperated the management autonomy out from the government and defined the duties, rights and benefits between the government and the enterprise. It has made Lonkey to be a self-operating, self-financing, self-developing and self-regulating enterprise and to initiate the motivation of the management and workers. After changing into a shareholding enterprise, more autonmy has been delegated by the government to Lonkey and almost all the policy and decision making are rest with the board of directors.

Compared the present Shareholding system with the previous ERC system, which one is better from the standpoint of the enterprise and the employee? The following scenario can explain the general opinion within the top management of Lonkey:

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# Observations:

- (1) Assume the employees receive the same monetary benefit of RMB5,100,000 (i.e. ERC system in a form of bonus and Shareholding system in a form of dividend pay-out).
- (2) Government receives less tax in the Shareholding system.
- (3) Under the ERC system, Lonkey has RMB15,900,000 retained earnings for future development.
- (4) Under the Shareholding system, Lonkey has a total liablility of RMB22,190,000 in which the preferential loan interst (i.e. RMB1,790,000) has to be paid in cash annually, whereas the retained dividend portion will be payable any time upon demand by the government.

- (5) It seems that under the Shareholding system, Lonkey has more capital (in the form of loan) or cash to use, but bear in mind that it is a liability to the government and may be repay upon demand. However, under the ERC system, Lonkey has the full autonmy to use the retained earnings left behind.
- (6) Furthermore, under the ERC system, Lonkey could charge the bank loan repayment in the profit and loss account before income tax. But this income tax preferential treatment is not allowable for the shareholding enterprises.
- (7) For the long term growth, development and security, Lonkey's top management prefer to the ERC system rather than the present Shareholding system. On the other hand, the employees are now shareholders and their motivation has been enhanced in terms of productivity and efficiency.
- (8) Under the present Shareholding system, Lonkey can transfer more profit after income tax to the "statutory capital reserve" and "general capital reserve", so that less dividend will be paid out and less government loan and interest will be incurred.
- (9) The actual dividends paid to the employees in 1994 for the year ended 1993 were RMBO.2 cash per 10 shares and 7 for 10 bonus issue which could be sold in the stock market.

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# Section 5 : Planning System

# 5.1 Organisation Structure

The guiding theme of the organisation structure of Guangzhou Lonkey Industrial Co. Ltd. (GLIL) is simplicity and accountability. It went to some length in 1992 to create stand-alone business units e.g.the 6 production factories as semi-independent profit centres that are controlled by individual factory managers with clear lines of authority and responsibility.

Each production factory is manufacturing different product lines without any interaction and therefore they do not involved in any transfer pricing issues. The production support factory is providing energy and power to the production factories by charging at standard cost plus or market price.

The 5 employee's collective companies are providing various services to the production factories and other departments by charging at standard selling prices having profit margins in order to reflect the arm's length transactions.

Since 1992, Lonkey has been decentralizing more planning responsibility to each factory and department such as formulating their annual plans or budgets and negotiating the internal responsibility contracts. The production and cost control responsibilities primarily lie with the factory manager but the top management keep a surveillance quantity and quality control on each production factory through monthly or weekly report.

The selection and appointment of the chairman (also the general manager) and party leader (also the deputy-chairman) is still decided by the Guangzhou Light Industrial Bureau and a the previous "Factory Manager Responsibility System" under the ERCS has been waived. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory general manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a predetermined lump sum bonus at the year end. Now under the shareholding system, the ultimate management responsibilities lie with the board of directors.

Since 1992, the factory general manager has full autonomy to appoint the deputy-general managers, chief engineer and the other departmental managers. Any major changes of the organisation structure in each division should be initiated by the deputy-general managers and approved by the general manager. However, more autonomy of internal management and operation has been delegated to the deputy-general managers and the chief engineer since 1992. And in turn, the deputy-general managers and chief engineer have involved their department heads more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, Lonkey has a decentralized structure in which the individual deputy managers report directly to the general manager, and they play a linking and control role between the departments and the general manager.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

#### 5.2 Review Process

Before changing into a shareholding enterprise in 1993, Guangzhou Longkey Industrial Co. Ltd. (GLIL) has implemented a formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). Before the annual planning process starts in October, the board of directors will discuss with the Guangzhou Light Industrial Bureau to ascertain the "profit before income tax" target which is the driving factor for the board and other senior staff to evaluate the internal and external environmental factors in order to determine the annual sales for next year. Based on these preliminary targets, some guidelines are provided to the factory managers and department managers to initiate their own annual plans or budgets. Much emphasis is placed on the production targets for the 6 production factories and the supporting factory which annual plans contained the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

Before the end of the calender year, all the factories and departments submit their annual plans to the Accounting and Finance Department for compiling the "financial plan" or "master budget" before submitting to the General Manager Office for review and discussion by the general manager with the deputy managers, chief engineer and department managers. At the beginning of the new year, a "Production & Operation Planning Meeting" will be held for two to three days in a venue outside the company so that all the top and middle management (at least one representative from each factory or department) can concentrate in discussing the annual plans and identifying any problems and gaps between the submitted plans with the targets perceived by the top management. The top management try to help the production factories solving their technical, financial and other problems in order to close the gaps as far as possible. Most likely all the annual plans including the financing plan would be compromised and agreed.

Then, further formal and informal meetings and discussions may be held between the general manager, deputy-general managers, chief engineer and factory managers either collectively or individually to fine tune the details of the annual plans. Eventually, all the annual plans and contracts are approved by the board of directors in early February. The approved annual production plans are broken down into quarterly and monthly plans to cater for demand and holiday factors. The financial plan and cash budget are also divided into quarterly pieces for control and evaluation purposes.

Before 1992, the annual planning review process was not as systematic as described above and the government and in turn the top management gave directions to the factories and departments on what should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material and energy consumption, etc. Since 1992, under the legislative changes and market economy promotion, the government has delegated higher automomy to Lonkey in formulating its strategic directions.

As a result, all the factories and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan. Therefore, the board of directors and general manager have inserted less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

For all the times, Lonkey emphasizes that "quality" is the strategic theme or life of its products. Lonkey keeps on renovating its production equipment such as to acquire washing powder and soap production lines from Italy which are capable to generate world-class products. In order to enhance the competitiveness of its products, the production processes have adopted a "quality rejection" system so that to guarantee that all passed outputs attain national or international standards. Lonkey also periodically sends out quality assurance staff to sample inspect its products selling in the market and listen to the opinion of the consumers as means of quality control. Therefore, the passing out quality rate of all Lonkey's products is 100% and over 80% of its products have received various levels of quality awards. The washing powder has acquired the largest market share in Guangzhou.

Product development is a major strategic thrust focused by Lonkey. Its research and development department is the most powerful cleaning consumables laboratory in the Guangdong province.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in Lonkey still from time to time make suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix in order to ensure the "profit before income tax" can be achieved. Despite this fact, the top management has given some freedom to the workshop managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

The top management follow the financial indicators and performance closely on a weekly and monthly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

### 5.4 Long-Term Plans (Resource Allocation)

Since the establishment of Guangzhou Lonkey in 1959, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system.

The commencement of the economic reforms in 1979 started to allow Lonkey to participate in the 5-year's planning with the Guangzhou Light Industry Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomics control and adjustment" as an excuse.

The changing role of the bureau since 1990 has encouraged Lonkey, for the first time, to formulate their own long term strategic plan (1991-1995). However, many internal factors and uncertainties have affected the validity and reliability of this long term plan which has been subject to review and changes every year. The long term plan was initiated and formulated by the board of directors and top management without much participation from the middle or lower management although they have been consulted during some occasions such as during the annual planning review.

Since then, the board of directors and top management subsequently reviewed the long term plan at the end of each year. Amendments have to be made in view of significant changes in the external environmental factors. Since the early 1990s, the following strategic directions have been laid down and will be carried forward in the 1996-2000 long-range plan.

#### (a) Joint-Venture

Since 1993, Lonkey has entered into a joint-venture with the Porter & Gamble (P&G) of the USA to manufacture cosmetics and other cleaning products by taking over the Soap Factory and No.1 Liquid Detergent Factory. P&G invested into cash capital of US\$30 million while Lonkey invested into premises and production facilities at a market value of US\$12 million. The production started in 1994 and the products are sold in China and exported overseas as well.

Since mid-1994, Lonkey has been exploring another joint-venture with a Japanese counterpart to manufacture a special detergent for kitchenware and a chemical by-product by taking over the No.2 Liquid Detergent Factory. It is expected that new production mix would be started in 1995.

# (b) Product Development

Other than the product differentiation strategy, Lonkey invested over RMB140 million (including bank loan) in 1994 to import a modern production line from Italy for manufacturing brand new detergent for cleaning kitchenware. This new production will enter into a joint-venture with a Japanese company as mentioned in (a) above.

# (c) Production Capacity

The establishment of joint-ventures and internal expansion as shown in (a) and (b) above will increase the total production capacity from 130,000 in 1994 to over 160,000 tons per annum before 2000.

# (d) Market Development

To penetrate into the domestic market, especially the southern provinces, and capture higher market share, Lonkey has established many sales agencies in the major cities in China and also in Hong Kong and Macau. In addition, the sales personnel has been seggregated into geographic teams with different marketing strategies and tatics including paying regular visits to the agents.

The IRC signed with the Sales Department links up the remuneration directly with the sales volume and the accounts receivable (or cash collected) in order to motivate the sales and marketing effort. To explore the overseas markets, such as South America, Africa, Eastern Europe, Middle East and Southeast Asia, is the most important task of the marketing and sales function in the next 5 to 10 years as perceived by the board of directors.

# (e) Marketing and Promotion

In parallel with the market development, marketing and promotion strategies are crucial to success in particular for the consumable products. Lonkey spent over RMB10 million in advertising alone during 1994 including an attractive advertisement produced in Europe and broadcasted in the TV channels of Beijing, Guangdong, Shenzhen, Hong Kong and Macau.

## (f) Diversification

After transforming into a shareholding and listed enterprise, Lonkey's board of directors have been agressively in planning for diversifying the business portfolio. Other than the joint-venture development as mentioned in (a) above, Lonkey is planning other ventures which are related to or different from the present core business such as to purchase a premises for running a shopping mall. Furthermore, the five employee's cooperative companies (or tertiary enterprises) which are selling their services to the outsiders and expanding their own businesses by joint-venture and cooperation with other enterprises.

# (g) Computerisation

Personal computers have been used intensively for production planning and control, sales recording, inventory control, financial accounting, annual planning, performance reporting and personnel recording purposes. The board of directors have recognised the importance of and efficiency in using computers. Lonkey is planning to instal a mini-computer and to implement a networking system before 2000. Of course staff education and training are the prerequisites.

#### (h) Sources of Capital

To finance the all the above long term project requires substaintial amount of capital. Apart from joint-venture capital and bank loan, Lonkey is planning to raise fresh equity capital through right issue in 1995 or 1996.

# (i) Modern Enterprise System

In October 1993, one of the major themes thoroughly discussed and promulgated by the Third Plenary Session of the 14th Central Committee of the Communist Party was the "Modern Enterprise System" which has the following five characteristics:

- (1) An enterprise (management and employees) should be a separate legal entity having ownership, usage and disposal rights of all the assets and also possesses the civil rights and responsibilities to insiders (i.e. shareholders) and outsiders.
- (2) Having had all the legal rights of all the assets, the enterprise should be self-operated (full autonomy), self-financed (no government subsidy), subject to respective tax liabilities, and responsible to the owners (i.e. shareholders) in maintaining and increasing the net assets value of the enterprise.
- (3) According the the amounts of investment, the enterprise's owners (i.e. shareholders) are entitled to the rights of profit distribution, important decision making and top management appointment.
- (4) According to the market demand and supply, the enterprise should have the full autonomy to organise the production and operation in order to increase the employee's productivity and enhance economic efficiency. The government should not insert any interference.
- (5) The enterprise should establish scientific leadership and management systems in order to balance the relationships among the owners, management and employees, initiate their motivation and define their duties and rights.

Establishing and implementing the modern enterprise system is the long term planning framework of Lonkey who has taken the first very important step - public listing. Conceptually, shareholding enterprises are more capable to achieve the above five characteristics in the present economic development stage in China.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Bureau has devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the Lonkey's board of directors is very active to initiate and formulate its own long term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short term planning policy adopted Guangzhou Lonkey Industrial Co. Ltd. (GLIL) is "production determined by sales" and "sales determined by targeted profit before income tax" which means that profit before income tax, as agreed in the ERC (before 1993) or in the BOD/AGM (from 1993) is the initial driving force of all the activities. After transforming into shareholding enterprise, reference has also be made to the 5-year plan especially to estimate what the sales potential will be from the joint-venture, new product and market situation in the next year. As from October 1992, Lonkey has employed the annual planning or budgeting process as described in Section 5.2 above.

Since October 1992, the production and department managers have been involved in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the general manager.

Other than the board of directors, all the annual plans and IRCs will be thoroughly discussed and compromised in the "Production and Sales Committee" meetings composed of top management and functional managers held every month during the planning cycle. Therefore, at least the middle management are actively involved in the annual planning exercise.

In view of the rapid changing market conditions, the budget review period has been shortened from quarterly to monthly. The general manager, deputy managers and department managers hold a General Manager Office meeting at the beginning of each month to review the financial performance against the master budget and individual departmental budgets. Amendments are made when there are significant factors affecting the overall production, sales and profit targets.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given Lonkey more freedom to plan ahead. The government or bureau has completely devolved the short term planning autonomy to Lonkey. The top management have involved the middle management in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan or the ERC, and on the other hand, it is an important motivational factor for the factory and department managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

#### 5.6 Internal Responsibility Contracts (IRC)

Guangzhou Lonkey Industrial Co. Ltd. (GLIL) started the Internal Responsibility Contract (IRC) System in 1986 in parallel with the first ERC. The most important financial target set in the IRC for the production factories is "internal profit" which is directly linked up with the total wages and bonus.

The following was an IRC which was applied for the two washing powder factories in 1993 :

\_\_\_\_\_\_

Department : No.1 (No.2) Washing Powder Factory Year : 1993

Guidelines

In order to further reduce the cost of production, to strengthen the internal management, to realise the development potential and to improve the economic efficiency, No.1 Washing Powder Factory enters into this IRC with the General Manager to undertake the targeted internal profit which is linked with the total wages (including bonus) of the whole factory.

# Economic Targets :

1993 1992 1991 Target Actual Actual

- Total Wages & Bonus (1)
- (2) Total Internal Profit\*
- Wages & Bonus/Internal Profit % (3)
- Internal Profit Growth % (4)
- \* Internal Profit = Standard Turnover Actual Cost of Production Standard Turnover = Actual Production Mix x Standard Selling Prices

Actual cost of production include transfer prices for internal materials and services supplied.

# Contractor's & Contractee's Responsibilities :

- (1) If the contractee cannot achieve the internal profit target, for every RMB100 drop in profit, RMBXX of gross wages and bonus will be deducted.
- If the raw materials consumed are below predetermined (2) standards, the material costs charged to the contractee's department should be 90% of the internal standard prices.
- The transfer price of the steam used should be standard cost (3) plus 10% internal profit markup.
- The transfer price of the oil supplied by the Power & Energy (4)Factory should be 97% of the listed price.

- (5) Due to changes of product formula, production facility renovation (within 3 months after completion), and changes of personnel, the affected standard costs should be amended promptly in determining the internal profit.
- (6) If the export washing powder exceeds the quantitative target, the excess portion will raise the standard selling prices by Y% in determining the internal profit.
- (7) For every ton of washing powder (clothing) output exceeding the targeted quantity, RMB4 additional wages and bonus will be awarded to the contractee's department. (It is the usual practice to employ temporary workers to increase the production.)
- (8) If the output of washing powder (others) exceeds the targeted quantity, for every RMB100 of the excess internal profit, RMB2.8 additional wages and bonus will be awarded to the contractee's department.
- (9) If the sales department cannot sell the contractee's output and cause production stoppage of one month, the headquarters (or contractor) will pay RMBXXX as wages to each employee of the contractee's department for that month.
  - If the contractee's internal profit greatly decreases and causes substantial reduction in wages to the employees, the contractor will ensure that a minimum annual wages of 88% of the previous year's average annual wages per employee to be paid to each employee of the contractee's department.
- (10) The contractee should strictly comply with the safety production, birth control, security and discipline, and quality control policies. If any of the following events occurs:
  - 10.1 fire, bribery, criminal offence, product quality failure causing financial loss of over RMB5,000;
  - 10.2 environmental pollution and protection failure causing financial loss of over RMB5,000; and
  - 10.3 death or serious injury of one time; then

the total wages and bonus (ceiling) of the factory manager and party secretary cannot exceed three times of the average annual wages and bonus (average) of the employees in the contractee's department. If any of the above events happens twice, then the "ceiling" (for factory manager and party secretary) cannot exceed two times of the "average" (for employees). If it happens three times or more, then the "ceiling" will be equal or less than the "average".

For other incidences, the award and penalty will be decided by the contractor according to relevant enterprise's rules and regulations.

It takes a few months for the general manager, factory managers and sales manager to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval by the board of directors in next February. In this negotiation process, the top management do insert influence and suggestion in order to ensure that the ultimate profit before income tax target can be made. The factory managers and even their shift and group leaders are very eager on this issue upon which they will be measured against and rewarded thereupon. The IRCs are reviewed monthly and revised if necessary in order to enhance the production management such as cost control, product mix, product quality etc.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the factory and department managers in initiating and negotiating their own IRCs, and also involved the accounting and finance department intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Nedium-Low Corporate" since 1992.

#### 5.7 Management of Interdependencies (Transfer Pricing)

Since the five production factory of Guangzhou Lonkey Industrial Co. Ltd. is independent in manufacturing its own products without any transfer to other factories, the transfer pricing is not applicable. The energy and power supplied by the supporting factory to the production factories or other departments are using "standard cost plus mark up" or "market price" as the transfer prices. Similarly, the transfer prices of the services provided by the five employee's cooperative companies are mainly market prices because they have the ability to render their services to the outside customers after they have satisfied the needs of internal users.

These transfer prices are mainly set by the headquarters, with the involvement of the accounting and finance department, and usually reviewed once every year during the annual planning process. The supplying and receiving departments would be consulted but without much room for negotiation in setting the IRCs

# Section 6 : Control System

#### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Guangzhou Lonkey Industrial Co. Ltd (GLIL) has four levels of management hierarchy:

- (1) Board of Directors (many overlaps with top management)
- (2) Top Management (general manager, deputy-general managers,

chief engineer)

- (3) Middle Management (factory managers, department heads, subsidiary managers)
- (4) Lower Management (deputy managers, supervisors, leaders)

The deputy-general managers and the chief engineer can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task which will be explained in the rewards and incentives section.

The major control mechanisms employed by the top management to control the performance of the factories and departments are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are internal profit and production volume set in the IRCs, although some other qualitative targets (non-financial) are employed. However, these are subsidiary ones which have lower weightings in calculating the group wages and bonus.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of Lonkey.

Observation of Control Influence: shift from "Financial Control" to "Moderate Strategic" since 1992.

# 6.2 Agreeing Objectives

Guangzhou Lonkey Industrial Co. Ltd. (GLIL) sets similar objectives for its production factories: factory managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. In view of the fierce competition within this industry and the bottom line (profit before income tax) imposed by the top management, the production factories sometimes feel passive in setting their objectives or targets in the budgets or IRCs because their activities are depending on the sales demand.

A high pressure to achieve the budgeted production and internal profit is put on the factory managers at the monthly review. They fully understand that their group wages and bonus are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. In terms of expenses, control is tighter and a system of standard cost is going to be implemented. Although the other non-production departments do not have the IRCs, they are constrained by the allocated capital and revenue expenses budgets by the top management.

In addition to the formal monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.3 Monitoring Results (Reporting & Performance Measurement)

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Guangzhou Lonkey Industrial Co. Ltd. (GLIL) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly and even weekly basis. All the factories, departments and subsidiaries submit monthly results on standard forms to their respective deputy-general manager, chief engineer and also to the finance manager for vetting and comparison with budgets and IRCs. The production factories are also required to submit production figures to the top management on a weekly or daily basis.

The monthly report format is unique for each department. The contents are mainly corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The weekly and monthly actuals are compared with the budgets and IRCs. The qualitative targets are usually subjectively measured by the deputy-general manager and chief engineer and written in the monthly reports as well. These monthly reports are compiled, some of them through the computer, by the accounting department. Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the general manager for review.

For any serious adverse variances shown on any report, the general manager will contact with the respective deputy managers, chief engineer, factory managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the Monthly Performance Evaluation Meeting of the top management with the middle management, the factory and department managers will put forward the monthly results for open discussion. The factory and subsidiary managers may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a factory or department manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results will be passed back to the personnel department for calculating the group bonus of each factory and department for last month and verified by the accounting department. Then the accounting department will process the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

Now, Lonkey views a budget or IRC as a contract between the top management and the factories and subsidiaries. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

#### 6.4 Rewards and Incentives '

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the Lonkey is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. In 1994, Lonkey actually paid wages and bonus above the ceilings, the excess portion would not be income tax deductable.

The take-home pay of each employee in Lonkey is mainly composed of basic wages, bonus and allowances. After transforming into a shareholding enterprise, Lonkey has merged the basic wages and bonus together which is evaluated mainly according to the accomplishment of the IRCs for the production factories and supporting factory (see Section 5.6 above). The basic salaries of other non-production or servicing departments are based on grades and points on the scale, whereas the bonuses are linked up with the average bonus awarded to the workers such as using this figure and then multiplying by a rank index (i.e. general manager - 1.8, deputy manager - 1.6, factory manager - 1.5, supervisor - 1.3 etc.) and an adjustment factor of 0.9. Therefore, the parities of income between the front-line workers and management staff would not be great. A "management by objective" system is going to be implemented to evaluate the performance of the non-production staff.

It is up to the factory managers to award that lump sum of group wages and bonus to his or her individual subordinates according to post, seniority, skill and performance (see the evaluation grid as shown at the end of this section). The wages and bonus are distributed in cash to all employees on a monthly basis. In high pay months, 10% of the wages and bonus will be retained in a reserve in order to make up the low income obtained during the months with unsatisfactory performance. The average annual gross wages per employee was around RMB9,500 in 1993 and RMB12,000 in 1994. Under the high inflation in Guangzhou (i.e. 30% in 1993 and 20% in 1994), Lonkey is expected to increase this average figure to RMB14,500 in 1995.

There are two portions for 'the "allowance". The first part is determined by the Guangzhou Manpower and Wages Bureau at least once in each year mainly for the purpose of combatting inflation in food, transportation, gas and electricity. The second part is decided by Lonkey which may include housing, meals, travel, child, attendance, overtime, production stoppage, hair-dressing, festival gifts etc., which are trying to balance the relatively low basic wages or salaries and maintain a reasonable standard of living for the employees.

Since 1992, Lonkey has obtained the autonomy to recruit employees from the labour market without getting the Guangzhou Manpower Bureau involved (in accordance with the Mechanism Transformation Regulations). Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the Guangzhou Light Industry Bureau will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management). If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. However, to lay off a certain percentage of redundant employees will cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

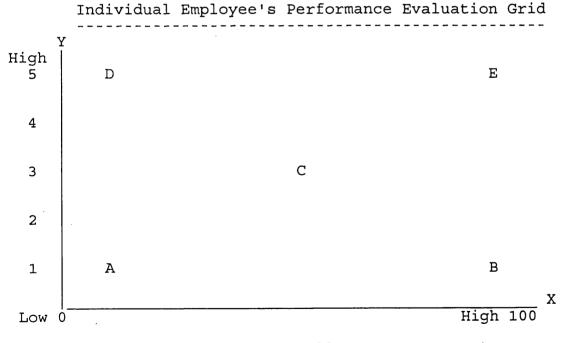
Since 1993, Lonkey has fully implemented the employment contract system and also the "In-Post Contracts" with most of the employees for periods from one to ten years. This in-post contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages, allowance and bonus. Without such a contract, that employee is out of job but he or she is still an employee of Lonkey and is allowed to received a basic monthly subsidy of about RMB200. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better.

In relation to the social welfare, since 1993, Lonkey has been contributing 25.5% of the monthly gross payroll to the government for sharing the pension scheme. Upon retirement of a worker, the government will fully responsible for the pension but not the medical allowance which is still a heavy burden borne by the state-owned enterprise. Other than the pension contribution, Lonkey has to provide over 16% of the monthly gross payroll for various benefits such as medical and education. To alleviate the heavy financial onus to the state-owned enterprises, the government is planning to request a 16%-18% employee's welfare contribution so that the government can underwrite most of the medical, unemployment, education, etc. allowances for the enterprises.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, Lonkey believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: sifht from "Financial Control" to "Moderate Financial Control" since 1992.



X = Job Performance (usually score 0 - 100)

Y = Post & Grade (usually 5 grades in each post)

A = Low Remuneration Zone

B, C, D = Medium Remuneration Zone

# E = High Remuneration Zone Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Guangzhou Lonkey Industrial Co. Ltd. (GLIL) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences:		
Organisation Structure*	High/Medium Corporate	Medium/Low Corporate
Review Process*	Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High/Medium Corporate	Medium/Low Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	Medium Corporate	Low Corporate
Internal Responsibility Contract	High/Medium Corporate	Medium/Low Corporate
Management of Interdependencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Financial	Moderate Strategic
Agreeing Objectives*	Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence	
	Tight Strategic	Tight Financial
High Corporate	(Strategic Programming)	(Financial Programming)
Medium Corporate	[1	[Pre-1992] 
Low Corporate	(Strategic Control)	(Financial Control)

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Guangzhou Lonkey Industrial Co. Ltd. (GLIL) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of financial control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

Revised: 23 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 17

Report Date : 3 June 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

\_\_\_\_\_\_

Name of SOE : Xiamen Luquan Industries General Company (XLIG)

Staff Interviewed : Miss Lin Chu Zhi/Deputy General Manager &

Finance Manager

(No. of years in this enterprise: 8 years)

Mr Ye Ren Chu/Administration Manager

(No. of years in this enterprise: 10 years)

Dates of Visits : First Visit - 17 September 1993 Second Visit - 14 September 1994

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# Section 1 : History & Background

Xiamen Beverage Factory was the largest beverage manufacturing enterprise in Xiamen established in 1985. On 8 June 1993, Xiamen Beverage Factory merged with an old and small enterprise called Xiamen Preserved Fruits Factory to form the present Xiamen Luquan Industries General Company (XLIG) which is a state-owned enterprise. XLIG's core business is manufacturing and distributing various kinds and brands of beverage including softdrinks, milkdrinks, fruitdrinks and tea. XLIG also produces preserved fruits selling domestically as well as export to overseas countries to gain foreign exchanges.

XLIG is a holding enterprise (having 85 administrative staff in the headquarters) under which it has the following subsidiaries and joint-ventures :

- (1) Xiamen Beverage Factory
- 1.1 Establishment date : 1 April 1985
- Ownership (Joint-venture): XLIG (45%), Hong Kong Swire 1.2 Bottle - Coca-Cola (55%)
- 1.3 No. of employees (1994) : 325
- : Coca-Cola, Sprite, Fanda (in can, bottle & condensed container)\* Products (Softdrinks) 1.4
- 1.5 Output quantity : 40,000 tons per annum
- : domestic (Fujian, Guangdong, Jia-1.6 Sales markets

jiang, Suzhou, Northeast and some

- Western provinces)
- 1.7 : RMB145 million (1993) Turnover
  - RMB200 million (1994)
- 1.8 Income before tax : RMB 11 million (1993)
  - RMB 18 million (1994)
  - \* XLIG has entered into a franchaise contract with the Coca-Cola Corporation in the USA to manufacture and distribute the three brands of softdrink in China.
- (2) Xiamen Preserved Fruits Factory
- : 31 December 1955 Establishment date 2.1 2.2 : wholly state-owned Ownership
- No. of employees (1994) : 26 2.3
- : over 80 types of preserved fruits 2.4 Products
- : 4,000 tons per annum 2.5 Output quantity
- : mainly domestic with some export Sales markets 2.6
- : RMB 8 million (1993) 2.7 Turnover RMB 7 million (1994)
- Income before tax : RMB 15,000 (1993) 2.8
  - RMB 10,000 (1994)

```
Xiamen Huarong Food Factory
(3)
    Establishment date : 1989
3.1
    Ownership (joint-venture): XLIG (65%), Hong Kong (35%)
3.2
                       : paperbag milk & fruit drinks : 12,000 tons per annu-
    No. of employees (1994) : 33
3.3
3.4
    Products
3.5
    Output quantity
    Sales markets
3.6
                             : domestic (to every province in
                                China)
                              : RMB45 million (1993)
RMB60 million (1994)
3.7
    Turnover
3.8 Income before tax
                            : RMB 4 million (1993)
                                RMB 5 million (1994)
    Xiamen Huayi Food Factory
(4)
                              : 1987
4.1
    Establishment date
    Ownership (Joint-venture): XLIG (31%), Beijing (17%),
4.2
                                Xiamen (17%), Japan (35%)
4.3
    No. of employees (1994) : 20
4.4
    Products
                              : Chinese tea leaves
4.5
    Output quantity
    Sales markets
                             : export (to Japan, Taiwan, Macau,
4.6
                                Hong Kong & other Southeast Asian
                                countries)
                             : RMB 10 million (1993)
4.7 Turnover (1993)
                               RMB 20 million (1994)
    Income before tax
                             : RMB 2 million (1993)
4.8
                                RMB 4 million (1994)
(5)
    Xiamen Huacheng Packing Factory
    Establishment date : 1993
5.1
5.2 Ownership
                             : Collective owned with another
                                enterprise in Xiamen
5.3
    No. of employees (1994) : 25
    Products
                              : paper & cartoon boxes & packs for
5.4
                                XLIG's products and external
                                customers
                             : 3 million square metres
    Output quantity
5.5
                             : other factories within the group and external customers in Xiamen
5.6
    Sales markets
5.7 Turnover (1993)
    Xiamen Luofang Trading Company
(6)
    Establishment date : 5 January 1993
6.1
                              : Cooperative (owned by employees)
6.2 Ownership
    No. of employees (1994) : 61
6.3
    Services
                              : shopping mall, import & export
6.4
                                trade
6.5
    Output quantity
                             : provide services to subsidiaries
6.6 Sales markets
                                of XLIG and external customers
```

6.7 Turnover (1993)

The headquarters and all the subsidiaries are located in the same location having a land area of 48,500 square metres and building floor space of 59,300 square metres.

\_\_\_\_\_\_

# Section 2 : Legal Form & Organisation Structure

Xiamen Luquan Industries General Comapny (XLIG) has been a wholly state-owned enterprise since 1985 when the Xiamen Beverage Factory and Xiamen Preserved Fruits Factory were merged together. Since XLIG is a state-owned enterprise, it is under the administration of the Xiamen Economic and Trade Commission.

Being one of the five special economic development zones, Xiamen's state-owned enterprises have enjoyed not only 14 favourable economic policies since early 1990s, but also the higher degree of freedom or autonomy to manage their own businesses including the planning and control systems employed by the enterprises.

In responding to and implementing of the "SOE Operation Mechanism Tranformation Regulations" enacted by the People's Congress in July 1992, the Xiamen Economic and Trade Commission has delegated the planning and control responsibilities to the top management of XLIG to run their own business. Furthermore, the investment autonomy has been delegated and raising capital for project investment can be arranged by the Commission and XLIG together. However, the commission is still in control of appointing the general manager and party secretary. Furthermore, major long term investment projects, such as the equity joint-venture agreement with the Hong Kong Swire Group (see section 5.4 below), have to been approved by the commission.

Since the early 1990s, XLIG's party secretary has inserted less and less influence on the planning and control systems. Basically, the roles played by the party secretary are as follows:

- (1) to assist the general manager in the operation and management but not to interfere his leadership;
- (2) to be consulted by the general manager in making long term investment decisions; and
- (3) to help the general manager in implementing the determined plans and policies.

Under the General Manager, who has an Enterprise Management Office (mainly responsible for long term planning and development), the organisation structure of XLIG's headquarters is as follow:

- (1) Finance Department (headed by a Deputy General Manager)
  - 1.1 Accounting
  - 1.2 Internal Audit
  - 1.3 Computing Centre
- (2) Research & Technology (headed by a Deputy General Manager)
  - 2.1 Product Research & Development
  - 2.2 Production Technology & Facility
- (3) Facility & Estate Department (headed by a Deputy General Manager)
  - 2.1 Power & Gas
  - 2.2 Building & Facility
  - 2.3 General Supply
- (4) Administration Department (headed by a Deputy General Manager)
  - 3.1 Personnel
  - 3.2 Safety & Security
  - 3.3 Education & Training
  - 3.4 Medical & Housing
  - 3.5 Canteen
- (5) Party Office (headed by the Party Secretary)

Under the headquarters of XLIG, the Xiamen Beverage Factory has the following decentralized structure:

- (1) Factory Manager (in charge of sales as well)
- (2) Deputy-Factory Manager (in charge of production, purchasing and supply)
- (3) Purchasing Department
- (4) Production Department
- (5) Quality Control & Inspection Department
- (6) Sales Department
- (7) Repair & Maintenance Department
- (8) Accounting Department
- (9) Personnel & General Affairs Department

The other three beverage, tea and packing material manufacturing factories have the similar organisation structure as above. All the factories and the trading company are treated as independent profit centres with high degree of operating, planning and control autonomy.

XLIG had a total of 540 working (including 50 administrative staff in the headquarters), 40 not in post (non-working) and 130 retired employees at the end of 1994. It is classified as a "small-size enterprise" in China. All the employees have signed "employment contracts" with duration from one to ten years since 1993.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

#### Section 3 : Financial Indicators

Total assets : RMB 56M (1993) : RMB 110M (1992) Turnover RMB 208M (1993)

RMB 287M (1994)@

Income before tax : RMB 11M (1992) - 10.0% of sales RMB 17M (1993) - 8.2% of sales\*

RMB 27M (1994) - 9.4% of sales\*\*

15%# Income tax rate

- @ Market demand for the softdrinks exceeds the supply which requires the expansion of the production capacity in the 1990s.
- \* In light of high inflation (25% in 1993 and 20% in 1994) and wages increases in Xiamen, XLIG expects the profit margin will continue to be less than 10%. In order to maintain the profit growth, XLIG has to increase the production and sales volumes substaintially in the next few years. Fortunately, XLIG does not have cashflow problem because most of the sales are "cash on delivery" especially during the peak (summer) seasons when demands for softdrinks are higher than supplies.
- \*\* The profit margin in 1994 was improved compared with 1993 mainly because of great increase in turnover and selling prices for the products sold within Fujian province could be maintained at higher levels than the same products sold to the other provinces. Furthermore, production and management efficiency have been enhanced.

# Since Xiamen is one of the five Special Economic Development Zones, most of the state-owned enterprises are subject of 15% income tax instead of 33% applied to the enterprises in other cities.

#### Section 4 : Economic Responsibility Contract System (ERCS)

When Xiamen Beverage Factory (XBF), the major subsidiary of XLIG, was established in 1985, it signed the first 5-year ERC with the Xiamen Economic and Trade Commission. The first year profit target was set at RMB2 million which is subject to 55% of income tax. In order to repay the initial bank loan, XBF was exempted from income tax in the first two years. In 1988, the terms were changed to 15% income tax rate and handing over 27% of income before tax to the government. For example,

	RMB'000
Actual income before tax in 1988	8,000
27% handing over to government	(2,160)
15% income tax	(1,200)
Income after tax retained by XBF	4,640
	======

Therefore, XBF was better off compared with the 55% income tax levied before 1988. Although, no formal ERC has been continued since 1990, XBF was still subject to the above terms until 1995 when XBF became a equity joint-venture enterprise with Hong Kong Swire Group (see section 5.4(1) below). Suppose XBF's actual income before tax in 1995 is RMB26 million, then,

(RMB'000) Actual income before tax in 1995	Swire Group 55% 14,300	XBF 45% 11,700	Total 100% 26,000
15% income tax 27% handing over to government	(2,145)	(1,755) (3,159)	(3,900) (3,159)
Income after tax	12,155	6,786 ======	18,941

Compared with the pre-1995 type of ownership in which 100% of the income after tax was retained by XBF, the new equity joint-venture should at least double the turnover and profit in the next few years in order to be equal footing with the old joint-venture. This is very likely to be the case since the Hong Kong Swire Group will bring in not only capital for production capacity expansion, but also production and management technology as well. XLIG is aiming at the long term growth in terms of turnover, efficiency and profitability at the end of the day.

## Section 5 : Planning System

# 5.1 Organisation Structure

The guiding theme of the organisation structure of Xiamen Luquan Industries General Company (XLIG) is simplicity and accountability. Since its formation in 1993, XLIG has retained the separate legal entities of all the factories and trading company under its umbrella and treated them as independent profit centres with clear lines of authority and responsibility with the headquarters.

Since 1993, XLIG has been decentralizing the planning responsibility to each factory such as formulating their annual plans or budgets and negotiating the internal responsibility contracts. The production and cost control responsibilities primarily lie with the factory manager but the top management keep a surveillance quantity and quality control on each factory through monthly report.

The selection and appointment of the general manager and the party secretary are still decided by the Xiamen Economics and Trade Commission. The "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a predetermined lump sum bonus at the year end.

The general manager has full autonomy to appoint the deputy-general managers, factory managers and the other departmental managers. Any major changes of the organisation structure in each factory should be initiated by the factory manager and approved by the general manager. However, more autonomy of internal management and operation has been delegated to the factory managers since 1993. And in turn, the factory managers have involved their deputies and management staff in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, XLIG has a decentralized structure in which the individual factory managers report directly to the general manager, and they play a linking and control role between the factories and the general manager.

Observation of Planning Influence: shift from "Medium Corporate" to "Medium-Low Corporate" since 1992.

## 5.2 Review Process

Since the formation of Xiamen Luquan Industries General Company (XLIG) in 1993, a formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs) has been implemented. Before the annual planning process starts in October, the general manager will discuss with all the deputy-general managers to ascertain the "profit before income tax" target which is the driving factor for the senior management group to evaluate the internal and external environmental factors in order to determine the annual sales for next year.

Based on these preliminary targets, some guidelines (sales and profits) are provided to the factory managers to initiate their own production plans or budgets. Much emphasis is placed on the sales and profit targets for the five production factories which annual plans contained the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts. In September 1994, XLIG employed an external marketing company to perform a market research to predict the demand patterns in the next few years.

At the end of November, all the factories submit their annual plans (mainly production, cost of sales, turnover and profit) to the Finance Department for compiling the "financial plan" or "master budget" before submitting to the Enterprise Management Office for review and discussion by the general manager with the deputy managers. The headquarters then holds a meeting in December mainly to discuss the gaps between the submitted plans with the targets perceived by the top management. The top management tries to help the production factories solving their technical, financial and other problems in order to close the gaps as far as possible. Then, further formal and informal meetings and discussions are held between the general manager, deputy-general managers and factory managers either collectively or individually. This iterative exercise carries on until all the annual plans and contracts are mutually agreed by the general manager and approved in the AGM (all the employees can attain) held during January. The apporved annual plans will be broken down in quarterly budgets for control and review purposes.

The factory managers and in turn their subordinates (lower management) have been intensively involved in the annual planning process, and the general manager has inserted less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

#### 5.3 Strategic Themes, Thrusts and Suggestions

Xiamen Luquan Industries General Company (XLIG) has been promulgating "Quality" as the most important strategic theme in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets on the other hand. As far as hardware is concerned, XLIG has imported some modern manufacturing plant and equipment from the European countries and Japan to replace the old ones since the late 1980s.

Each factory has a quality control department responsible for designing policies, setting production and product standards, testing new products and providing training. The inspection section is responsible for controlling the input materials and output products quality, and enforcing the compliance of quality procedures in production.

In XLIG's company's information booklet, the following strategic thrusts are clearly written down:

- (1) Company's goodwill and reputation must be maintained at all times.
- (2) Every employee should be trustworthy and faithful to the company.
- (3) Every employee should maintain good discipline in the company.
- (4) Product innovation and development should be the life-blood for compnay's growth.
- (5) Economic efficiency should be enhanced year after year.
- (6) Operation efficiency should be promoted at all times.

The above strategic themes and thrusts are mainly laid down by the top management but the factory managers have certain degree of freedom to promulgate some strategic ideas if they are not out of line with those prescribed by the headquarters. The top management follow the financial indicators and performance closely on monthly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.2.4-7 and Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Very High-High Corporate" to "Medium Corporate" since 1992.

# 5.4 Long-Term Plans (Resource Allocation)

Since the early 1980s, the Beijing government adopted Deng Xiao Ping's idea, the Chief Architect of Chinese Economic Reforms, to set up five "Special Economic Development Zones" in the southern coastal cities of:

- (1) Xiamen in Fujian Province (close to Taiwan);
- (2) Zhantao in Guangdong Province (between Xiamen & Shenzhen);
- (3) Shenzhen in Guangdong Province (close to Hong Kong);
- (4) Zhuhai in Guangdong Province (close to Macau); and
- (5) Haikau in Hainan Province/Island (close to Southeast Asian countries).

These five special economic development zones have been authorized by the central government to enjoy many favourable economic policies such as low tax rates or rebates, foreign exchange freedom, preferential bank loans, import and export autonomy, and generous land use rights etc., in order to attract billions of foreign investments and technology knowhow as well. Being one of the five special economic development zones, Xiamen's state-owned enterprises have enjoyed not only the above favourable economic policies, but also the higher degree of freedom or autonomy to manage their own businesses including the planning and control systems employed by the enterprises.

Xiamen Beverage Factory (XBF), the major member of XLIG was borne in April 1985 when the Xiamen's economic development has taken off and entered into the growing stage. By that time, the Xiamen Light Industry Committee started to allow the state-owned enterprises under its umbrella to actively participate in the 7th 5-year (1986-1990) long term planning process with two major aims of introducing more foreign investments (i.e. from Taiwan and Hong Kong) and improving the economic benefits in terms of trade volume and foreign exchange. The subsequent 8th 5-year (1991-1995) long term plan has further encouraged XBF to initiate its own blueprint for development. The current 5-year plan is going to an end. XLIG is now planning for the next 5-year plan (1996-2000) as breifly described below in which some projects have been implemented in the past few years.

## (1) Xiamen Beverage Factory

Since the formation of XBF on 1 April 1985, a 10-year cooperative joint-venture agreement has been signed with the Coca-Cola Corporation in the USA to manufacture and distribute a series of Coca-Cola's softdrinks including Coke (50%), Sprite (48%) and Fanda (2%). US Coca-Cola invested technology and management into this joint-venture. Equiped with the advanced production lines from the USA, Xiamen Beverage Factory (XBF) can produce over 40,000 tons of those softdrinks and packed in the forms of bottles, cans and PET condensed containers (after dilution becomes normal drinks). This beverage factory is the largest one in Xiamen as well as in the Fujian province and can generate over RMB150 millions per annum. In the past few years, this beverage factory has been awarded the following titles:

- (a) ranked 22nd among the top 50 best economic efficient enterprises in Fujian province in 1991;
- (b) ranked 19th in terms of output volume of all the beverage manufacturing enterprises in China in 1992;
- (c) ranked 72th in terms of overall performance of all the industrial manufacturing enterprises in Fujian province in 1992; and
- (d) ranked 59th in terms of tax and profit of all the industrial enterprises in Fujian province.

(e) ranked 4th among the top 10 best economic efficient enterprises in Xiamen in 1993.

The softdrink market in China is getting keener and keener since more and more foreign beverage companies have stepped into this largest market in the world. Coca-Cola and Pepsi-Cola are the two most famous and largest US corporations which have established franchaised operations in many big cities in China manufacturing and distributing their softdrink products. XBF is the sole franchaised agent for Coca-Cola in Fujian province but they are facing head to head competition from the Pepsi-Cola manufacturing plant in Fuzhou, the capital city of Fujian province and about 600 Km northwest from Xiamen.

To maintain the market share in Fujian, XBF spends over RMB300,000 to run two sales offices in Fuzhou and Zhangzhou of Fujian province. Apart from Pepsi-Cola, XBF is also competing with hundreds of other brands of softdrink products in China. XBF is aggressively expanding its domestic markets in Fujian province and try to keep about 30% of sales to other provinces. Another means is to sub-contract the production to a softdrink factory in Guangzhou and distribute the products within Guangdong province.

The joint-venture with US Coca-cola was expired and ceased at the end of 1994. On 1 January 1995, the Hong Kong Swire Group, which is the sole agent of Coca-Cola in Hong Kong, invested 55% of share capital into XBF to transformed the latter into an equity joint-venture. Although competition is fierce, yet the demand of softdrinks is higher than the maximum production capacity of XBF especially during the peak (summer) season when most of the sales are on cash on delivery. Therefore, XBF is planning to utilize the fresh capital injected from Swire Group to import three new proudction lines from Germany to increase the output by four times (170,000 tons) in the next 3 to 4 years. XLIG and Swire Group are discussing with the Xiamen government to acquire a location for building the new production premises\*. As an interim measure, XBF spent over RMB3 millions (all came from retained earnings) in December 1994 to renovate the present two production lines in order to increase the production capacity by 20%.

The liquidity and cashflow situations are quite satisfactory, except RMB20 million of bank loan for working capital, XPF does not have any long term bank loan nor any significant doubtful debts.

\* Eventually, a piece of land with an area of 70,000 square metres located in the Fangwu Industrial District was acquired in late 1995 and started the building construction in March 1996. It is expected the three new production lines imported from Germany will increase total annual production to 170,000 tons with an annual turnover of RMB500 million.

# (2) Xiamen Preserved Fruits Factory

The Xiamen Preserved Fruits Factory (XPF) was formed on 31 December 1955 when 8 small private factories in this industry were merged together. In the past 40 years, renovation and improvement of the premises, production facilities and technology have developed over 80 types of preserved fruits with an annual production capacity of 4,000 tons selling domestically and overseas. The grape and peach products have been awarded the silver and bronze medals respectively in the China First Food Expo. Hygenic production is the major thrust of this factory which has been well approved by the Fujian Provincial Consumer Association and was awarded as an Advanced Enterprise in 1989.

In view of the keen competition in this industry and the overall decline in demand of preserved fruits domestically and overseas, XLIG is reducing gradually the output variety and volume of XPF and transfer the resources into the Xiamen Beverage Factory.

## (3) Xiamen Huarong Food Factory

Xiamen Huarong Food Factory is a joint-venture between Xiamen Beverage Factory, Hong Kong Xianing Enterprise Ltd. and Hong Kong Huashan Trading Ltd. The major products are paperpack fruit and milk drinks. Since the installation of a Swedish production line in 1989, the production quantity and efficiency have been grown at a rate between 30% - 50%. In 1995, this factory has equiped 3 Swedish made TBA-9 production lines and has reached an annual production capacity of 12,000 tons. The major thrusts of this factory are developing at least a few products every year and penetrating into new domestic markets. It has become one of the largest beverage manufacturing enterprises of this kind in the Fujian province.

XLIG is discussing with a Taiwanese counterpart to form a US\$2.5 million worth joint-venture to produce new beverage products in Guangzhou.

## (4) Xiamen Huayi Food Factory

Xiamen Huayi Food Factory is a joint-venture established in 1987 between Xiamen Beverage Factory, Xiamen Tea Import & Export Branch Company, Beijing Tea Import & Export Holding Company and two Japanese tea manufacturing companies. Having installed advanced production plant imported from Japan, this factory can refine a kind of tea leave called Ulong which is 100% exported to Japan and other Souteast Asian countries. This joint-venture is the only entity having had the import and export right in XLIG.

# (5) Xiamen Huacheng Packing Factory

Xiamen Huacheng Packing Factory was established in 1993 by Xiamen Luofang Trading Company (55% owned by employees of XLIG) and Xiamen Packing General Factory (45% owned). This factory has a production capacity of 3 million square metres of different packing materials which can satisfy not only the requirements of other factoris within XLIG, but also can accept orders from external customers.

## (6) Xiamen Luofang Trading Company

Xiamen Luofang Trading Company registered on 5 January 1993 in the Xiamen Industrial and Commercial Administration Bureau and owned by the employees of XLIG. It is a self-managed, self-financed and separated legal entity located in the premises of XLIG. The business units of this company or tertiary enterprises include investment department, trading department, industrial development department, three small department stores and a few retailing shops. This company makes use of the favourable economic policies granted by the Xiamen government and the strong support of XLIG to diversify the business portfolio into different industries. The commodities traded by this company include the beverage and food produced by XLIG, oil and foodstuff, daily necessities, metallurgical products, electrical components, chemical products and food manufacturing technology transfer. XLIG is still applying for the import and export right for this company in order to expand the business portfolio.

## (7) New Joint-Venture

Since the late 1994, XLIG has been discussing with a large and famous French wine manufacturer to enter into a new joint-venture in producing grape wine in Xiamen. Market research is undertaken in order to perform the SWOT analysis at a later stage. If predictions and forecasts are positive, it is expected that operation will be started in 1996.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the Xiamen Commercial and Trade Commission has devolved its central planning role to individual enterprises under its umbrella since 1992. Now, the top management of XLIG is taking the initiative to formulate its own long term plan and the middle management (i.e. factory managers) is involved as well.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short term planning policy adopted by Xiamen Luquan Industries General Company (XLIG) is "production determined by sales" and "sales determined by targeted profit before income tax" which means that profit before income tax, as agreed at the very beginning of the annual planning process, is the initial driving force of all the activities. Although the demand of Coca-Cola softdrinks is greater than supply in the South China market, yet cautious has to be made to guard against other similar franchaises granted by Coca-Cola and other competition from substitute products. Reference is also made to the 5-year plan especially to estimate what the sales potential will be from the new product and market situation in the next year. As from October 1993, XLIG has employed the annual planning or budgeting process as described in Section 5.2 above.

Since October 1993, the factory managers have been involved in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the general manager.

Apart from the annual plans of the individual factories, the financial or master budget does not involve too much from the other departments in the headquarters, but largely based on the guidelines from the top management and the experience of the finance manager. Eventually, the other departments in the headquarters are constrainted by their allocated expense budgets. Therefore, it is quite a top-down process in terms of expense budget and also the capital budget for the factories as well.

In view of the rapid changing market conditions, the budget review period has been shortened from quarterly to monthly. The general manager, deputy-general managers and factory managers hold a formal meeting at the beginning of each month to review the financial performance of each factory against the breakdown monthly budget. Amendments are made when there are significant factors affecting the overall production, sales and profit targets.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the mechanism legislation and the market economy have given XLIG more freedom to plan ahead. The Xiamen Commercial and Trade Commission has completely devolved the short term planning autonomy to XLIG.

The top management have involved the factory managers and also their subordinates, in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the factory managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

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# 5.6 Internal Responsibility Contracts (IRC)

Xiamen Luquan Industries General Company (XLIG) started the Internal Responsibility Contract (IRC) System in 1994, the year after the establishment of the holding company. The following is a breif description of the IRC for the Xiamen Beverage Factory in 1994:

\_\_\_\_\_

Department : Xiamen Beverage Factory

Year : 1994

Guidelines :

This IRC is designed to enhance the economic efficiency of the beverage factory by assignment of respective responsibilities and delegation of appropriate authorities to the management. The incentive scheme is linked up with the achievement of the targets set in this IRC.

#### Production Targets :

## (1) Quality & Management

# 1.1 Production Quality (40% of incentive bonus) (according to Coca-Cola US standards)

,	C+	0
	Standard	Score
Sugar concentration	20	
Carbonation	20	
Liquid purity	20	
Metal cover	14	
Liquid surface height	12	
Capacity (per unit)	12	
Distilated water	10	
Bottle washing water	10	
Waste water processing	10	
External packaging	8	
Consumption date & bar code	6	
Carbonated water	5	
Total Standard Score	147	

If Actual Score/147 > 94%, then 100% bonus will be awarded.

# 1.2 Production Management (60% of incentive bonus)

	Standard	Score
Production Safety	20	
Product quality	20	
Operation control	15	
Production scheduling	15	
Production facilities	15	
Production technology	15	
Total Standard Score	100	

If Actual Score/100 > 90%, then 100% bonus will be awarded.

## (2) Material Consumption

If the raw materials consumed exceed standards, 10% - 15% of the total inventive bonus will be deducted.

## Sales Targets :

The bonus for the sales personnel will depend on the volume of sales and the cash collected in the accounts receivable.

It takes two to three months for the general manager and the factory managers to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval by the annual general meeting in next February. In this negotiation process, the top management do insert influence and suggestion in order to ensure that the ultimate profit before income tax target agreed with the budget.

The factory managers and their subordinates are very eager on this issue upon which they will be measured against and rewarded thereupon. The IRCs are reviewed quarterly and revised if necessary in order to enhance the motivation and incentive.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the general managers in initiating and negotiating their own IRCs, and also involved the finance department intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

## 5.7 Management of Interdependencies (Transfer Pricing)

Except the Xiamen Huacheng Packing Factory (XHPF), all the other production factories of Xiamen Luquan Industries General Company (XLIG) are independent in manufacturing thier own products without any transfer to other factories. The packing materials supplied by XHPF internally are charged at the market prices less a small percentage for the savings of selling and administration expenses. The ultimate transfer prices are determined by the negotiation between the seller and buyer without interference from the XLIG.

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# Section 6 : Control System

## 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Xiamen Luquan Industries General Company (XLIG) has three levels of management hierarchy:

- (1) Top Management (general manager, deputy-general managers)
- (2) Middle Management (factory managers and department heads)
- (4) Lower Management (foremen and supervisors)

The deputy-general managers and the factory managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of emploment with any staff is a difficult task which will be explained in the rewards and incentives section below.

The major control mechanisms employed by the top management to control the performance of the factories are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are material consumption, production quality and management which are all non-financial, whereas the major financial measurement is sales volume. Provided the turnover can be increased and materials consumption (the largest cost item) can be controlled constantly, then profit will be increased. Therefore, the headquarters applies strategic contol on the factories more than the financial control with a belief that the achievement of the latter depends on the former's success.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Strategic Control" since 1992.

# 6.2 Agreeing Objectives

Xiamen Luquan Industries General Company (XLIG) sets similar objectives for its production factories: factory managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions. The critical occasion, therefore, is the annual budget review. In view of the fierce competition within this industry and the bottom line (profit before income tax) imposed by the top management, the production factories sometimes feel passive in setting their objectives or targets in the budgets or IRCs but they are given the autonomy to decide the marketing, selling and promotion strategies to achieve the targets.

A high pressure to achieve the budgeted production and internal profit is put on the factory managers at the monthly review. They fully understand that their group bonus are tied in with the budget or IRC and it also depends on the overall performance of the enterprise as a whole. Although the other departments in the headquarters do not have the IRCs, they are constrained by the allocated capital and revenue expenses budgets by the top management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

## 6.3 Monitoring Results (Reporting & Performance Measurement)

Xiamen Luquan Industries General Comapny (XLIG) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly basis. All the factories submit monthly results on standard forms to the Finance Department for vetting and comparison with budgets and IRCs. In order to measure the total economic performance of each factory, the management expenses in the headquarters are apportioned to the factories according to sales or turnover.

The monthly report format is unique for each department. The contents are mainly corresponding with the budgeted line items from which all the targets stipulated in the IRC can be extracted from this report. The monthly actuals are compared with the budgets and IRCs. The qualitative targets are usually subjectively measured by the factory manager and enterprise management office and written in the monthly reports as well. These monthly reports are compiled, through the computer, by the Finance Department and Enterprise Management Office.

Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the general manager for review. For any serious adverse variances shown on any report, the general manager will contact with the respective deputy managers and factory managers to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the Monthly Performance Evaluation Meeting of the top management with the middle management, the factory managers will put forward the monthly results for open discussion. The factory managers may be asked to explain briefly the significant variances. Tolerance is allowed for the factory managers to fail the budgets or targets for some months in a year provided they have the strategies and tactics to meet the budget at the end of the year. After the monthly meeting, all the approved results will be passed back to the finance department for calculating the group bonus of each factory for last month.

The importance of computerization is well recognised by the top management and a mini-computer was installed in July 1994. A few stand-alone personal computers have been used for production control, financial and management reporting, personnel, sales and wages. A comprehensive programme is on the way to implement a network system and provide education and training to the employees.

Now, XLIG views a budget or IRC as a contract between the top management and the factory. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

## 6.4 Rewards and Incentives

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the state-owned enterprises are allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. In 1994, the Xiamen government allowed XLIG to break away from these two ceilings and free to determine the wages and bonus to be paid out, however, if XLIG actually pays wages and bonus above the ceilings, the excess will not be income tax deductable.

Under the "Factory Manager Responsibility System" (as a part of the ERC System), if there is an overall outstanding or above target performance, the Xiamen Commercial and Trade Commission will award a lump sum of "special bonus" to the factory manager at the end of the year. But under no circumstances, the remuneration package of the factory manager can be greater than three times the total earnings of a department head (middle management). If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

The average annual gross wages per employee was around RMB9,000 in 1993 and RMB11,500 in 1994. Under the current high inflation rate (over 22% in 1993 and 1994) and the keen competition in the labour market of this industry, it is expected to increase the average annual gross wages to RMB14,000 in 1995.

The "basic wages" is reviewed annually depending on grade, seniority, qualification and skill. There are totally eight grades in the wages scale and there are some points in each grade for annual increase of wages but the parity between two consecutive points is only RMB10-20, therefore, it is not substantial enough to catch up with the inflation. Obviously, the bonus is the major source of income which is determined according to the IRC.

There are two portions for the "allowances". The first part is determined by the Manpower Bureau of the Xiamen government at least once in each year mainly for the purpose of combation of inflation. The amount was about RMB90 in 1994. The second part is decided by XLIG which may include housing, meals, travel, education, attendance, overtime, festival gifts, shift (two shifts of 11 hours each) etc. The payment of "allowances" is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus", as described in section 5.6 above, is based on the degree of accomplishment of the IRC. An IRC signed between the general manager and a factory manager will decide what level of group bonus will be given to the factory as a whole. It is up to the factory manager to award that lump sum of group bonus to the production sections and then to every workers according to individual performance. The bonus awarded to the administrative or non-production staff is calculated as follow:

worker's monthly average bonus x 80% x grade index\* x performance
score#

- \* Different positions have different grade indexes such as general manager = 1.8, deputy-general manager = 1.6, factory manager = 1.5, deputy-factory manager = 1.4, foreman = 1.3, etc.
- # Performance score is evaluated by the superior of each employee and the maximum is 100%.

The 80% is a buffer in order to maintain the staff's bonus (about 55% of the total wages) relatively close to the worker's average. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10%-20%) will be retained in a reserve in order to make up the low bonus obtained during the months of slack season.

In addition to the remuneration paid to the servicing employees, as from 1994, XLIG has to pay 25.5% of the monthly gross wages and salaries to the governemnt for pension contribution. Furthermore, the other benefits in kind, such as medical and education allowances, account for about 16% of the monthly gross wages and salaries. XLIG also transfers 8% of the income after tax to an "employee's welfare reserve" for some capital expenditures such as building dormintory for the employees. These life-long responsibilities, including all the retired employees, is common to all the state-owned enterprises and sometimes it is adding a significant financial burden to the profit and loss account.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. However, to lay off a certain percentage of redundant employees will cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Since 1993, XLIG has only implemented the employment contract system with the non-manufacturing employees for periods from one to ten years. After a certain trial period, XLIG is expected to extend this system to the production workers in the near future as well. When XLIG was established by merger in 1993, over 40 redundent employees have sent home although they are still receiving the basic wages and allowances (about RMB300 per month). The minimum wages per month for the working employees was RMB300 and RMB150 for the out-of-job employees as fixed by the Xiamen government in 1994.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, XLIG believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Finance Control" to "Moderate Financial Control" since 1992

# Section 7 : Summary

Campbell.

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Xiamen Luquan Industries General Factory (XLIG) belonged to before and after 1992.

\_\_\_\_\_

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	Medium Corporate	Medium/Low Corporate
Review Process*	High/Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	Very High/High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High/Medium Corporate	Medium/Low Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	Medium Corporate	Low Corporate
Internal Responsibility Contract	Medium Corporate	Low Corporate
Management of Interdepen- dencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Financial	Moderate Strategic
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

\* Parameters of planning and control influences used by Goold &

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence	
	Tight Strategic	Tight Financial
High Corporate	(Strategic Programming)	(Financial Programming)
Medium Corporate	[Pos	[Pre-1992]    st-1992]<-
Low Corporate	(Strategic Control)	(Financial Control)

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Xiamen Luquan Industries General Company (XLIG) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Control" (Pre-1992) to "Strategic Control" (Post-1992). Although it has not yet reached a strong-form (low corporate) of Strategic control style as described by Goold's and Campbell's Strategic Style, it is moving towards the "Strategic Control" style.

Revised: 24 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme : PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)
Research Title : "Responsibility Accounting In China Towards An Exploratory Framework"

Report Title : Data Analysis 18
Report Date : 5 December 1995

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

\_\_\_\_\_\_\_

Name of SOE : Beijing No.3 Cotton Mill (BCM3)

Staff Interviewed : Mr Hsu Ching Soon/Chief Accountant

(No. of years in this enterprise : 38 years)

Dates of Visits : First Visit - 4 September 1993

Second Visit - 31 August 1994

Third Visit - 13 September 1995

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## Section 1 : History & Background

Beijing No.3 Cotton Mill (BCM3) is a large, cotton cloth export-oriented enterprise established in 1956 and started production since May 1957. It possesses 120,980 ring spindles, over 3,200 looms, 11,240 twisting spindles, and 1,600 open-end heads. The main products are cotton and T/R yarn, cotton and T/R cloth of full widths, cotton ramie yarn as well as Vinylon and Jinlun products. The annual production capacity is 23,000 tons of cotton yarn and 90 million metres of cotton cloths. BCM3 is also a major foreign currency earning enterprise, with annual export volume of 50 million metres of grey cotton cloth which can earn over US\$40 million.

Products of BCM3 are exported mainly to European Common Market, accounting for 25% of total Chinese cotton cloth export to Europe. The products are also popularly received by overseas clients in the USA, Canada, Africa and Southeast Asian countries and regions. BCM3 enjoys a good reputation in the international market.

BCM3 upholds the principle of "customer first and quality first". Bearing in mind that quality is the life of the mill, BCM3 has been devoting to promote the quality of its products. Over 20 types of yarn and cloth have won national, municipal and ministerial prizes. Its Tex29 grey cotton cloth series which is mainly for export once won national gold prize, and Peng Chentex 19.5 and 29 grey cotton plain cloth series are highly acclaimed by the overseas clients.

BCM3 attaches great importance to its equipment renovation. During the current 8th 5-year plan (1991 - 1995), BCM3 has imported and will continue to import a great deal of advanced technology and critical machine parts from Germany, Switzerland and Japan. To become more competitive, BCM3 is stepping up the efforts for technical renovation. When the overall technical renovation plan is fulfilled at the end of 1995, SCM3 will be equiped with the advanced fore-spinning equipment of the 1990s, and other machinery of the 1980s to 1990s. The quality of finished cotton yarn will reach upper middle international level. The international standard will be adopted for grey cloth production, and indirect weft will be used, consequently, the quality will reach level "A".

BCM3 pursues modern management methods. Its management technique is improving steadily. Among its counterparts in Beijing, it is the only one which has been awarded the state's first grade enterprise. As one of the major textile enterprises in China, BCM3 has provided a large number of execellent products to the clients at home and aborad.

Unlike the last few decades, the demands of textile products, in particular the old cotton mills such as BCM3, in China have been declining since the early 1990s due to the following reasons:

- (1) The production plants and equipment are rather out-dated such as before 1994, BCM3 were still using very old machines manufactured in the 1940s and 1950s. Productivity, efficiency and quality of these retiring machines were low compared with the other developed countries like the USA, Japan and Europe or even the many newly developed small-sized cotton mills located in small towns and cities all around China which have the ability to import advanced equipment and machines from overseas.
- (2) Lacking of capital, either coming from retained earnings or bank loans, makes the large- and medium-sized and long-established cotton mills unable to renovate their out-dated plants and equipment. Therefore, they can mainly manufacture lower quality or class of products and only a small portion of them belong to the higher counts for further processing into high quality products such as the shirts and T-shirts with famous brand names.
- (3) The surging of too many small-sized township cotton mills increases the total national supply in excess of the total national demand of cotton yarn by one-third in 1995. Under this unfavourable situation, the old cotton mills including BCM3 can hardly compete with them in terms of price and quality.
- (4) As the cost of production of the textile mills all along the coastal provinces in China is getting higher mainly due to inflation on raw materials, labour wages, electricity, depreciation and bad debts, the central government decided in 1995 to transfer a quarter of all the textile production capacity from the east-coast to the inland provinces such as Qinghai and Xinjiang where abundant of cotton is produced at cheaper costs. As a result, over a million of textile workers will be redundant in the next few years.

The following are some factors hindering the market development of BCM3's own products and then the derived product (i.e. cloth):

(1) the quality of the final products manufactured by the clothing industrial customers cannot attain international standards and compete with overseas competitors although the cloth produced by BCM3 is among the top three in Beijing;

- (2) many small- and medium-sized cotton mills in other developing cities and economic zones are enjoying some favourable policies, such as low import and export taxes, given by the municipal government so that they are very cost competitive; and
- (3) therefore, BCM3 product selling prices may not be competable with the younger and smaller brothers and sisters in this industry.

Depsite of the above unfavourable conditions, the goodwill of BCM3 has been well established mainly due to its quality products, high technology and good management. It is ranked within the top three cotton mills in Beijing.

## Section 2 : Legal Form & Organisation Structure

Beijing No.3 Cotton Mill (BCM3) has been a wholly state-owned enterprise since 1956 and previously under the administration of the Ministry of Textile in Beijing which was transformed into the National Textile Industry Council in 1994. All the cotton mills and related industries such as textile machines manufacturing are treated as subsidiaries under the Council which is one of the 8 institutions under the State Council and has less political influences on its member enterprises.

The major role played by the Council, which is similar to a trade association, is to control the supply of cotton (raw materials), total number of employees and appointment of the top management such as general manager and party secretary of each member enterprise under its umbrella. Another important function of the Council is raising capitals for the approved projects or investments initiated by the member enterprises. Despite the latter fact, BCM3 has the autonomy to obtain bank loan independently.

Before the economic reforms started in 1979, the central planning system dictated all the planning and control systems of the state-owned enterprises. Therefore, BMC3 acted just as a vehicle (or cost centre) to carry out the activities according to the commands directed from the Ministry of Textile. Since the economic reform started in 1979, instead of dictatorship from the bureau, BCM3 has been involved in the 5-year long range plan even though BCM3 for most of the time had to take the directives from and give in their negotiations to the authority.

Since the promulgation of the "SOE Operation Mechanism Transformation Regulations" by the People's Congress in July 1992, the National Textile Industry Council has fully delegated the management autonomy to SCM3 to manage its own business such term planning and operation like purchasing, the short production and sales.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

Under the Factory General Manager, who has an Enterprise Management Office, the organisation structure of BCM3 is listed as follow:

- Production Division (headed by a Deputy-General Manager) 1.
  - No.1 Spinning Factory\*
  - 1.2 No.2 Spinning Factory\*
  - 1.3 No.3 Spinning Factory\*
  - 1.4 No.4 Spinning Factory\*
  - No.5 Spinning Factory (Macau Joint-Venture) 1.5
  - No.1 Weaving Factory\* 1.6
  - 1.7 No.2 Weaving Factory\*
  - Production Support Factory (supplying electricity, gas, 1.8 consumables, spares, tools etc.)\*\*
  - Technical Support Department (headed by Chief Engineer)
  - 1.10 Production Facilities Department (headed by CE)
  - 1.11 Quality Control Department (headed by CE)
- Operation Division (headed by a Deputy-General Manager) 2.
  - 2.1 Purchasing Department
  - Supplies Department
  - 2.3 Sales Department
  - Accounting & Finance Department (headed by Chief 2.4 Accountant)
- Administration Division (headed by a Deputy-General Manager) 3.
  - 3.1 Personnel Department
  - 3.2 Manpower & Wages Department
  - Safety & Security Department 3.3
  - 3.4 Education & Training Department
  - Tertiary Enterprises# 3.5
    - 3.5.1
    - No.1 Knitting Factory (Shenzhen Join-Venture) No.2 Knitting Factory (Shenzhen Join-Venture) 3.5.2
    - 3.5.3 No.71 Cotton Weaving Factory (Shenzhen JV)
    - 3.5.4 Beijing Colour Weaving Factory (Hainan JV)
    - 3.5.5 Cotton Printing Factory
    - Import & Export Company 3.5.6
    - 3.5.7 Textile Retailing Shop
    - 3.5.8 Repair & Maintenance Centre
    - 3.5.9 Restaurant
    - 3.5.10 Nursary

- Communist Party Office ' 4.
- 5. Labour Union Office
- All the production factories have a factory manager, a deputy factory manager, section supervisors and group leaders. Each factory is responsible for its own repair and maintenance work. All the production factories are treated as cost centres and have entered into Internal Responsibility Contracts (IRC) with the General Manager on an annual basis.
- The production support factory is a cost centre and allocates its operating costs to the other production factories or departments according to actual usages.
- The tertiary enterprises are independent investment centres having their own management teams and bank accounts, and # they have signed IRCs with the General Manager on an annual basis.

BCM3 had a total of 8,000 working employees (10% are administrative staff) and 3,000 retired employees at the end of 1994. It is classified as a "large-sized SOE" in China.

# Section 3 : Financial Indicators

Total assets : RMB 240M (1993) : RMB 300M (1992)Turnover RMB 330M (1993)

RMB 410M (1994)

RMB 430M (1995 forecast)

Income before tax\*\* : RMB 1.2M (1992) - 0.4%\* of sales

RMB 0M (1993) - 0%@ of sales RMB 1.5M (1994) - 0.4%# of sales

(1995) - 0% of sales RMB OM

55% (before 1994) Income tax rate :

33% (from 1994)

\* The low profit margin was mainly because of selling prices have to be reduced in order to bid the orders. Furthermore, inflation and heavy payroll and benefits in kind (including retired employees) increased the total expenditures or fixed overheads. The purchase prices of raw materials (i.e. cotton) have been increased from RMB11,000 per tonne in 1993 to RMB18,000 per tonne in 1994 (or 64% increase) due to reduction of domestic production. The farmers do not have the incentive to grow cotton because of low selling prices set by the government and high inflation of input materials like fertilisers.

The domestic produced cotton is centrally purchased from the farmers and distributed to the mills by the National Textile Industry Council, Ministry of Commerce and Ministry of Agriculture at predetermined prices. In view of domestic short supply, 30% of the cotton demand was imported from foreign countries in 1995. BCM3 is importing about 30% of its cotton requirements from overseas countries.

- \*\* Income before tax has deducted the value added tax already which is 17% on sales (output VAT) but only 13% on cotton purchased (input VAT) can be deducted according to the new taxation system implemented in January 1994. As a result, the VAT paid in 1994 was higher than the previous known sales tax in 1993.
- @ Since BCM3 did not have the "import and export right" before 1994, the export products have to be sold to the trading entities under the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) at a fixed exchange rate of US\$1 = RMB5.8. Then these trading enterprises sell the products overseas at the market exchange rate of US\$1 = RMB8.7 to make a handsome profit out from the exchange gap. This means most of the export profit is taken away by the government.

# Another major reason of low or no profit before tax making was the annual payment of RMB36 millions of bank interest due to capital investment and working capital loans of over RMB300 million in both 1994 and 1995.

# Section 4: Economic Responsibility Contract System (ERCS)

The Beijing No.3 Cotton Mill (BCM3) is one of the earliest state-owned enterprises in Beijing entered into the first five-year Economic Responsibility Contract with the Beijing Textile Bureau and the Beijing Finance Bureau (representing the Beijing municipal government) in 1986. The major financial targets set in this ERC were income before tax and foreign exchanged created from export. The gross wages and salaries was linked up with the income before tax achieved. Furthermore, an annual growth factor was also set for the income before tax target. In addition, production quantity, product quality and safety are also other targets to be determined in the ERC as well.

BCM3 could easily achieve the foreign exchange target because its quality products were yarn and cloth which were input materials for the clothing industry having high demands overseas. Contrary, the clothing industry was constrainted by many customer

factors like fasion, season, culture and taste. The first ERC was successfully completed in 1990, and then the second 5-year ERC (1991-1995) was signed immediately.

Under the ERC system, once the target profit has been achieved, the predetermined wages, bonuses and benefits-in-kind would be awarded plus other favourable terms like bank loan repayment could be tax deductable. Therefore, all the personnel in BCM3 have been facing higher pressure and challange to enhance the overall economic efficiency year after year.

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# Section 5 : Planning System

## 5.1 Organisation Structure

The National Textile Industry Council has delegated full autonomy to BCM3 in managing its own organisation structure except appointing the general manager and the party secretary. The "Factory Manager Responsibility System" is still adopted in BCM3 by the Council. This system adopts the previous Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the general manager. If an outstanding or above target performance has been achieved, the general manager will be awarded a predetermined lump sum bonus at the year end.

Since 1992, the general manager has the autonomy to appoint the senior staff such as the production managers and department heads. Any major changes of the organisation structure in each unit should be initiated by the deputy-general managers and approved by the general manager. However, more autonomy of internal management and operation has been delegated to the deputy-general and factory managers since 1992. And in turn, the deputy-general and factory managers have involved their workshop supervisors and section heads more in planning, control and decision making.

The top management has been decentralizing more planning responsibility to each production factory and department such as participation in formulating the annual plan and the internal responsibility contract. The production and cost control responsibility primarily lies with the production managers but the top management keep a surveillance quantity and quality control on each production factory through monthly or weekly report. (Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, BCM3 has a decentralized structure in which the individual deputy-general and department managers are reporting directly to the general manager, and they play a linking and control role between the factories or departments and the general manager.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

## 5.2 Review Process

Since the promulgation of the "enterprise transformation regulations" in July 1992, Beijing No.3 Cotton Mill (BCM3) has implemented a more formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). In October, the general manager calls for a planning meeting to discuss with the deputy-general managers concerning the next year targets such as production output value, sales, profit, capital requirements and other important events. The top management also evaluates the internal and external environmental factors in order to determine whether the above targets are realistic or not. If there is any then the general manager negotiates with the National Textile Industry Council until compromise can be reached. on these preliminary targets, the general manager assigns them to the production managers and other department heads for them to formulate their own plans or budgets for the next year. Much emphasis is placed on the production value and cost control which are the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

At the end of November, all the factories and departments submit their initial plans to the Enterprise Management Office for consolidation before review and discussion by the top management. If the overall predetermined targets cannot be met, the top management then try to enforce and insist the factories and departments to revise their annual plans accordingly. Although back and forth iterative discussions are allowed in December, it does not leave much rooms for negotiation for the factory and department managers unless they can provide very strong evidence such as the deficiency in the production facilities. Eventually, the annual plans must be approved by the top management in February next year for endoresement by the annual general meeting (attended by all enterprise representatives).

The approved annual plans are broken down into quarterly and monthly plans to cater for demand, seasonal and other factors. The annual plans are formally reviewed in July and adjustments on significant deviations are allowed to make after detail discussion and approval by the top management.

Before 1992, the production managers and department heads were only consulted in this annual planning review process and the general manager, under the direction of the Beijing Textile Bureau, gave directions to the factories and departments on what

should be done over the next 12 months within the context of a few key indicators e.g. sales, production volume and mix, quality improvement, material consumption, expense levels etc.

Since 1992, under the legislative changes and market economy promotion, the Bureau (subsequently the Council) has delegated higher automomy to BCM3 in formulating its strategic directions. As a result, all the factories and departments are involved in the planning process but the key variables are still determined and controlled by the top management.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as macro-eocnomic control (1994), operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc.

As mentioned in the introductory section at the very beginning, the Beijing No.3 Cotton Mill has laid down the following strategic themes and thrusts since 1992:

- (1) Customer and quality are always number one.
- (2) Production facilities and technology should be renovated to further enhance product quality to international standards.
- (3) Expand the domestic market share and explore the overseas markets.
- (4) Employ advanced management techniques to achieve a modern enterprise system.

The above strategic themes and thrusts are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the enterprise. BCM3 has been promulgating "Quality" as the most important strategic thrust in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets on the other hand.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the top management in BCM3 still from time to time make suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. Despite this fact, the top management has given some limited freedom to the factory managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales and profit targets.

The top management follow the financial indicators and performance closely on monthly and quarterly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "Very High-High Corporate" to "High-Medium Corporate" since 1992.

#### 5.4 Long-Term Plans (Resource Allocation)

Since the transformation of Beijing No.3 Cotton Mill (BCM3) into a state-owned enterprise in 1956, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system. The commencement of the economic reforms in 1979 started to allowed BCM3 to participate in the 5-year's planning with the Beijing Textile Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomics control and adjustment" as an excuse.

The changing role of the Bureau and the formation of National Textile Industry Council since 1993 has encouraged BCM3, for the first time, to participate in the first long term strategic plan (1991-1995). However, many internal factors and uncertainties have affected the validity and reliability of this long term plan which has been subject to review and changes every year. This year is the last year of the 5-year long term plan, the top management of BCM3 is trying to formulate the next 5-year plan (1996-2000).

The followings are the major long term plans or projects envisaged by BCM3 to be implemented in the next 5-year plan (1996-2000) although some of them have been started during 1991-1995.

#### (A) Production Renovation

BCM3 has been undertaken very long term facilities renovation in order to enhance the production technology and efficiency. Modern plant and equipment have been imported from Germany, Switzerland and Japan since the 1980s to upgrade the product quality and variety and satisfy the higher customer demands. Over 40% of the plant and machinery have been replaced with a total investment of RMB180 millions since the 1980s. BCM3 is needing over RMB200 millions of sources of fund to replace the other production facilities.

## (B) Product Development

Significant changes in the textile industry have been occured in recent years under the transition from planned economy to market economy. Now BCM3 has to promote and sell its products in a highly competitive market. The goodwill of BCM3 has been well established mainly due to its quality products, high technology and good management. Taking this advantage, BCM3 has to bias its product mix to the higher end by manufacturing upper grades of yarn and cloth (40-50 higher counts and density) and selling to the local and overseas clothing industry for producing final products of high quality. By aiming at the higher quality and price market segment, BCM3 will be able to at least avoid loss in the next 5 years.

## (C) Competitive Edge

BCM3 has been facing keen competition from many small- and medium-sized cotton mills in other developing cities and economic zones which are enjoying some favourable policies, such as low import and export taxes, given by the municipal governments so that they are very cost competitive and fliexible. To maintain at least the market share and competitive edge against these counterparts, BCM3 has to manufacture higher quality products but this strategy needs capital for reinvestment and renovation in plant and machinery. BCM3 are negotiating hardly with the banks for capital loans in order to further improve its production technology such as plant and machinery replacements.

## (D) Joint Ventures

The cost of production in the textile industry is getting higher and higher since 1990s mainly due to shortage in cotton grown in China and inflation on wages and other overheads. In 1991, under

the guidance of the government, BCM3 invested RMB2 million in a small textile mill in Shandong in order to obtain additional cotton supply produced in that province, but this practice was banned by the Council in 1993.

BCM3 is looking for joint-venture opportunities in other developing countries such as Russia, Vietnam, Philippines etc. However, sources of capital is the major hurdle to be overcome before entering into any foreign joint-ventures.

### (E) Market Development

To penetrate into the domestic market and capture higher market share, the sales personnel has been seggregated into geographic teams with different marketing strategies and tactics such as regular visits to the existing customers. The IRC signed with the Sales Department links up the remuneration directly with the sales volume and the accounts receivable (or cash collected) in order to motivate the sales and marketing effort.

### (F) Overseas Markets

Since the last 20 years, BCM3 has been relying very much on product export to creat both profit and foreign exchange. This strategy should be further explored by making use of its import and export right (since 1994) to expand and develop overseas markets in the Southeast Asian, South America and Eastern European countries.

# (G) Tertiary Enterprises

Diversification is one of the strategic themes promulgated and implemented since the early 1990s. Other than the existing tertiary enterprises as listed in the Legal Form and Organisation Structure section above, BCM3 is planning to diversify into other businesses such as property development, clothing, retailing and trading.

## (H) Reducing Headcount

In order to curb down the increasing payroll, BCM3 has to reduce the number of employees in the next 5 years (1991-1995) by means of transferring a proportion of employees to the existing and new tertiary enterprises, and encourage early retirement age of 55 for male workers (60 for male staff) and 50 for female workers (55 for female staff).

The current 5-year plan (1991-1995) was compiled after long discussion and negotiation between the Council and the BCM3's top management without much participation by the middle management who were playing a consultation role only. The 5-year plan is

reviewed at least once every year and adjustments are made via the annual plans. As far as the next 5-year plan (1996-2000) is concerned, BCM3 is trying to maintain and further develop the above long term strategies.

The factory managers and department heads are mainly concerned with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have tight financial surveillance coming from the general manager at least on a monthly basis. Therefore, the long term planning and review process are using a top-down approach in the belief that the general manager has better experience and knowledge of the external environment and even the internal operations of the factories and departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the National Textile Industrial Council has devolved its central planning role to BCM3 since 1992. Now, the top management of BMC3 is taking the initiative to formulate its own long term plan but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

## 5.5 Short-Term Plans/Budgets (Resource Allocation)

The general short term planning policy adopted by Beijing No.3 Cotton Mill (BCM3) is "production determined by sales" which means sales or turnover figure as agreed with the National Textile Industry Council is the initial driving force of all the activities. During the planning meeting held in October, the top management review and discuss the following four most important issues:

- (1) present and future production and operation situations;
- (2) current and future financial positions including capital, assets and liabilities mamagement;
- (3) next year profit target agreed with the Council; and
- (4) domestic and overseas market changes.

At the end of the day, the top management lays down some guidelines and targets to the factory managers and department heads to compile their individual annual plans or budgets. First of all, based on the production quantity and mix targets, the production factories draft their production plans and submit to the deputy-general manager (production) for consolidation and then send copies to the accounting and finance department for compiling financing plans (i.e. profit and loss, balance sheet, cash flow). At the mean time, the technical support and quality control sections also determine its production quality plans in order to ensure the production technology and facilities are capable to achieve the production plans.

In parallel, the wages and manpower section ascertains the labour hours and total payroll required which are directly linked up with the sales, profit or production value growth rates. On the other hand, the tertiary enterprise managers figure out their income and expense budgets as well. Finally, all the pieces are consolidated and reviewed by the enterprise management office before submission to the next planning meeting for consideration. The other steps in the annual planning or budgeting process are as described in section 5.2 (Review Process) above.

Since October 1992, the factory managers, department heads and tertiary enterprise managers have been involved in this planning process which they believe to be important in setting and negotiating the internal responsibility contracts with the general manager subsequently.

In view of the rapid changing market conditions, the annual planning review period has been shortened from quarterly to monthly. The general manager, deputy managers, factory managers, department heads and tertiary enterprise managers hold a formal meeting at the beginning of each month to review the financial performance against the annual plans.

Appropriate corrective actions may be taken to rectify any problems identified or deviations from the plan. Amendments or revisions are seldom made on the annual plans but adjustments are allowed in the monthly forecast and estimation.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

The major guidelines laid down by the top management before the budgeting process started include the followings:

- (1) Sales income
- (2) Profit before income tax + value added tax
- (3) Sales per employee
- (4) Production quantities
  - 4.1 yarn in tons
  - 4.2 cloth in ten thousand metres
- (5) Production value
- (6) Product quality
  - 6.1 yarn first class
  - 6.2 cloth first class
  - 6.3 export passing rate
- (7) Year-end number of employees
- (8) Safety targets
- (9) Employee's benefits
  - 9.1 new quarters provided
- (10) Capital projects
  - 10.1 research and development
  - 10.2 technology renovation
  - 10.3 buildings and facilities
  - 10.4 machinery and equipment
  - 10.5 major repair and maintenance

The following is an example of the Cash Budget which is a very important piece of master budget especially under the present lack of financial support from the banks.

- (1) Textile products sales income
  - Tertiary enterprises sales income
- (3) Other sales income

(2)

- 3.1 raw materials
- 3.2 second products
- 3.3 scrap materials
- (4) Sub-contracted work income
- (5) Other incomes (i.e. interest)
- (6) Bank loan received
- (7) Capital fund increased
- (8) Production expenses
  - 8.1 raw materials
  - 8.2 spares and consumables
  - 8.3 electricity and power
  - 8.4 wages and benefits

- sub-contract charges
- (9) Administration expenses
  - 9.1 salaries and benefits
  - 9.2 selling and distribution
  - 9.3 financial and insurance
  - 9.4 labour union
  - 9.5 others
- (10) Taxes paid
- (11) Capital expenditures
  - 11.1 production development
  - 11.2 production renovation
  - 11.3 major repair and maintenance

  - 11.4 machine and equipment 11.5 buildings and facilities
- (12) Bank loan repayment

In summary, both the mechanism legislation and the market economy have given BCM3 more freedom to plan ahead. The Council has almost completely devolved the short term planning autonomy to the top management of BCM3, except to agree on the minimum targets as agreed at the beginning of every year. Nevertheless, the Council can still influence the planning process by appointing new general manager and party secretary, and agreeing the sales and profit targets. The top management have involved the middle management in the annual planning process which on one hand is a critical step in materializing the long term strategic plan, and on the other hand, it is an important motivational factor for the factory managers, department heads and tertiary enterprise managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence : shift from "High-Medium Corporate" to "Low Corporate" since 1992.

## 5.6 Internal Responsibility Contracts (IRC)

Beijing No.3 Cotton Mill (SCM3) established its IRC system in 1988 in order to motivate the efficiency, profitability and cost reduction in the production workshops.

The following is the format of a typical IRC for the production factories :

(1) Headcount and Wages

Budgeted Gross Wages : XXXXXX No. of Employees : XXX ---

Including -

No. of Workers : XXX Budgeted Gross Wages : XXXXXX
No. of Day-time Staff : XX Budgeted Gross Wages : XXXXX
No. of Shift Staff : XX Budgeted Gross Wages : XXXXX
--XXX XXXXX

- (2) Rights and Responsibility
- 2.1 Contractor (General Factory Manager)
- 2.2 Contractee (Factory Manager)
- (3) Performance Targets
  - .1 Controllable Targets
    - 3.1.1 Production Quantities
    - 3.1.2 Product Quality
    - 3.1.3 Materials and Resources Consumption
    - 3.1.4 Facility and Equipment Condition
    - 3.1.5 Production Safety
- 3.2 Management Targets
  - 3.2.1 Production/Operation Management
  - 3.2.2 Human Resource Management
  - 3.2.3 Technology Innovation/Renovation Management
  - 3.2.4 Scientific Research Management
  - 3.2.5 Education and Training
  - 3.2.6 Sanity and Environmental Protection
- 3.3 Other Targets
  - 3.3.1 Serious Accidents and Fire Events
  - 3.3.2 Serious Quality Incidents
  - 3.3.3 Repair and Maintainence
  - 3.3.4 Family Planning
- (4) Contractee's Reward

It takes a few months for the general manager, factory managers and tertiary enterprise managers to negotiate with the terms and conditions for their IRCs signed in parallel with the planning process started in October until final approval by the top management in next February. This long process indicates that the setting of IRC is not a top-down approach and the factory and tertiary enterprise managers are very eager on this issue upon which they will be measured against and rewarded thereupon.

The IRCs are subject to quarterly review but adjustments can be made if some factors affecting the achievement of targets significantly.

Another type of IRC is related to individual project signed between the general manager and the heads of department such as technical support and production facilities. The followings are the major contents of this kind of sigle-project IRC:

- (1) Project title
- (2) Degree of completion
- (3) Project quality control and inspection methods
- (4) Safty measures and responsible party
- (5) Incentive scheme
- (6) Economic responsibilities of contractor and contractee
- (7) Budget
- (8) Other issues mutually agreed by both parties

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the factory managers, department heads and tertiary enterprise managers in initiating and negotiating their own IRCs, and also involved the accounting and finance personnel intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Management of interdependencies means the control influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the factories, and exploitation of a shared resource are examples that happen in Beijing No.3 Cotton Mill (BCM3) that need headquarter's intervention.

As shown in the organisation structure (section 2 above), the 5 spinning factories are integrated into a process type of production in which the outputs of No.1 Spinning Factory become input of No.2 Spinning Factory and so on. Furthermore, a certain proportion of the outputs from No.5 Spinning Factory are transferred to the two weaving factory for manufacturing cloth. Since all the production factories are treated as cost centres, standard costs are used as the "transfer prices".

The transfer quantities are also predetermined in the production plans which are broken down into monthly targets and reviewed or adjusted on a weekly basis. This practice can ensure all factories are operating together towards the same production goals or plans without bottlenecks due to arguement in transfer prices and quantities.

Therefore, there is no much rooms for negotiation among the spinning and weaving factories in both transfer prices and quantities because the spinning factories do not have much autonomy to sell the intermediate products externally and it is decided by the headquarters. Arbitration by the general manager is required to settle any unresolved dispute.

The Production Support Factory is providing electricity, gas, water, consumables, spares, tools etc. to the other production factories, service departments and tertiary enterprises. This supporting factory is treated as a cost centre and allocates its operating costs to the users according to actual usages at standard costs. Therefore, it does not involve in the transfer prices but only some arguements in the transfer (or standard) costs and quantities.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### Special Notes

In 1994, over 80% of the cotton mills in China were loss-making. Some economic reforms since 1980s affecting the textile industry are elaborated below.

- (1) Many textile enterprises, especially the old ones, may not get used to the transformation of central planning system to the market economy environment partly because they have not possessed relevant and sufficient market information, and partly due to some internal factors (i.e. management reliance and reluctance to change) and external factors (i.e. inflation and bank credit control).
- (2) Too much emphasis has been put into "tertiary enterprises" as a means to settle down the redundant employees and to contribute small amounts of profits. Instead of creating wealth to the society, some of them such as trading companies and retailing shops may consume resources of the main business. The tertiary enterprises in BCM3 have not brought into very significant profit to the headquarters.

- (3) Contrary to point (2) above, the government has not put enough investments into the "primary enterprises" (i.e. farming, mining, fishing, etc.) and the "secondary enterprises" (i.e. housing, transportation, manufacturing, electricity, tele-communication, etc.). For examples, the reduction of cotton produces and lacking of capital or credit support are adversely affecting the development of BCM3. Without good foundations in or insufficient supplies from the primary and secondary enterprises, the general living standards of the people cannot be raised. As a result, the people's purchasing power cannot affort to spend in the tertiary or third enterprises such as reastaurant, entertainment, retailing, taxi, security market, insurance, etc.
- (4) As mentioned in the introductory section 1 above, BCM3 has been facing very keen competition from those small- and medium-sized cotton mills established in the towns and villages. They can obtain more and cheaper cotton because their locations are closer to cotton farms. In addition, their wages and other expenses are lower than their counterparts in the big cities like Beijing. Furthermore, they can easily accumulate and obtain capital funds to renovate their production facilities which can enhance their flexibility and adaptability to the fast changing market enconomy.

The following are some ways suggested by BCM3 to revive the prosperity of the textile industry in China.

- (1) The government and bank should provide lenient sources of capital to renovate the production facilities and technologies in order to enhance the product quality and competition in the market.
- (2) The increase of total textile output should be controlled, whereas, the export of high quality products should be increased to create better profit and foreign exchange.
- (3) The economic responsibility contract and taxation system (i.e. value-added and income taxes) should allow some favourable terms for the textile industry to retain more earnings for working capital.
- (4) The government should increase the investments and policy support into the cotton farming in order to expand the output and reduce the price.

#### Section 6 : Control System

## 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Beijing No.3 Cotton Mill (BCM3) has three distinct levels of management hierarchy:

- (1) Top Management (general manager, deputy-general managers)
- (2) Middle Management (factory managers, department heads, chief accountant, chief engineer, tertiary enterprise managers)
- (3) Lower Management (foremen, supervisors, section heads)

The deputy-general managers, factory managers and tertiary enterprise managers can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (production lines or sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of employment with any staff is a difficult task which will be explained in the rewards and incentives section.

The major control mechanisms employed by the top management to control the performance of the factories and departments are by using annual plans and IRCs. As described in section 5.6 above, the most important measurement criteria are production efficiency and cost control set in the IRCs, although some other qualitative targets, such as quality and safety, are employed. However, these are subsidiary ones which have lower weightings in calculating the group wages and bonus. Obviously, financial objectives are the major factors in the control mechanisms used in the decentralized operation of BCM3.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence : shift from "Financial Control" to "Moderate Financial Control" since 1992.

## 6.2 Agreeing Objectives

Beijing No.3 Cotton Mill (BCM3) sets similar objectives for its production factories and tertiary enterprises: production and tertiary enterprise managers must meet their agreed IRC targets for the year and expect improvement in performance year after year as emphasized by the top management and the Council in terms of growth rates. The critical occasion, therefore, is the annual planning review.

As mentioned before, in view of the market economy and macro-economic control policies promulgated by the government, and the keen competition within this industry, the production factories and tertiary enterprises sometimes feel passive in setting their objectives or targets in the annual plans or IRCs because their activities are depending on some internal and external factors which are sometimes out of their control.

A high pressure to achieve the planned production quantity and efficiency is put on the production managers at the quarterly or monthly review. They fully understand that their group wages and bonus are tied in with the annual plans or IRCs and it also depends on the overall performance of the enterprise as a whole. Apart from the production factories, the other departments, such as purchasing and sales, and the tertiary enterprises may have annual or project based IRCs in which they have agreed specific objectives or targets with the general manager. The promotion, salary and bonus of these functional staff and independent profit centre staff are correlated with these quantitative and non-financial targets as well.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

## 6.3 Monitoring Results (Reporting & Performance Measurement)

Beijing No.3 Cotton Mill (BCM3) regards it as essential to catch variances from annual plan or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the factories, departments and tertiary enterprises submit monthly results on standard forms to their respective deputy-general managers and department heads, and also to the chief accountant for vetting and comparison with budgets and IRCs. The production factories are also required to submit production progress reports to the top management on a weekly basis.

The major performance measurement criteria are production quantity and product quality as shown in the IRC section. Without much autonomy on setting the selling or transfer prices, the production factories can only control the costs by employing

the "responsibility (target) costing" system implemented in 1992. This cost control system mainly sets quantitative standards such as material and electricity consumptions.

The monthly report format is unique for each factory or department. The contents are mainly corresponding with the annual plan from which all the targets stipulated in the IRC can be extracted from this report. The monthly and quarterly actuals are compared with the targets. The qualitative targets are usually subjectively measured by the deputy-general managers and enterprise management office and written in the monthly reports as well. These monthly reports are compiled, by the enterprise management office. Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the general manager for review.

For any serious adverse variances shown on any report, the general manager will contact with the respective deputy managers, chiefs, factory managers, department heads or tertiary enterprise managers to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

During the monthly meeting of the top management with the middle management, the general manager will put forward the monthly results for open discussion. The chief accountant will also report the financial performance of individual units. The factory managers, department heads and tertiary enterprise managers may be asked to explain briefly the significant variances.

Consistent failure (say over 12 months) in meeting the targets which are controllable by a factory manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results will be passed back to the manpower and wages department for calculating the group wages and bonus of each factory, department and tertiary enterprise for last month. Then the accounting department will process the bonus payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

The importance of computerization has been recognised by the top management and some stand-alone personal computers have been purchased and used for production planning and control, purchasing and inventory control, sales analysis, wages, and financial planning and analysis. In spite of this piece-meal computer utilisation, BCM3 does not have a concrete plan to purchase more personal computers or instal a mini-computer for networking. The major stumbling block is lacking of fund for

this kind of investment which is at low priority compared with many other perceived important projects like renovation of production facility, plant and equipment.

Now, BCM3 views the annual plan or IRC as a contract between the top management and the factory, department and tertiary enterprise. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no unit goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from plan.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" to "Moderate Financial Control" since 1992.

#### 6.4 Rewards and Incentives

Since 1992, The Beijing No.3 Cotton Mill (BCM3) had the autonomy to recruit employees from the labour market without getting the Beijing Manpower Bureau involved which is in compliance with the Mechanism Transformation Regulations. Furthermore, since 1993, the employees have gradually signed employment contracts, which include the "employee contract" and the "in-post contract".

The employee contract signed between the general manager and an employee signifies that he or she has been employed by the enterprise. Whereas, the in-post contract means a formal assignment of a certain post to the employee who is expected to be capable for the job. For the employees without in-post contracts, they may be transferred to the tertiary (service) enterprises which are fully-owned by BCM3 and are self-financed.

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the BCM3 is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. Under the new taxation system implemented in January 1994, the enterprise's payroll can exceed the two limits but the excess will not be income tax deductable.

The average annual gross wages per employee was around RMB5,300 in 1993 and RMB6,200 in 1994 which were about 30% less than the metallurgical industry and 40% less than the retailing industry. Under the current high inflation rate (overall average 21.7% in China in 1994), SCM3 is expected to increase the average annual gross wages to RMB7,000 in 1995.

The wages includes the basic wages and the floating wages where the former is almost fixed (i.e. average RMB200 per month) across the board and increased according to inflation as determined by the Manpower Bureau. The floating wages is classified into different grades depending on the type of work, seniority, efficiency and skill. The average floating wages is about RMB150 per month.

There are two portions for the "allowances". The first part is determined by the Manpower Bureau of the Beijing Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity. The second part is decided by the BCM3 which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowances" is about RMB100 to RMB120 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the factories, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the general manager and a factory manager will decide what level of group bonus will be given to the department. Of course, it is up to the factory manager to award that lump sum of group bonus to his or her subordinates according to individual performance. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

The calculation of "bonus" for the non-manufacturing employees is based on an "index" (scale) and then multiplied by the average monthly bonus achieved by the workers. The index scale is as follow:

General Manager	1.6
Deputy-General Manager	1.5
Chief Accountant/Chief Engineer	1.4
Section Head	1.3
Supervisor	1.2

Clerks 1.1

Under the "Factory Manager Responsibility System", if there is an overall outstanding or above target performance, the Council will award a lump sum of "special bonus" to the general manager at the end of the year. But under no circumstances, the remuneration package of the general manager can be greater than three times the total earnings of a department head (middle management). If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees.

However, to lay off a certain percentage of redundant employees will cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives. Another way to reduce redundant employees is to enforce early retirement at the age of 45 to 50.

Instead of fully implementing this contract employment system, BCM3 has signed "in-post contracts" with most of the employees on an annual basis. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive wages (according to grade in the pay-scale), allowances and bonus. Without such a contract, that employee is out of job but he or she is still an employee of BCM3 and is allowed to received a basic monthly subsidy of less than RMB300. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better. In fact, 25%-30% of SCM2 employees, in particular the non-manufacturing staff, are still redundant but reluctant to lay off due to some social constraints. On the other hand, a few hundreds of workers are employed from the other provinces who are hardworking and paid less wages than the local workers.

In relation to the social welfare, since 1993, BCM3 has to contribute 25.5% of the monthly gross payroll to the government for sharing the responsibility of pension. Fortunately BCM3 is able to claim a significant portion of its 25.5% contribution from the government because it has over 3,000 retired employees at the end of 1995.

In addition, BCM3 has to provide about 14%-16% (standard rate and tax deductable) of the monthly gross payroll for various employee's benefits such as medical, unemployment and building or buying residential quarters. Therefore, many old-aged state-owned enterprises, including BCM3 are proposing to handover the standard provision i.e. 16% of monthly gross payroll to the municipal government who will reimburse the actual cost of benefits incurred by the enterprises.

The 3rd Plennary Session of the 8th People's Congress held from 3-15 March 1995 discussed and approved this social welfare policy. BCM3 has to bear the medical allowance for its 3,000 retired employees which is a rather heavy financial burden to the overhead expenditures.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, BCM3 believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### Section 7 : Summary

Influences

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing No.3 Cotton Mill (BCM3) belonged to before and after 1992.

\_\_\_\_\_\_

Before 1992

After 1992

\_\_\_\_\_\_ Planning Influences: Organisation Structure\* High Medium Corporate Corporate Review Process\* High Medium Corporate Corporate Strategic Themes, Thrusts High/Medium Very High/High and Suggestions\* Corporate Corporate Long-term Plans\* High Medium (Resource Allocation) Corporate Corporate Short-Term Plan/Budgeting\* Medium Low (Resource Allocations) Corporate Corporate Medium Internal Responsibility High Corporate Contract Corporate Management of Interdepen-Hiqh Medium dencies\* Corporate Corporate (Transfer Pricing)

Control Influences :

Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Tight Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence	
	Tight Strategic	Tight Financial
High Corporate	(Strategic Programming)	(Financial Programming)
Medium Corporate		[Pre-1992]
Low Corporate	(Strategic Control)	(Financial Control)

## Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing No.3 Cotton Mill (BCM3) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting from "Financial Programming" (Pre-1992) to the boarder of "Financial Control" (Post-1992) which indicates the change is not very significant.

Revised: 24 March 1996

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 19
Report Date : 12 January 1996

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

Planning Influence	Control Influence	RA Style
High Corporate High Corporate Low Corporate Low Corporate	Tight Strategic Tight Financial Tight Strategic Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

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Name of SOE : Beijing Friendship Hotel (BFSH)

Staff Interviewed : Miss Zhang Lin/Finance Manager

(No. of years in this enterprise : 20 years)
Mr Sun Yu Qing/Assistant Finance Manager

(No. of years in this enterprise : 18 years)

Dates of Visits : First Visit - 4 September 1993 Second Visit - 31 August 1994 Third Visit - 11 September 1995

# Section 1 : History & Background

Built in 1954, the Beijing Friendship Hotel (BFSH) covers an area of 330,500 square metres and it has a construction area of 320,000 square metres. It is the largest hotel in Beijing in terms of land area. BFSH is situated at the west side of Beijing with a distance of 33km and 14km from the airport and city centre respectively. BFSH is a very traditional, cultural and elegant hotel composed of a main building, four hotel buildings and 48 stand-alone apartments. The gardens and recreation facilities occupy most of the space of this big piece of land. Hundred kinds of trees and flowers are growing in the gardens and along the lanes, so that the guests can enjoy the green peace all around the year. It is equipped with complete service and recreational facilities of international standard.

BFSH has 2,600 standard rooms, suites, deluxe suites and apartments, 3,000 beds, 9 restaurants and other facilities including conference building, acadamic hall, business centre, theatre, dancing hall, swimming pool, tennis court, fitness centre, sauna room, billard room, penthouse garden, coffee lounge, bars, department stores, foreign exchange counter, medical clinic, hair saloon, post office, bookshop, photoshop, flowershop, etc.

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#### Section 2 : Legal Form & Organisation Structure

Beijing Friendship Hotel (BFSH) has been a wholly state-owned enterprise since 1954. BFSH is under the administration of the State Foreign Experts Bureau because during the 1950s and 1960s, BFSH mainly provided accommodations to the foreign experts who were invited by and worked for the China government. Before the economic reforms started in 1979, the central planning system dictated all the planning and control systems of the state-owned enterprises. Therefore, BFSH acted just as a vehicle (or cost centre) to provide the accommodation activities according to the commands directed from the Bureau. Since the economic reform started in 1979, instead of dictatorship from the bureau, BFSH has been delegated autonomy in the business decisions and operations although the bureau still imposed influences on some affairs like personnel, pricing, investment, finance and wages.

In responding to and implementing of the "SOE Operation Mechanism Tranformation Regulations" enacted by the People's Congress in July 1992, both the government and bureau have delegated the planning and control responsibilities to the top management of BFSH to run their own business.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

Under the General Manager, who has an Enterprise Management Office, the organisation sturucture of BFSH is listed as follow:

## Profit Centres -

- Guest Houses Department (5 buildings) 1.
- Expert Houses Department (48 apartments) 2.
- 3. Customer Service Department
- Meal & Beverage Department
- Commodity Selling Department 5.
- 6. Transportation Service Department
- 7. Friendship Palace (see section 5.4)
- Beidaihu Hotel\* 8.
- 9. Tertiary Enterprises : Friendship Shopping Malls Trading Companies Engineering & Decoration Company Entertainment Company Distill Water Company

Cost Centres (Servicing Departments) -

- 10. Purchasing & Storage Department
- 11. Repair & Maintenance Department
- 12. Accounting & Finance Department
- 13. Personnel Department
- 14. Security Department
- 15. Quality Control Department
- 16. Education & Training Department
- 17. Organisation & Promotion Department 18. Labour Union Office
- 19. Communist Party Office
- \* This is a small hotel in Beidaihu which is about Northeast of Beijing. This small hotel has 180 employees.

BFSH had a total of 3,800 employees at the end of 1994 and about 600 retired employees whose wages and benefits had to be borne by BFSH. It is classified as a medium size state-owned enterprise in China.

# Section 3 : Financial Indicators

Total assets RMB 290M (1993)RMB 130M (1993)Turnover RMB 200M (1994)

RMB 230M (1995)

(1993) - 17.7% of sales Income before tax RMB 23M

20M (1994) - 10.0% of sales\* RMB(1995) - 8.7% of sales\* RMB 20M

: 15% (since 1993)# Income tax rate

\* The significant reduction of profit margin in 1994 and 1995 was mainly due to the inflation effect on the cost of sales. Despite the drop of profitability, BFSH's cash position is rather healthy. It repaid RMB30M in 1995 and had a bank credit balance of RMB20M at the end of the same year.

# The income tax rate may be unified at 33% in 1996 pending for the government final decision.

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# Section 4 : Economic Responsibility Contract System (ERCS)

Beijing Friendship Hotel (BFSH) has never entered into any formal Economic Responsibility Contract (ERC) with the government but instead major financial targets such as turnover, profit, foreign exchange and capital expenditure have been assigned by the State Foreign Expert Bureau since the 1950s.

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# Section 5 : Planning System

# 5.1 Organisation Structure

The organisation structure of Beijing Friendship Hotel (BFSH) is a typical functional type by grouping the operations into 9 profit centres and 10 cost centres as shown in Section 2 above. Each department has one manager who is responsible for most of the personnel affairs. Since 1992, BFSH has been decentralizing more planning responsibility to each department such as initiating the annual plan and the internal responsibility contract. The income, profit and expense responsibilities primarily lie with the departmental managers but the top management keep a close eye on the financial performance of each profit or cost centre through monthly, weekly and daily report.

Before 1992, the general manager, departmental managers and some assistant managers were appointed by the Bureau. But now the departmental managers and their assistants are recruited by the general manager who is still appointed by the bureau. Any major changes of the organisation structure in each department should be initiated by the manager and approved by the general manager. However, the major appointments and changes are still influenced by the bureau.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, BFSH has a decentralized structure in which the individual departmental managers report directly to the general manager, and they play a linking and control role between the department and the general manager.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.2 Review Process

Since 1992, the government or bureau has assumed the planning autonomy to the Beijing Friendship Hotel (BFSH) to implement a formal planning process for reviewing, discussing and sanctioning the annual plan or budget and the internal responsibility contracts (IRCs). First of all, the general manager refers to the long term plan and evaluate the internal and external environmental factors before thorough discussions with the departmental managers. The ultimate conclusion is to determine the annual sales, profit and foreign exchange targets for next year which have to be agreed with the bureau. Based on these preliminary targets, some guidelines are provided to the departmental managers for them to initiate their own plans or budgets for the next year. Much emphasis is placed on the internal profit and cost control for the departments whose annual plans contained the key criteria to be used as the measurement yardsticks of their subsequent internal responsibility contracts.

In October, all the departmental managers submit their annual plans to the Accounting & Finance Department for consolidation before review and discussion by the general manager and the departmental managers. The first annual planning meeting is held in November by the general managers and departmental managers mainly to discuss the gaps between the submitted plans and the targets perceived by the bureau. The top management is trying to provide assistance to the departmental managers to close the gaps as far as possible. If not, the general manager has to refer back to the bureau and ask for compromise. Then, further formal and informal meetings and discussions are held between the general manager and departmental managers either collectively or individually. This iterative exercise carries on until all the annual plans and contracts are mutually agreed and approved in the annual staff representative meeting held during February. The approved annual plans are broken down into quarterly and monthly plans to cater for seasonal and holiday factors. The annual plans are formally reviewed once every quarter.

Before 1992, the departmental managers had not participated too much in the annual planning process. Instead, they were given the performance targets by the general manager who had to fulfil the financial goals as assigned by the bureau. Since 1992, under the legislative changes and the market economy promotion, the government or bureau has delegated higher automomy to BFSH in formulating its strategic directions. As a result, all the departmental managers, who know their operations better, are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan.

Therefore, both the bureau and general manager have less interference in departmental planning decisions, but without reducing the financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc. The strategic themes and thrusts promoted by the Beijing Friendship Hotel (BFSH) are as simple as follow:

- friendly atmosphere;
- (2) considerate and quality service; and
- (3) beautiful surroundings.

The above strategic themes and thrusts are directed from the top management for all the employees to observe and keep in mind when they are performing their duties for the customers.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

After the promotion of "Mechanism Transformation" in 1992, the bureau and the top management in BFSH still from time to time make suggestions on specific issues relating to the planning and control process such as personnel, pricing and investment decisions. Despite this fact, the top management has given more freedom to the departments to compile their own plans or budgets and to adjust their plans and operations as long as they do not deviate much from the ultimate sales, profit and cost targets.

The top management follow the financial indicators and performance closely on weekly, monthly and quarterly basis and are quick to make suggestions if they do not match the overall long and short term plan.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "High-Medium Corporate" since 1992.

# 5.4 Long-Term Plans (Resource Allocation)

Beijing Friendship Hotel (BFSH) has been and will be undertaken the following long term projects which would increase the revenue and profit in the next five years (i.e. 1996-2000).

## (1) Friendship Palace

A eugal-share joint-venture with a Taiwanese company was established in 1992 to invest RMB100 million in building the Friendship Palace which is located to the west of the central garden of the Beijing Friendship Hotel which, after this renovation, has been rated internationally as a four-star hotel. The three-storey building of 17,000 square metres combining facilities for conventions, recreation, dining and bar service has become an important part in the total provision of services by the Friendship Hotel.

On the first floor is situated the large-scale recreational centre of first-class facilities include a beauty salon, a sauna, a massage, a bowling alley and a karaoke lounge. On the second floor, there are several elegantly decorated restaurants serving different style of Western-food as well as regional Chinese-food. The multi-function hall on the third floor is an ideal place for conventions of all kinds, grand banquest, cocktail parties and entertainments.

The Friendship Place was opened in September 1993. It brought in over RMB20M of income in 1995 which is equivalent to the total revenue of all the other restaurants and entertainment facilities provided in the hotel.

#### (2) Expansion

BFSH is planning to increase the number of Guest Houses from 48 to 130 in the next few years in order to provide more apartments for the higher demand from the foreign investors and expatriates in Beijing.

## (3) Joint Venture

BFSH has been discussing with foreign investors, including Taiwan and Hong Kong, to invest RMB200M-300M for constructing a 18-28 floors of commercial building close to the present hotel site. This project will take at least 3 years time.

# (4) Import/Export

Since BFSH has been operating two department stores, further plan has been made to expand its import/export trade in particular the household electrical appliances. This would require an additional working capital of RMB15M-RMB25M in 1996. The long term objective is to obtain the import and export right from the government.

## (5) Tertiary (Service) Enterprises

BFSH will continue to expand and diversify its tertiary enterprises in order to allocate the resources better on one hand and to transfer many excess employees to these independent self-financing entities on the other hand.

Since the establishment BFSH in 1954, it has followed the national 5-year's planning cycle and carried out the missions as assigned in every 5-year's plan directed by the municipal government under the central economic planning system.

The commencement of the economic reforms in 1979 started to allow BFSH to participate in the 5-year's planning with the Beijing Municipal Government and the State Foreign Experts Bureau but specific directives and suggestions were always coming from the top by using the term "macroeconomic control and adjustment" as an excuse.

The Enterprise Mechanism Tansformation Regulations promulgated by the government in 1992 have legitimately delegated the long term strategic planning autonomy to BFSH who should demostrate to the bureau of its future development to sustain growth in terms of asset value and profitability. However, many external factors and uncertainties, such as government macro-economic control policies and inflation, have affected the validity and reliability of the above long term plans which have been subject to review and changes every year. The long term plans are initiated and discussed by the top management and the bureau without much participation from the departmental managers except playing a consultation role only. Furthermore, the departmental managers concern with how the milestones set in the long term plan will affect their next year budgets or internal responsibility contracts which will have financial surveillance coming from the top management at least on a monthly basis.

Therefore, the long term planning and review process are using a top-down approach in the belief that the top management have better experience and knowledge of the external environment and even the internal operations of the departments.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the State Foreign Expert Bureau has devolved most of its central planning role to BFSH since 1992. However, major long term projects involving substaintial capital still require the approval from the bureau whose endorsement on the bank loan is a must. Now, the top management of BFSH is taking the leading role to formulate its own long term plans but participation from the middle management is limited to consultation only.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.5 Short-Term Plans/Budgets (Resource Allocation)

After the implementation of the mechanism transformation legislations in 1992, BFSH has employed the following more formal annual planning or budgeting process.

In October, the general manager asks the accounting and finance department to provide the year-to-date financial results. he calls up an initial planning meeting to review and discuss the following aspects which have direct or indirect impacts on the next year's plan or budget.

- (1) Capability Evaluation
  - Financial performance Financial stability (a)
  - (b)
  - Borrowing capacity (c)
  - (d) Space & facility availability
  - Manpower availability (e)
- Environmental Scanning (2)
  - Worldwide economy changes
  - China economy changes (b)
  - Beijing economy changes (c)
  - Competitor analysis (d)
  - Customer analysis (e)
- (3) State Foreign Experts Bureau Expectations
- (4)Long-term Plans (as shown in 5.4 above)

The general conclusion of this planning meeting is to preliminary targets for income and profit expected to be achieved in the next year. Of course, a certain extent of stretch is built into these targets in order to enforce the departmental managers to plan their own budgets agressively. Then the general manager breaks down these targets on divisional basis and notify them to individual departments.

The next step is for the departmental managers to formulate their budgets by discussion with their own deputy managers supporting staff. In November, the departmental managers have to send their first budget drafts to the accounting and finance department for screening and consolidation before submitting to the top management in the headquarters for consideration. this point of time, informal discussions may be held between the top management and the departmental managers trying to bridge the gap of different expectations.

Then formal and informal meetings are held until compromises and agreements have been reached between the headquarters and the departmental managers. After the Chinese New Year in February, the master budget is tabled in the annual employee representatives meeting for approval, and after that, implementation begins. The budgets and IRCs are broken down into quarterly targets for periodic control and measurement. Since 1994, BFSH has compiled the expense budget and profit and loss budget as the two important pieces of financing plans which formats are shown in Appendix A at the end of this case writing.

Since October 1992, the departmental managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the top management. Furthermore, the approved budgets and IRCs affect their strategies and tactics for short and medium term developments.

In view of the rapid changing market conditions of the tourism business in China, the budget review period has been shortened from quarterly to monthly. The top management in headquarters and all the departmental managers hold a formal review meeting at the beginning of each month to review and discuss the financial performance of last month. Remedial actions are suggested to correct any significant controllable deviations from the quarterly or monthly budgets. The targets determined in the budgets and IRCs are seldom adjusted unless facing substantial uncontrollable environmental factors. Basically, a fixed budget concept is employed.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, the mechanism legislation and the market economy have driven BFSH spending more effort to plan ahead. The top management have involved the departmental managers or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plans, and on the other hand, it is an important motivational factor for the departmental managers to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

#### 5.6 Internal Responsibility Contracts (IRC)

Beijing Friendship Hotel (BFSH) established its IRC system in 1988 in order to motivate the various departments to attain at least the financial targets set in the ERC signed with the This IRC system applies to the 8 profit centres as government. listed in Section 2 above. In turn, individual departments, such as guest houses, meal and beverage etc., sign similar or second-tier IRCs with their sub-units. The duration of the IRCs is usually last for one year and reviews on a quarterly basis.

The followings are the major contents of an IRC signed between the Headquarters and the Guest Houses Department for 1992.

# Purposes

- Enhance the operation management and service quality. 1.
- Motivate the initiative of employees. 2.
- 3. Improve the economic and social effectiveness.
- Ensure the target accomplishment of "wages linked up with efficiency".
- Balance the economic benefits distribution among the 5. government, enterprise and employees.

# Section 1 : General

The signing up of this IRC does not change the organisational relationship and leadership between the contractor (general manager) and the contractee (guest house department). contractee is under the supervision and management of the contractor. The contractee is obliged to increase the revenue and reduce the expenses in order to achieve every target agreed in this contract.

# Section 2 : Economic Targets

- 2.1 Income\* and Profit Targets
  - 2.1.1 For Income RMB42M, Profit RMB 5.40M (PM=12.9%)
  - 2.1.2 For Income RMB48M, Profit RMB 7.30M (PM=15.2%)
  - 2.1.3 For Income RMB55M, Profit RMB 8.80M (PM=16.0%) \* Income is based on cash received or receivable.
- Expense Targets# 2.2
  - Allocated Expenses RMB12M 2.2.1
  - Fixed Assets Depreciation, Repair and Maintenance 2.2.2 RMB7.4M
  - Water, Electricity, Power RMB6.14M (if no direct 2.2.3 metre, use building area as apportionment basis)
  - Insurance RMB0.31M 2.2.4
  - Land, Building and Vehicle Taxes RMB1.11M 2.2.5

# The expense targets are adjusted once every year unless under significant inflation or deflation during the year.

## Section 3 : Total Wages Underwritten

The contractor will allow a total wages of RMB1,146,596 to the contractee for the year. The total wages cannot be adjusted due to any increase or decrease in number of employees. This amount will be reviewed annually. The daily wages for temporary workers is RMB2.5.

Section 4 : Service Targets

Enhance the operation management and service quality persistantly. Maintain proper service, sanity, safety and facility according to 3-star hotel standards subject to any sudden inspection.

Section 5 : Materials Supplied

The contractee should submit a materials requisition plan to the contractor one week in advance for materials which are available in Beijing, one month in advance for materials which are purchased from other places, and six months in advance for materials which need to place orders. The requisition plan should stipulate the material description, type and model, quantity, quality, unit price, and delivery time. According to the plan, the contractor is responsible to search for the suppliers, provide sample, place orders upon contractee's agreement, and charge contractee the purchase cost.

In order to save the expenses, the contractee should consume firstly the materials available in contractor's stock. For any urgent required materials which are out of contractor's stock, the contractee can purchase directly the materials at a cost not exceeding RMB50 each time.

The contractee can collect the planned and purchased materials from the contractor's stock collectively, regularly or at any time upon proper approval by the authorized personnel.

Section 6 : Income Handover

The contractee should handover all the recorded operating income to the contractor's accounting and finance department every day and no retention is allowed.

Section 7 : Floating Wages

If the contractee cannot accomplish the first economic target (2.1.1), the total wages underwritten will be adjusted downward accordingly.

The total wages underwritten in next year will be increased if the contractee can accomplish the second economic target (2.1.2). If not, the responsible personnel of the contractee will be subject to discipline until laying off.

The total wages underwritten in current year will be increased if the contractee can accomplish the third economic target (2.1.3). In addition, the contractor should grant appropriate award to the responsible personnel of the contractee. If the actual performance is in between the second and third economic targets, the contractor should grant a lump sum award to the contractee on a proportional basis.

## Section 8 : Bonus Distribution

The bonus to be awarded to the contractee is calculated at 6.5% on the actual monthly profit achieved. In addition, a year end bonus of RMB140,000 can be awarded to the contractee according to overall annual performance and other special circumstances. A bonus at 3% of the sub-contract (external) income earned by the laundry is calculated and awarded on a monthly basis as well.

# Section 9 : Education and Training

In order to enhance the personal competance, the contractee's employees should actively participate in the education and training programmes organised by the contractor. The related expenses should be borne by the contractor except the wages and bonus of the employees receiving the training. The contractee is responsible for the expenses related to the education and training programmes offered by itself. The contractor is responsible for arranging those outsiders coming to attend the education and training programmes and leaving 50% of the training income to the contractee.

#### Section 10 : Contractor's Rights and Duties

## 10.1 Rights

- 10.1.1 Determine and assign the economic targets and total wages for the contractee.
- 10.1.2 Assign specific duties to the contractee in writing.
- 10.1.3 Considering the benefit of the whole enterprise, add or delete certain contractee's business operations. Expenses of the additional operation are borne by the contractor, whereas the derived benefits should be reflected by increasing the economic targets to the contractee. On the other hand, the reduction in benefits to the contractee due to operation deletion should be reflected by reducing the economic targets
- 10.1.4 Employ, transfer or lay off the senior staff and their deputies of contractee's major sections.

# 10.2 Duties

- 10.2.1 Ensure the supplies of water, electricity and gas to contractee.
- 10.2.2 Perform timely inspection and maintenance for the contractee's equipment and facilities in order to ensure the contractee's normal operation.
- 10.2.3 Creat a favourable environment for the contractee's operation and do not affect any contractee's activities.
- 10.2.4 Provide the bonus, medical expenses, quarters, meal and education allowances, and other benefits to the contractee.

# Section 11 : Contractee's Rights and Duties

# 11.1 Rights

- 11.1.1 Has the autonomy of operation and management.
- 11.1.2 Recruit management staff and arrange group and shift
- 11.1.3 Recruit employees according to contractor's personnel policies.
- 11.1.4 Subject to the contractor's approval procedures, transfer out or lay off employees.
- 11.1.5 Recruit temporary employees according to seasonal needs.
- 11.1.6 Punish the against-the-rules employees according to employee's handbook.
- 11.1.7 Put redundant employees out of job with contractor's approval and under contractor's training programme.
- 11.1.8 Decide the posts for the employees but the transfer from service post to technical post should obtain contractor's approval.
- 11.1.9 Arrange proper jobs for the old, weak, sick and handicap employees.
- 11.1.10 Decide the wages and bonus distribution system but should file the record with the contractor.

# 11.2 Duties

- 11.2.1 Observe the government policies, laws and the hotel's rules and regulations.
- 11.2.2 Work hard to operate actively to maintain the goodwill of the hotel.
- 11.2.3 Take appropriate measures to enhance management in order to reduce expenses and improve profit.
- 11.2.4 Maintain the equipment and facilities in good operating conditions and notify contractor's for repair and maintenance promptly.

# Section 12 : Breaching Contract Responsibilities

- 12.1 Both parties should comply with this contract and should not change any terms and conditions or breach this contract unilaterally.
- 12.2 If the contractor, after operational audit, discovers any malpractice, significant wrong decision making or serious misconduct on the part of the contractee and make the latter's operation a standstill, the contractor has the right to terminate or withdraw the contract.
- 12.3 If the contractee breaches the contract and affect the contractor's benefits adversely, the latter has the right to terminate or withdraw the contract.
- 12.4 If the contractor breaches the contract and interfers the rights of the contractee seriously to an extent of unable to manage the latter's operation, the contractee has the right to terminate or withdraw the contract. Any loss incurred by the contractee should be compensated by the contractor.

# Section 13 : Contract Period

This contract is effective for two years as from January 1992 to December 1993. Three months prior to the expiry of this contract, both parties can mutually agree to extend or terminate this contract. Both parties should also mutually discuss and agree to solve any questions related to this contract.

# Section 14: Managing Department

The Enterprise Management Office is responsible to assess the performance, supervise and explan of the terms and conditions of this contract.

# Section 15 : Dispute

The council meeting of the Labour Union is responsible to deal with any disputes arising from this contract.

#### Section 16

If any conflicts occur between this contract and the government policies and regulations, the latter will be prevail. If any conflicts occur between this contract and the hotel's regulations, the former will be prevail.

#### Section 17

In case of any unavoidable or uncontrollable events occur and affect the accomplishment of the targets agreed in this contract, both parties can mutually resolve the problems.

#### Section 18

Both parties have the same copy of this contract which is effective after sign, seal and delivery.

Since 1992, the IRCs have been developed by the headquarters and relevant departments during the budgeting process (October - February). After iterative discussions and negotiations with the top management in the headquarters, the IRCs are agreed and signed by the departmental managers and the general manager.

The IRCs are reviewed quarterly in parallel with the budget review but both the general manager and the departmental managers are trying to avoid adjusting the targets unless there are significant uncontrollable environmental changes affecting their validity.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the departmental managers in initiating and negotiating their own IRCs, and also involved the accounting and finance department intensively as a vetting mechanism in order to set the targets as objectively as possible.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Because the 8 departments or profit centres in Beijing Friendship Hotel (BFSH) are all independent with very minimal interactions and interdependencies, therefore, if there is any internal transfer of product/service, actual or standard cost is used to settle the transactions.

# Section 6 : Control System

# 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Beijing Friednship Hotel (BFSH) has three distinct levels of management hierarchy:

- (1) Top Management (general and deputy-general managers)
- (2) Middle Management (departmental managers, deputy managers and other functional managers)
- (3) Lower Management (section leaders under the departmental managers)

The profit centre managers, who have signed the IRCs, can recommend their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (sections) to the headquarters. In addition, since 1992, the profit centre managers have been vested with higher strategic autonomy to manoeuvre their organisational and personnel changes but important changes should be discussed with headquarters before implementation. Whereas, the organisational and personnel matters of the other cost centres are still influenced by the headquarters.

The profit centre managers are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation, remuneration (distribution of bonus) and even suggestion of termination. With tremendous increase of foreign-invested and joint-venture enterprises, the present labour market in Beijing is rather free which means employees can choose their new jobs and resign from the old ones at their own will. On the other hand, the employers have the autonomy to lay off their staff by giving advanced notice according to the Labour Law (implemented in January 1995) and the terms of the employment contracts. BFSH has implemented the "employment contract system" since 1994 but the "big rice pot" or "three iron bowls" concept is still existed. Almost a few hundreds of the employees are redundant but it is difficult, under the influence of the communist party and labour union, to ask them to leave the enterprise.

The major control mechanisms employed by the top management to control the performance of the departments are by using annual budgets and IRCs. As described in section 5.6 above, the most important measurement criteria are sales and profits set in the IRCs, although some other qualitative targets (non-financial) are employed.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.2 Agreeing Objectives

Objectives in Beijing Friendship Hotel (BFSH) emerge from the detailed discussion of the long and short term plans between the government or bureau and the top management. The financial objectives stem from the compromise between the two parties, and then impose on the departments, especially the profit centres. The departmental managers participate in formulating their annual budgets and IRCs, but top management in the headquarters can and do push and probe for alternative objectives as they see fit since they are under the pressure form the bureau. With the long years of experience and information (financial and marketing) gathered by the top management, suggestions are provided to individual departments to amend the financial objectives both in the short or long term. Furthermore, the top management have a holistic view to achieve the overall financial objectives year after year according to the long term plan.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Tight Financial Control" and "Moderate Financial Control" since 1992.

## 6.3 Monitoring Results (Reporting & Performance Measurement)

Beijing Friendship Hotel (BFSH) has monthly and quarterly reporting systems to track actual results versus plans or budgets. Each profit centre has its own accounting staff responsible for sending monthly results on prescribed formats to the accounting and finance department in the headquarters for calculating the internal profits and comparing with budgets before submission to the general manager for review.

The contents of the monthly report are simpler than the manufacturing industries. The key financial results such as sales and expenditures are the major concerns of the headquarters. The non-financial measurement yardsticks (see IRC in section 5.6) are assessed by the headquarters and department through daily inspections. The comments and ratings of the service evaluation are written on the same monthly reports. These monthly reports are compiled, through the computer, by the accounting staff. Any significant variances (without specifying tolerance limits) are highlighted in order to bring to the attention to the top management.

For any significant adverse variances shown on any report, the general manager contacts the respective departmental managers to dig out the underlining reasons or asks them to perform investigation immediately. It is expected that remedial actions can be taken to handle the short term problems as soon as possible.

During the monthly meeting between the top management in headquarters and the departmental managers, the general manager puts forward the monthly results for open discussion. The departmental managers may be asked to explain briefly the significant variances and any other potential problems. Infrequent failures in meeting the budget by the departmental managers can be tolerated as long as they are taking remedial tactics or strategies to put things back on the right track and attain the budget at the end of the year. Of course, if any serious uncontrollable environmental factors happened to hit any department adversely, the manager should not be blamed.

Apart from the monthly reporting system, daily performance or control reports are required for the profit centres since they receive cash around the clock everyday. The followings are two examples of these daily control reports.

- (1) Guest House (Front Desk/Cashier)
- 1.1 Shift
- 1.2 Receipt No.
- 1.3 Staff No.
- 1.4 Receipt from Customers :
  - 1.4.1 Ad Hoc
  - 1.4.2 Long-term
  - 1.4.3 Experts
  - 1.4.4 Tourist Group
  - 1.4.5 Conference
  - Sub-total

- 1.5 Receipt from Services:
  - 1.5.1 Meals
  - 1.5.2 Telephone
  - 1.5.3 Business Centre
  - 1.5.4 Laundry
  - 1.5.5 Beverage
  - 1.5.6 Service Charge
  - 1.5.7 Deposits
  - 1.5.8 Others
  - 1.5.9 Taxes
  - Sub-total

- 1.6 Payment Analysis
  - 1.6.1 Cash
  - 1.6.2 Credit Card
  - 1.6.3 Credit Account
  - 1.6.4 Account Transfer
- 1.7 Reporter
- 1.8 Auditor
- 1.9 Date of Report

# (2) Restaurants

Name of Restaurant (Each)
Breakfast Lunch Dinner Sub-Total

- 2.1 Cashier
- 2.2 No. of Dinning People
- 2.3 No. of Seats
- 2.4 Occupancy Rate (2.2/2.3)
- 2.5 Sales per Customer
- 2.6 Service Items:
  - 2.6.1 Food
  - 2.6.2 Beverage
  - 2.6.3 Wine
  - 2.6.4 Bear
  - 2.6.5 Tobacco
  - 2.6.6 Others
  - 2.6.7 Taxes
  - 2.6.8 Adjustment

Total Sales

- 2.7 Weekday/Holiday
- 2.8 Weather
- 2.9 Reporter
- 2.10 Auditor
- 2.11 Date of Report

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.4 Rewards and Incentives

According to the central government's policy, the annual gross wages (including bonus) growth rate of all the state-owned enterprises, including shareholding companies, can not exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
  - 2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the Beijing Friendship Hotel (BFSH) is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration. Any excess wages and bonus paid above either of these two limits will be subject to income tax of 15% in the case of BFSH.

The take-home pay structure of BFSH is composed of basic wages, bonus and allowances. Because of the high inflation rate of 21.7% and 14.8% in 1994 and 1995 respectively, the average annual gross wages per employee was increased from RMB6,000 in 1994 to RMB7,500 in 1995.

The "basic wages" is reviwed annually depending on post, skill and seniority. Every point increase on the basic pay scale is RMB10-25, therefore, it is not substantial enough to catch up with the inflation. Obviously, the "bonus" is an significant component of income which is determined according to the IRC.

There are two portions for the "allowances". The first part is determined by the Beijing Manpower Bureau at least once every year mainly for the purpose of combating the inflation. The second part is decided by the BFSH which may include housing, meals, travel, education, attendance, overtime, festival gifts etc. The payment of "allowances" is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus", as described in section 5.6 above, is based on the accomplishment of the IRC. An IRC signed between the general manager and a departmental manager decides what level of group bonus will be given to the department. Of course, it is up to the store manager to award that lump sum of group bonus to various sections and in turn, the section heads can distribute the group bonuses to individuals according to performance as agreed beforehand usually in black and white. The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) can be retained in a reserve in order to make up the low bonus obtained during the months of slack season. The payment of year-end bonus, if there is any, is also according to the annual performance of each department. It is possible that a department will receive very low or even zero bonus if it performs much below the targets.

The bonus paid to the management and administrative staff in the headquarters is calculated as follow:

Monthly average wages per employee x Grading factor\* x Perfromance factor#

*	i.e.	Position	Grading	factor
		General Manager	1.8	
		Accounting Manager	1.5	
		Supervisor	1.3	
		Senior Clerk	1.1	

# Performance factor is assessed by the departmental manager usually less than 100%.

In addition to the remuneration paid to the servicing employees, BFSH has to pay pension and other allowances to 600 retired employees. This kind of life-long responsibility is common to all the state-owned enterprises and it is adding a significant financial burden to the profit and loss account. To alleviate this ailing situation, a Central Government Welfare Fund System has been promulgated since 1993 and will be fully implemented in 1996.

Since 1993, BFSH has been contributing 25.5% of the monthly gross wages and salaries paid to the employees to the Central Government Social Welfare Fund for the purpose of pension. The shortfall between the enterprise contribution and actual payments to employees will be covered by the government. Similar contributions are under discussion for the other social welfare benefits such as medical, unemployment and disable allowances. All these policies are aiming at to share the social securities between the government and the enterprises for the long term benefit of the working population.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Rice Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. BFSH has implemented this contract employment system since 1993 and now all the employees have signed employment contracts from one to five years subject to review and renewal. In general, the motivation of the employees has been improved.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, the enforcement of financial objectives has both a stick and a carrot aspect. Evidence of the stick can be found in the reduction of monthly or year-end bonus and even manangement turnover in senior positions. The carrot is represented by substantial increase in bonus and perhaps career advancement.

Observation of Control Influence: shift from "Financial control" to "Moderate Financial Control" since 1992.

#### Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Beijing Friendship Hotel (BFSH) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	High Corporate	Medium Corporate
Review Process*	High Corporate	Medium Corporate
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corproate
Long-term Plans* (Resource Allocation)	High Corporate	Medium Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	High/Medium Corporate	Medium/Low Corporate
Internal Responsibility Contract	High Corporate	Medium Corporate
Management of Interdepen- dencies* (Transfer Pricing)	N/A	N/A
Control Influences :		
Organization Control*	Financial	Moderate Financial
Agreeing Objectives*	Tight Financial	Moderate Financial
Monitoring Results*	Financial	Moderate Financial
Rewards & Incentives*	Financial	Moderate Financial

<sup>\*</sup> Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence				
	Tight Strategic	Tight Financial			
High Corporate	(Strategic Programming)	(Financial Programming)			
Medium Corporate		[Pre-1992]    \/ [Post-1992]			
Low Corporate	(Strategic Control)	(Financial Control)			

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beijing Friendship Hotel before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifted from "Financial Programming" (Pre-1992) to "Financial Control" (Post-1992) gradually although it has not yet reached a very strong-form (very low corporate) of financial control style as suggested by Goold and Campbell.

As a matter of fact, both the degrees of planning and control influences are on two separate continua. The planning influence should run from high corporate, then medium corporate and down to low corporate. Similarly, there should be measurement in between tight strategic control and tight financial control.

Revised: 24 March 1996

# Appendix A

Line Expense

# Beijing Friendship Hotel Expenses Budget (1994)

No.		Actual \$	Budget \$
01 02 03 04 05 06 07 08 09 10 11 12	Wages Welfare Fuel Depreciation Repair & Maintenance Consumable Materials Water & Electricity Postage Uniform Laundry Meals Service Charges Travelling		
14 15 16 17 19 21 22 23 24 25 26 27 28 29	Entertainment Conference Advertising & Promotion Education & Training Labour Insurance Other Insurance Security Transportation Labour Union Management (Bureau) Charges Local Taxes Bad Debts Damaged Stock Others Finance Total Expenses (Sum 1-28) = 29.1 Operating Expenses 29.2 Management Expenses 29.3 Finance Expenses		

Last Year This Year

# Appendix 3

# Beijing Friendship Hotel Budgeted Profit & Loss Account

Line No.	Expense	Last Year Actual \$	This Year Budget \$
01	Operating Income Less:		
02	Operating Cost		
03	Operating Expenses		
04	Operating Taxes Equal:		
05	Gross Profit		
	Less:		
06	Management Expenses		
07	Finance Expenses Equal:		
08	Operating Profit Add:		
09	Investment Income		
10	Other Income Less:		
11	Other Expense Equal:		
12	Profit Before Tax		

24.03.96

# UNIVERSITY OF GLASGOW DEPARTMENT OF ACCOUNTING & FINANCE

Post-graduate Programme: PhD in Accounting

Supervisor : Professor Clive Emmanuel

Student Name : Joseph Yau Shiu Wing (Hong Kong)

Research Title : "The Responsibility Accounting In China

- Towards An Exploratory Framework"

Report Title : Data Analysis 20
Report Date : 30 January 1996

Introduction: A total number of 20 State-owned Enterprises (SOE) have been visited during the period from September 1991 to September 1995 in order to collect data concerning the changes of planning, control and responsibility accounting systems in these SOEs before and after 1992 due to some legislative, economic and ownership reforms implemented in China during that year. The purpose of this Data Analysis is to describe the changes of the parameters in these systems operated in each SOE (one analysis for one SOE). The ultimate aim is to classify the "Responsibility Accounting Style" (before and after 1992) of each SOE into a simplified two-dimensional (planning & control influence) matrix similar to the "Strategic Style Grid" propounded by Goold & Campbell in 1987. The four specified "Responsibility Accounting Styles" are summarised as follow:

High Corporate Tight Financial Financial Programming (2) Low Corporate Tight Strategic Strategic Control (3)	Planning Influer	nce Control Influence	RA Style
How corporate right rimaneral rimaneral control	High Corporate	Tight Financial	Strategic Programming(1) Financial Programming(2) Strategic Control (3) Financial Control (4)

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Name of SOE : Beiren Printing Machinery Holdings Ltd. Beijing (BPMH)

Staff Interviewed: Miss Zhang Weifen (Finance Manager)

(No. of years in this enterprise: 15 years)

Dates of Visits : First Visit - 2 September 1993 Second Visit - 30 August 1994 Third Visit - 15 September 1995

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# Section 1 : History & Background

Beiren Printing Machinery Holdings Ltd. (BPMH) is a core member of Beiren Group Corporation (BGC) which specialises in the design, development, production and sale of various types of sheet-fed offset presses in China. BGC (formerly known as Beijing Renmin Machinery Factory) was established in 1952 through the merger of 21 small iron factories and machinery factories.

BPMH was established in Beijing, the PRC on 13 July 1993 as a joint stock limited company in accordance with the provisions set out in the Standard Opinion on Joint Stock Limited Companies issued as of 15 May 1992 by the State Commission for Restructuring the Economic System of the PRC. BPMH is registered as an overseas company in Hong Kong under Part XI of the Hong Kong Companies Ordinance. Its ultimate holding company is Beiren Group Corporation ("BGC"), a legal entity owned by the PRC government.

Pursuant to the approval of the China Securities Regulatory Commission of the State Council and other relevant authorities, BPMH issued H Shares in Hong Kong in July 1993 and A Shares in Shanghai in April 1994. The H Shares were listed on the Hong Kong Stock Exchange on 6 August 1993 and the A Shares (public shares) were listed on the Shanghai Stock Exchange on 6 May 1994. Additional A Shares (employee shares) were listed on the Shanghai Stock Exchange on 29 November 1994.

Since the shareholding transformation of BPMH in July 1993, the issue and listing of shares are as follows :

(a) Issue and listing of Hong Kong public shares (H Shares)

Date of issue : 4 August 1993

Issue price: RMB2.3 per share, payable at HK\$2.08 per share

Number of shares issued: 100,000,000 shares

Date of listing : 6 August 1993

Place of listing: Hong Kong Stock Exchange Number of shares listed: 100,000,000 shares

- (b) Issue and listing of PRC public shares (A Shares)
  - (i) Public shares

Date of issue : 9 April 1994

Issue price : RMB5.3 per share

Number of shares issued: 35,000,000 shares

Date of listing: 6 May 1994

Place of listing: Shanghai Stock Exchange Number of shares listed: 35,000,000 shares (ii) Employee shares

Date of issue : 9 April 1994
Issue price : RMB5.3 per share

Number of shares issued : 15,000,000 shares

Date of listing: 29 November 1994

Place of listing: Shanghai Stock Exchange Number of shares listed: 15,000,000 shares

As at 31 December 1994, the share capital structure of BPMH was as follow:

	Million shares Nominal value RMB1 each
Shares not yet listed	,
State-owned legal person shares (A Shares)*	250 (62.5%)
Listed shares	·
PRC public shares (A Shares)	50 (12.5%)
Hong Kong public shares (H Shares)	100 (25.0%)
	400 (100.0%)

\* Represented by the Beiren Group Corporation (BGC).

In 1994, BPMH applied the funds raised from the listing for construction and renovation of workshops, purchase of staff quarters, purchase and installation of advanced equipment, introduction of overseas modern management skill and investments in profitable projects. The investments in five workshops have made some progress. In 1994, BPMH invested RMB52 million for the introduction, installation, construction and improvement of staff quarters, equipment and technology. Long term and short term loans of RMB68 million were repaid in 1994.

In 1995, BPMH pursued technology improvement, management diversification, vertical integration of operation and reformation of operational structure to meet the demand of the market with a view to having higher economic return.

The major business operation of BPMH are development, design, manufacturing and sales of printing machines, pressing machines, packing machines and parts and components of such machines. The other operations include technology consultancy and technical support services related to the above business.

BPMH is principally engaged in the production and sale of various types of sheet-fed offset presses in China. BPMH currently has more than 300 regular customers located throughout China, including printers of books, magazines, newspapers, notes, certificates and packaging materials. BPMH's products are principally sold to customers in the PRC. In addition, a small proportion of its products (less than 10%) are exported to a number of developing countries and regions including Southeast Asia and the Middle East.

BPMH's head office and production facilities are located adjacent to the Beijing-Tianjin Express Highway in Beijing city. BPMH uses computers in the production and testing of key parts, components and fittings and has entered into an agreement with Beiren Group Corporation (BGC) whereby BPMH will undertake research and development of new products using the research facilities of BGC.

BGC (including BPMH) is the largest manufacturer of offset presses in the PRC and was accredited as a "Category 1" enterprise in 1990. "Category 1" enterprise is a national award given by the State to enterprises which have attained certain standards of management, proudct quality and profitability. BPMH is the largest manufacturer of sheet-fed offset presses in China. BPMH's products principally consist of sheet-fed offset presses, which are widely considered to be one of the most commonly used presses in the printing industry. BPMH produces 61 different models of offset presses, which include single/double colour, multi-colour and multi-function sheet-fed offset presses. BGC has obtained the two Gold Quality Awards and two of the three Silver Quality Awards that have ever been given to the printing machinery industry by the State during the past decade.

In 1994, under the supervision of the directors and with the efforts of all the staff, BPMH managed to overcome the difficulties of the volatile market conditions due to the macro-economic control measures taken by the PRC government and to speed up the technology improvement programme. The quality of the products has been improved and the company was able to achieve its targets and to grow satisfactorily when compared with last year.

# Section 2 : Legal Form & Organisation Structure

Beiren Group Corporation (BGC) was restricted by its production capacity and shortage of staff which led to an insufficient supply of its products. To expand its production capacity, BGC acquired the Beijing Electrical Punched Part Factory and the Beijing Forging Press Factory in 1983 and 1992 respectively. These factories were subsequently coverted into a sheet-fed machine factory and a single/double colur offset press factory respectively. The company successfully developed and manufactured China's first folio six-colour glazing multi-function offset press in 1992. Commercial production of such offset press commenced in 1994.

On 13 July 1993, BPMH was registered with the administrative bureau of industry and commerce of Beijing municipality upon approval from the State Commission for Restructuring the Economic System of the PRC. The ownership rights in the multi-colour offset press factory, the single/double colur offset press factory, the gear workshop, the sheet-fed machine factory and the supply division, which were originally under BGC, were transferred to BPMH and became the operating divisions.

Under the Beiren Printing Machinery Holdings Ltd. (BPMH), the company structure is shown as follow:

- (1) Production Factories & Workshops\*
- 1.1 Multi-Colour Offset Press Factory
   [manufacture of sheet-fed multi-colour offset press]
  - ..2 Single/Double Colour Offset Press Factory
    [manufacture of sheet-fed single/double colour offset press]
    - Sheet-Fed Machine Factory
      [component and sheet-fed machine manufacturing]
- 1.4 Gear Workshop
  [gear manufacturing]
- 1.5 Foundry [casting of semi-finished products]
- \* Each factory or workshop is an independent profit centre, having signed IRC with the General Manager, and has its own manager, deputy managers, foremen and other supporting staff, such as accounting and personnel. Therefore, a kind of matrix management exist with various reporting relationships with the respective departments in the headquarters.
- (2) Headquarters
- 2.1 Enterprise Management Office (headed by the General Manager
- 2.2 Internal Audit & Law Office and a Deputy-General Manager)
- 2.3 Production Planning & Control Department (headed by the
- 2.4 Technical & Quality Assurance Department Chief Engineer)

- 2.5 Investment & Development Department (headed by the Chief
- 2.6 Sales & Marketing Department Economist)
- 2.7 Accounting & Finance Department (headed by the Chief
- 2.8 Computer Department

Accountant)

- 2.9 Purchasing & Supply Department (headed by a Deputy-General
- 2.10 Personnel & Manpower Department Manager)

The BPMH had the following 11 persons in the Board of Directors :

Chairman (General Manager)

Deputy Chairman (Deputy General Manager)
Director (Deputy General Manager)

Director (Chief Engineer)
Director (Chief Economist)

Director (Assistant to General Manager)

Director (Deputy General Manager of Beiren Group

Corporation\*)

Director (Deputy General Manager of Beiren Group

Corporation)

Director (Senior Assistant to the General Manager of

Beiren Group Corporation)

2 Non-executive Directors

(Government Officials)

\* Beiren Group Corporation (BGC) is the ultimate holding of BPMH.

The followings are the 3 members in the Supervisory Committee:

Chairman of BGC's Labour Union)

Supervisor (Supervisor of BGC's Supervisory Committee)

Supervisor (Representative of BPMH Labour Union)

Beiren Group Corporation (BGC) is an independent legal entity owned by the State. The supervisory authority of BPMH and BGC is Beijing Industrial Machinery Bureau. BPMH and BGC are independent of such authority in respect of management decision relating to policy setting, strategy, planning and operations.

As far as BGC is concerned, the major roles played by the Beijing Industrial Machinery Bureau before 1993 are to :

- (1) appoint the factory manager (or general manager) and the communist party secretary;
- (2) maintain macroeconomics control on the 5-year's plans suggested by its enterprises;
- (3) provide guidance on product development, technology improvement and market information; and
- (4) act as a bridge or facilitator between the government and its enterprises in policy matters such as capital investment, import and export autonomy, taxation, legal form transformation i.e. shareholding, etc.

In responding to and implementing of the "SOE Operation Mechanism Transformation Regulations" enacted by the People's Congress in July 1992, the Bureau has delegated the planning and management responsibilities to BGC although the quarterly and annual reports have to be submitted to the Bureau for review. Since BPMH is a shareholding enterprise, the Bureau exerts less planning and control influences although it can do so by the two representatives sitting on the board of directors.

(Please refer to Q2.6 & Q2.7 on the questionnaire extracts in Appendix 1.)

At the end of 1994, BPMH had a workforce of 3,650 people, including 2,800 workers, 290 engineering and technical personnel, 450 administration staff and 110 responsible in servicing and other duties. It is classified as a "large-size SOE" in China. BPMH has extensive staff training programmes depending on the current staff situation and the needs. It provides training to its staff in the following areas:

For management, engineering and technical personnel: computer operation, foreign language skills and various kinds of specialised technical training.

For workers: training of elementary, intermediate and advanced levels in metal cold-working and hot-working and the study of theories on related subjects for technicians.

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#### Section 3 : Financial Indicators

(1994)Total assets RMB1,027M (1992)265M Turnover RMB (1993) RMB 385M RMB 426M (1994)RMB 362M (1995)

Income before tax : RMB 52M (1992) - 19.6% of sales

RMB 111M (1993) - 28.0% of sales RMB 122M (1994) - 28.6% of sales RMB 107M (1995) - 29.6% of sales

Income tax rate : 15%

BPMH generally commences production upon confirmation of orders. As a result of the recent rapid growth of printing industry, demand for BPMH's printing machines has significantly exceeded supply. Therefore, the customers are generally required to pay a cash deposit of 10% - 20% of the purchase price at the time of order. The balance will be payable immediately prior to delivery or upon delivery. Coupled with the shares issued in 1993 and 1994, BPMH had a total of cash and bank balance of RMB220M against a total of long term and short term borrowings balance of RMB83M at the end of 1994. Bad debt was quite minimal.

### Section 4: Economic Responsibility Contract System (ERCS)

Since 1986, the Chinese government has actively promoted the ERCS to the state-owned enterprises with an aim to enhance their economic efficiency (over one-third of them were running in losses) through the participation in the profit sharing. The first stage of the ERCS development was from 1986 to 1990. In the first three years of this stage, ERCS created positive effects such as the government revenue and the labour remuneration were both increased.

However, in the following two years, due to the macroeconomics contol policies adopted by the government to curb down the overheated economy, the market demand for products and services declined and as a result, a lot of contracts could not be fulfilled. Therefore, during the second stage (1991-1995) of the ERCS development, many enterprises were not willing to enter into contracts with the government in 1991. Then the government had to give more favourable terms and conditions to the enterprises in order to induce them entering into the contracts.

Under the above situation, the Beiren Group Corporation (BGC) entered into the first 3-year ERC (1988-1990) in 1988 with the Beijing municipal government. The major economic target was sales tax plus income before tax which initial base was set at RMB20 million for the first year 1988. Then the annual growth rate was 6%. The profit and tax handovered to the government included sales or value-added tax, income tax, municipal taxes and a portion of the profit after income tax. Any excess of the profit and tax over the targets would be refunded to the enterprise.

Upon the expiry of the first ERC, the second one for five years (1991 - 1995) was agreed and signed in 1991. The 1991 sales tax plus income before tax was set at RMB24 million and then the annual growth rate was increased to 8%. Any excess of the income tax over the ERC target would be refunded. Other than income tax, there were sales tax, value-added tax and other municipal taxes. 90% of the profit after tax was transferred to the Renovation and Development Fund, whereas, the 10% went to the Employee Welfare Fund for capital expenditures such as building or buying staff quarters.

The inception of Beiren Printing Machinery Holdings Ltd. (BPMH) in 1993 did not affect the ERC of its ultimate holding, BGC, because BPMH is a public limited company which is not required to entered into any ERC with the government, but instead income and relevant taxes are the sources of revenue paid by BPMH to the government.

BGC is currently negotiating with the government to waive the continuance of ERC and adopt the similar tax payments to the government as its subsidiary, BPMH.

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#### Section 5 : Planning System

# 5.1 Organisation Structure

Although Beiren Printing Machinery Holdings Ltd. (BPMH) is a large listed SOE, the guiding theme of the organisation structure is simplicity and accountability. It went to some length in 1993 to establish the 5 production workshops as stand-alone business units which are independent semi-profit centres that are controlled by individual factory or workshop managers with clear lines of authority and responsibility. Based on the Internal Responsibility Contracts (IRC), they are accounted for the production quantities and costs, as well as the fixed and working capital. Other than these four production workshops, all the other departments are classified as cost centres.

Since the inception of BPMH in 1993, more planning responsibility has been decentralised to each factory and department such as initiating the annual budget and the internal responsibility contract. The profit and cost responsibility primarily lies with the factory manager but the top management keep a surveillance cost control on each production workshop through monthly or weekly report.

It has been the practice that the selection and appointment of the factory manager and party secretary of BGC are decided by the Beijing Industrial Machinery Bureau and a "Factory Manager Responsibility System" is in force. This system takes the Economic Responsibility Contract (ERC) as a basis to evaluate the performance of the factory manager. If an outstanding or above target performance has been achieved, the factory manager will be awarded a lump sum bonus at the year end.

Since BPMH is a shareholding enterprise, the board of directors has full autonomy to appoint all the senior management staff in the headquarters and the managers of the 5 production factories and workshops. As a matter of fact, most of the senior management staff in the headquarters are members of the board who know the business and operation better on one hand but may have conflict or independence in decision making. Any major changes of the organisation structure in each production factory and service department should be initiated by the manager in charge and approved by the general manager via the Enterprise Management Office.

However, more autonomy of internal management and operation has been delegated to the factory and department managers in BPMH compared with its holding enterprise BGC. And in turn, the factory and department managers have involved their subordinates more in planning, control and decision making.

(Please refer to Q5.1.1-Q5.1.4 on the questionnaire extracts in Appendix 1.)

In summary, BPMH has a decentralized structure in which the individual factory and department managers report directly to the general manager who in turn reports to the board of directors, and they play a linking and control role between the factories, headquarters and the board.

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.2 Review Process

Since the establishment of Beiren Printing Machinery Holdings Ltd. (BPMH) in 1993, a regular formal planning process to review, discuss and sanction the annual plan or budget and the internal responsibility contracts (IRCs) has been implemented. First of all, the board of directors reviews the long term plan and evaluates the internal and external environmental factors, and then discusses with the senior management staff in details in order to determine the annual sales and profit targets for next year. Based on these preliminary targets, some guidelines are provided to the production managers and other department heads for them to initiate their own plans or budgets for the next year. As far as the five production factories are concerned, their budget proposals contained the key criteria (i.e. internal profit, production quantity and cost, and working capital employed) to be used as the measurement yardsticks of their subsequent internal responsibility contracts. The other service departments in the headquarters have to compile their annual work plans and expense budgets as well.

During November, the Enterprise Management Office and Accounting and Finance Department, under the direction of the general manager receive all the budgets and plans for validation and consolidation into a master plan or budget for submission to the Board of Directors for review. Then, formal and informal meetings and discussions are held between the board of directors and senior management staff either collectively or individually. This iterative exercise carries on until all the plans, budgets and contracts are mutually agreed and approved by the board in February and endorsed by the AGM held in April or May. Then the enterprise management office publishes a set of the final master plans and sends to the production and department managers.

Apart from the annual planning exercise, all the factories or workshops and departments are encouraged to participate in the planning process and extend their planning horizon beyond one year in order to match the milestones set in the 5-year long term plan. Therefore, the top management have less interference in departmental planning decisions, but without reducing the tight financial control.

(Please refer to Q5.5.2, Q5.5.6, & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

Obvervation of Planning Influence: shift from "High-Medium Corporate" to "Low Corporate" since 1992.

# 5.3 Strategic Themes, Thrusts and Suggestions

It is an usual practice for the traditional (especially old) state-owned enterprises to promulgate various strategic themes and thrusts to their employees through different means such as meetings, documents, notice boards or banners. Some of these themes and thrusts are disseminated by the government such as operational mechanism (1993), economic effectiveness (1992), quality control (1991), economic responsibility contract (1990), etc.

The directors of Beijing Printing Machinery Holdings Limited (BPMH) believe that the success of the company is attributable to the following strategic thrusts:

- (1) the growth of China's printing industry leading to increasing demand for advanced printing machines as a result of modernized production processes;
- (2) its association with Beiren Group Corporation, which has a history of 43 years in the printing machinery industry in the PRC and which is one of the market leaders;
- (3) its experienced management team and workers who have extensive experience and expertise in the printing machinery industry;
- (4) its continuous efforts in research and development to improve the quality of the existing products and on the development of offset presses;
- (5) its extensive product range of high-quality and competitively priced offset presses, which at present consists of 61 different models; and

(6) the use of computer controlled facilities in the processing of key parts and components which enable the company to maintain its control over product quality and production schedules.

BPMH has been promulgating "Quality" as the most important strategic theme in order to compete with the counterparts for the domestic market share on one hand and to explore the overseas markets on the other hand.

In order to establish the quality assurance system for the full size paper offset presses, BPMH has adopted the ISO 9000 quality management and quality assurance standard since 1995. It is expected that the system will obtain the certification from the relevant PRC authorities of the State in 1996. The system intensifies the internal quality control of BPMH so that products of reliable quality are provided to its customers. It also facilities the penetration of the products into international markets.

In addition to the "GS" recognition of the six models of quarto offset presses, it is expected that the folio offset presses of BPMH will pass the examination for the "GS" recognition of Germany and the "UL" recognition of the United States in 1996. The recognition will facilities the expansion of the markets of the Europe and the United States for BPMH's products.

(Please refer to Q5.2.4-7 on the questionnaire extracts in Appendix 1.)

Before 1992, the top management in BGC (BPMH's holding entity) from time to time made suggestions on specific issues relating to the planning and review process such as sales quantity and mix, selling price, marketing strategy and production quantity and mix. The top management followed the financial indicators and performance closely on monthly and quarterly basis and were quick to make suggestions if they did not match the overall long and short term plan.

To facilitate the implementation of the legislation in 1992, both the top management of BGC and BPMH have given more freedom to the factory managers and department heads to compile their own plans or budgets and to adjust their plans and operations as long as they would not deviate much from the ultimate sales and profit targets. Nevertheless, the top management still provide guidelines and suggestions to the factories and departments in the planning process.

(Please refer to Q5.3.1-4 on the questionnaire extracts in Appendix 1.)

Observation of Planning Influence: shift from "High Corporate" to "Medium Corporate" since 1992.

#### 5.4 Long-Term Plans (Resource Allocation)

The current trend in the printing industry worldwide is the switching from letterpress printing to lithography, which has resulted in an increasing demand for offset presses. In addition, the trading volume of printing machines worldwide is accelerating. BPMH's offset presses compare favourably with those of its competitors in pricing. Accordingly, the Directors believe that BPMH's products have a competitive edge in the expanding international market.

Since the public listing in 1993, BPMH's efforts have be focused on :

- (1) improving the quality and performance level of its offset presses;
- (2) expanding the range of offset presses produced; and
- (3) increasing its production capacity and improving its productivity.

In order to materialize the above objectives, the board of directors have been actively formulating the following long term plans which are extending to the 9th National Planning Cycle from 1996 to 2000.

### (a) Joint-Ventures

A joint venture contract dated 2 April 1994 between Beijing Daqing County Taihe Industrial Company and BPMH whereby the parties agreed to invest an aggregate amount of RMB5 million to establish Beiren Tai He Printing and Casting Factory. BPMH would contribute RMB3.5 million, representing 70% of the total investment. The factory started operation in 1995.

A joint venture contract dated 1 November 1993 was signed between BPMH and Xiaotangshan Town People's Government of Changping County, Beijing whereby a joint venture named Beijing Pressing Machine Factory No.2 was established with a registered capital of RMB9 million. BPMH contributed machinery and equipment of RMB4.6 million to acquire 51% of the equity interest of the joint venture. The term of the joint venture is from 1 November 1993 to 31 December 2003. Profit would be distributed prior to taxation and equally distributed to the parties after each year end. Upon the liquidation of the joint venture, the parties shall be entitled to take back the assets respectively contributed by them. The joint veture started operation in 1995.

# (b) Long Term Investments

A wholly-owned subsidiary of BPMH, Sheenlite Company Limited, was incorporated by BPMH under Hong Kong Companies Ordinance on 6 January 1994. A special resolution was passed on 24 May 1994 to rename it as Sheenlite Finance Company Limited.

An agreement was entered into between Sheenlite Finance Company Limited ("Sheenlite") and Full Pool Limited Corporation ("Full Pool") in May 1994 whereby Honmark Investment Co. Ltd ("Honmark"), a wholly-owned subsidiary of Full Pool, would enlarge its issued share capital from 2 shares of HK\$1 each to 2,000,000 shares prior to the execution of the agreement and all the 2,000,000 shares would be owned by Full Pool. The principal business of Full Pool are import and export trading, shares, properties holding and other projects.

It was agreed between Full Pool and Sheenlite that Full Pool would sell 1,000,000 sahres in the enlarged share capital of Honmark to Sheenlite, representing 50% of the enlarged share capital of Honmark. The shares entitled Sheenlite to receive dividends and the rights to assets. Based on friendly negotiation, Honmark was jointly managed by the directors appointed by Full Pool and Sheenlite in Hong Kong administration practice.

An agreement dated 29 December 1994 between BPMH, Sheenlite and Full Pool whereby the shares of Full Pool owned by Sheenlite were transferred to BPMH.

#### (c) Renovation

After renovation of the Single/Double Offset Factory, BPMH has strengthened the production of single/double colour offset presses. A total of 270 sets of single/double offset presses were produced in 1994, representing an increase of 125% over 1993.

#### (d) Research & Development

After two years' effort, BPMH's quarto offset presses passed the "GS" examination of the Germany in 1994 and was granted the right to use "GS" trade mark on six models of the products. It indicates that the safety technology of "Beiren" offset press meets the advanced standard of developed countries. With such a recognition, the products can be sold to the European market.

In order to cope with the demand for printing of packaging papers, 15 sets of newly developed four-colour offset presses were produced in 1994. With the fine quality and high adaptability of the printed products, the presses are well received by the customers.

# (e) Equipment & Technology Transfer

The 500 tonnes single-spot forging press with the technology introduced from Japan has commenced operation. A small number of products were produced in 1994 to meet the demand for medium to large size press in the automotive and electrical industries. The production of each products was also a new development of the production of forging machine.

Mechinite cast iron technology was introduced from British International Machanite Co. After throughout study of the technology, BPMH has obtained the authorisation from the British Company to use the internationally recognised quality trade mark "M". As the quality of the casted parts has been improved, BPMH is able to accept orders for export of large quantity of casted parts.

# (f) Production Development

The construction of phase 1 of Beiren Tai He Printing and Casting Factory, a joint venture with Daxing County Government of Beijing, was completed in 1994. The factory will have a production capacity of 1,500 to 2,000 tonnes of quality casted parts for offset press. It will also have the ability of primary processing of certain major components. The factory will help improving the quality of small casted parts of offset press.

Part of the renovation of the workshop for high precision small parts was completed. Trial production has commenced and the production capacity of the workshop was 300,000 man-hours in 1995. It has anticipated that the quality of high precision parts of offset press would be further improved after 1995.

A cold-formed parts machine workshop for the production of safety guard of offset press was established. The renovation of the workshop of 2,600 square metres was completed. Agreements for the introduction of three cold-formed parts machines from Germany and Japan had been signed. The machines were delivered in the second quarter of 1995 and operation commenced in the last quarter of the year.

Plasma coating workshop was constructed in order to improve the anti-rust protection of the roller of offset press.

Hebei Beiren Paper Feeder Factory was established in 1995 with Shijiazhuang Government of Hebei to produce paper feeder for the BPMH's offset presses.

# (g) Marketing & Promotion

In order to provide comprehensive after-sales and maintenance services to its customers, and assist its customers in the technical aspects of their operations, BPMH has entered into an agreement with Beiren Group Corporation (BGC) whereby BGC's 27 servicing centres for offset presses located throughout the PRC, which employ more than 300 service personnel, will provide after-sales service for BPMH's products. In addition, BGC will be the sole sales agent for BPMH's products in the PRC and overseas, and be responsible for the implementation of marketing programmes formulated by BPMH. When a customer purchases a new offset press, BPMH will, through BGC, provide free installation testing, technical advice and training for the customer. In addition, after-sales services such as machine repair and maintenance, the supply of components and fittings, and one-year free maintenance will be provided.

Under the above arrangement, BPMH will also have access to the marketing network and sales staff of BGC located in various sales centres throughout the PRC. These marketing staff, through interaction with customers, are aware of the customers' needs. They provide service on the development of new technology, and gauge the customers' requirements and assessments of the capability of BPMH's products at the same time.

BPMH often participates in exhibitions and conferences relating to printing machinery, including the annual roadshow in major cities in the PRC and the International Exhibition for Printing Machinery, such as the one held in Drupa of Germany in 1995. BPMH also advertises in various PRC newspapers, periodicals and trade magazines relating to printing.

#### (h) ISO 9000

Since 1979, Beiren Group Corporation (BGC), including BPMH has implemented a comprehensive quality control system in its production process. BPMH undertakes inspection for quality control purposes in every aspect of the production process. All materials and parts have to undergo quality control tests after each principal stage of the production process and before further processing. BPMH has established internal guidelines on quality control and regularly trains its staff on quality control procedures. To ensure the effective implementation of such procedures, BPMH has set up a department with experienced personnel to undertake random checks and tests on quality control procedures to evaluate their effectiveness.

BCG, including BPMH, has compiled a quality control handbook based on the ISO 9000 Quality Control Management and Quality Standard System, and since 1990, quality control procedures have been implemented on this basis. BCG and BPMH are planning to obtain ISO 9000 certification in 1997 or 1998.

### (i) Turnover/Profit Growth

The Board of Directors believe that BPMH has been able to maintain consistent profitability as a result of continuous improvement to existing models and introduction of new and improved models in accordance with market demand. Prices of most raw materials and components used by BPMH and its products were previously subject to state control, and most adjustments to prices had to be approved by the relevant authorities. However, since the latter part of 1992, such price control has been eliminated and currently, the prices of raw materials and components used by BPMH and its products are not subject to any form of state control.

During the period, which was also a period of rapid economic growth in the PRC, BPMH's production costs have increased significantly, as a result of increases in material costs as well as labour costs. Nonetheless, throughout the period, BPMH has been able to adjust its sales prices in response to increases in such costs, and overall profit margins have been maintained. With its established market position and competitive pricing policy, as against both domestic and imported products, and the strong market demand, the BOD expect that BPMH will be able to sustain its profit margins in the 1990s.

(Please refer to Q5.4.1-9 on the questionnaire extracts in Appendix 1.)

In summary, the government has devolved its central planning role to BGC and in particular BPMH as a shareholding enterprise. Now, the top management of BPMH is taking the initiative to formulate its own long term plan with active participation from the middle management whose medium and short term operation may be affected as well. The board of directors of BPMH are very keen in the strategic planning process which represents the committment to the shareholders and other stakeholders in terms of profitability and growth.

Observation of Planning Influence: shift from "High Corporate" to "Medium-Low Corporate" since 1992.

# 5.5 Short-Term Plans/Budgets (Resource Allocation)

Since the establishment of Beiren Printing Machinery Holdings Ltd. (BPMH) in 1993, the general short term planning policy adopted is "production determined by sales" which means sales is the initial driving force of all the activities. Reference should also be made to the 5-year long term plan especially to estimate what the sales potential will be for the newly developed products in the next year. As from October 1993, BPMH has employed the following annual budgeting process.

The board of directors and top management are very active in performing some marketing activities such as participating in local and overseas exhibitions and visits to exisiting and potential customers with his sales and marketing staff. In October, they evaluate the present and future internal financial, production and human resources with the deputy managers, factory managers and the three chiefs. They also scan the external opportunities and threats with the sales and marketing staff. Eventually, the board of directors tentatively determine a set of sales mix figures (i.e. sales budget). These sales forecasts are provided to the respective departments, more importantly to the production factories and workshops, for them to initiate their own budgets.

The first budget submission is in early November and the enterprise management office and chief accountant consolidate all the pieces into a master budget (financial and operation plan) for board of directors' review before the first budget meeting is held with all the factory and department managers. The major purpose of this first meeting is to discuss with the factory managers to ascertain whether their production capacities can be matched with the initial sales budget. If they exceed the sales budget, it becomes the primary responsibility of the sales and marketing staff and even the factory manager to hunt for other sales avenues in order to fully utilize the production capacity. If there is excess demand, then priorities will be given to the customers for delivery and agreements must be made with the customers beforehand. Due to the resultant effects of the macro-economic control measures installed by the government in July 1993, the demand of BPMH's printing machines have been affected since 1995. It is expected that the overall production capacity will be about 90% in 1996.

Again, the second budget submission in December is consolidated by the enterprise management office for further review by the board of directors who will then discuss informally or formally with the factory managers and department heads. Another submission is usually made in January next year. Finally, the agreed master budget is tabled to the board of directors for approval in February and then endorsed by the AGM in April or May.

Since October 1993, the production managers have been involved intensively in this budgeting process which they believe to be important in setting and negotiating the subsequent internal responsibility contracts with the general manager. The other department heads have also participated carefully in devising their expense and operation budgets which they would be measured against as performance yardsticks.

In view of the rapidly changing market conditions, the budget review period has been shortened from quarterly to monthly. The general manager and his deputy managers and three chiefs hold a formal meeting at the beginning of each month to review the financial performance against the master budget and individual departmental budgets. Amendments to the budgets can be made although flexible budget has not been made.

(Please refer to Q5.5.1-8 & Q5.7.1-14 on the questionnaire extracts in Appendix 1.)

In summary, both the privatisation and the market economy have given BPMH more freedom to plan ahead. The government authority has completely devolved the short term planning autonomy to BPMH, except the two government representatives sitting on the board can make suggestions in relation to the overall sales and profit targets. The top management have involved the middle management or even their subordinates (lower management) in the annual planning and budgeting process which on one hand is a critical step in materializing the long term strategic plan or the ERC, and on the other hand, it is an important motivational factor for the factory managers and department heads to manage their own businesses and to be rewarded accordingly.

Observation of Planning Influence: shift from "Medium Corporate" to "Low Corporate" since 1992.

# 5.6 Internal Responsibility Contracts (IRC)

Beijing Printing Machinery Holdings Ltd. (BPMH) established its IRC system at the beginning of 1993 and seven months before listing its H shares in the Hong Kong Stock Exchange. The major purposes of adopting the IRC are to motivate the efficiency, profitability and cost reduction in the production workshops. Before 1993, the production factories were measured on target production quantity and cost, while the subsequent IRCs emphasized on the internal profit for the 3 production factories and cost of production for the gearing and foundry workshops.

The followings were the contents of the IRC signed between the General Manager and Foundry Factory Manager (casting of semi-finished products) in January 1994.

\_\_\_\_\_\_

(A) IRC Format : mainly cost control oriented(B) Duration : January - December 1994

(C) Agreed Targets:

#### (C1) Economic Targets

1.1 Production Quantity

Internal supply/transfer : 5,500 tonnes Fixed external supply : 3,453 tonnes Temporary external supply : 1,100 tonnes Total production quantity : 10,053 tonnes

Labour hours for internal supply = 38,000 hours Labour hours for external supply = 8,000 hours 1.1.2 \_\_\_\_\_ Total production labour hours 46,000 hours

\_\_\_\_\_\_

#### 1.2 Cost of Production

1.2.1 Production cost per tonne = RMB3,226

1.2.2 Conversion cost = RMB13.2 million = RMB1.36 million 1.2.3 Working capital 1.2.4 Discretionery expenses = RMB1.01 million

The production targets, according to the Production Planning 1.3 and Control Department's standards, should be accomplished and assessed in the monthly economic responsibility system.

#### (C2) Quality Targets

Sample inspection passing rate 2.1 = 96%

First class output rate = 50% (over) 2.2

Wastage & scrap rate (cylinder parts) = 8.5%
Wastage & scrap rate (other parts) = 13%
Serious quality defect incidence = 0% 2.3 2,4 2.5

### (C3) Working Capital Targets

Total annual average working capital is fixed at RMB1.36 million. An interest rate of 12% is charged on any excess within 20% of the fixed amount. An interest rate of 24% is charged on any excess over 20% of the fixed amount. The interest, if there is any, will be calculated quarterly and charged to the cost of production.

# (C4) Technical Targets

Due to the controllable factors, any delay in each item of the technical renovation or improvement will be fined RMB1,000 to RMB5,000.

- (C5) Other Targets
- 5.1 No serious employee injury incidence.
- 5.2 No serious facility breakdown incidence.
- 5.3 Different resource consumption rates at least equal to the levels in 1993.
- (D) Targets and Gross Wages Linkage System Policy
- (D1) The gross wages is linked up with the accomplishment of the above economic targets. The gross wages will be reduced proportionately according to the degree of achievement in the targets.
- (D2) Bonus not exceeding 10% of the gross wages will be awarded if the actual performance exceeds each item of the economic targets (cost targets and quality targets account for 5% each).
- (D3) Increase or decrease in headcount should refer to the personnel policy.
- (E) Contractee's Right
- (E1) Entrusted Legal Entity Right: within the entrusted legal entity right authorised by the General Manager (contractor), the Workshop Manager (contractee) has the right to manage the production operations and related activities.
- (E2) Employee Deployment Right: within the predetermined gross wages and headcount, the contractee has the rights to employ technical and management staff, and to lay off, transfer, warn and punish employees. The contractee also has the right to change the posts and adjust the wages of the employees as well. The above arrangements should not violate the personnel policies and be reported to the Personnel & Manpower Department.
- (E3) Bonus Distribution Right: within the control of gross wages level, the contractee has the right to distribute the awarded bonus among his own employees.
- (E4) Pricing Right: without affecting the production plan, the contractee can accept the outside orders and determine the prices of these orders, provided the overall profitability of the enterprise will not be reduced.

- (E5) Technical Renovation Right: the contractee is allowed RMB100,000 to proceed small technical renovation work and purchase minor equipment and accessories.
- (E6) The contractee is allowed RMB10,000 for business expenses including entertainment.
- (E7) Assessment Review Right: the contractee has the right to counter assess and appeal the planning, adjustment, compromise, service and policy made by the other departments, which affect the operation of the contractee's factory.
- (F) Contractee's Responsibilities
- (F1) Comply with the state laws and regulations and pay the relevant and respective taxes.
- (F2) Accomplish each target agreed in this contract and ensure the maintenance and increase of the assets' value.
- (F3) Apart from the economic achievement, the political and cultural education work should be enforced and improved.
- (F4) Achievement (Operation) audit should be performed at the end of the year. The respective management staff will be accounted for any shortfall of targets which are not due to uncontrollable factors.
- (G) Contractor's Rights
- (G1) The contractor has the rights to inspect, evaluate, award, penalize the accomplishment of the targets agreed in this contract.
- (G2) The interpretation right of this contract belongs to the Enterprise Management Office.
- (G3) The contractee's operation should be self-disciplined. If any malpractice which is against the rules and regulations and causes economic loss to the enterprise, the contractee will be punished for 1% of the amount of loss after auditing and inspection by the respective authorities.
- (G4) At the end of the year, the final assessed performance and corresponding wages and bonus awarded will be matched against the two ceilings as laid down in the Enterprise Law 1988 (refer to section 6.4 below).

- (H) Contractor's Responsibilities
- (H1) Ensure the realisation of the wages and bonus awarded and recognised the other terms and conditions as stipulated in this contract.
- (H2) Within the pre-determined amount, ensure the adequacy of the working capital provided to the contractee.
- (H3) In order to provide an all-round favourable environment for the contractee to accomplish all the targets in this contract, the corresponding departments should perform their planning, facilitating, servicing and supervising work well.

It takes a few months for the general manager and the production or workshop managers to negotiate with the terms and conditions for the IRCs signed. This long process indicates that the setting of IRC is not a top-down approach and the production managers are very eager on this issue upon which they will be measured against and rewarded thereupon.

(Please refer to Q5.6.1-16 on the questionnaire extracts in Appendix 1.)

In summary, the general manager has delegated more freedom to the production or workshop managers in initiating and negotiating their own IRCs, and also involved the accounting and finance personnel intensively as a vetting mechanism in order to set the targets as objective as possible.

Observation of Planning Influence: shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

# 5.7 Management of Interdependencies (Transfer Pricing)

Management of interdependencies means the central influence in the form of broad thrusts or specific suggestions exercised particularly where overlaps, links or relationships between business divisions need to be managed. Cross-supply and transfer pricing between the workshops, and exploitation of a shared resource are examples that happen in Beiren Printing Machinery Holdings Ltd. (BPMH) that need headquarters' intervention.

The production process for the BPMH's printing machines principally involves the following steps: the preparation of moulds for parts and components and other ancillary materials, processing and assembly. The initial stage involves the preparation of moulds for parts and components and other ancillary materials by way of casting, forging and other processing for subsequent stages.

The moulds for parts and components and other ancilliary materials are then processed using processing machinery, pressure treatment, heat treatment and electroplating or other processes to manufacture parts and components that match specific requirements as to structure, length, precision and strength and other requirements. Principal parts and components include the main printing unit frame, gears and printing cylinders.

The assembly stage involves the assembly of the various processed parts and components as well as certain mechanical fittings and standard fittings sourced from supplies into finished products, which are packed and delivered for sale after alignment and testing.

The above production process can be summarized as follow:

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(1) Mixing of Materials ---> (2) Forging ---> (3) Casting ----> | <--- (5) Component & Machinery Processing<--- (4) Surface <---- Processing | ---> (6) Testing ---> (7) Spraying ---> (8) Assembly of -----> Components | <--- (10) Alignment & Testing <--- (9) Final Assembly <----- | ---> (11) External Spraying ---> (12) Packaging ---> (13) Shippment
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Beiren Group Corporation and BPMH continue to facilitate each other in the purchase of raw materials required by BPMH and BGC. Pruchases can be made by BGC or BPMH and the materials can be sold to the other party at the original purchase price. BPMH also sells to BGC processed parts at a price equal to 115% of its production cost. Referring to the organisational structure as shown in section 2 above, the Gearing and Foundry Workshops are providing processed parts to the other three production departments at standard cost plus 15% internal profit margin.

Under the terms of an agreement with BPMH, BGC acts as the sole sales agent for the BPMH's products in the PRC in addition to being responsible for implementing the BPMH's marketing programmes, and providing after-sales services to BPMH's customers, in the PRC. Accordingly, BPMH can access to BGC's distribution and servicing network, including sales and marketing and servicing staff in the PRC. Under this agreement, BPMH's products can be sold through BGC's distribution network in the PRC and the various technical services including installation and maintenance provided to BPMH's customers are undertaken by BGC. BPMH pays to BGC a monthly sales agency fee at the rate of 3% of the total turnover in the PRC in the relevant month. BPMH is also be responsible for all expenses relating to marketing and the after-sales services provided by BGC.

Under the terms of an agreement with BPMH, Beijing Yan Long Import & Export Company, a subsidiary of BGC, acts as the sole export sales agent for BPMH's products to be sold to overseas customers. Beijing Yan Long Import & Export Company is also responsible for implementing BPMH's marketing programmes for overseas markets and for providing after-sales services, including installation and maintenance services, to BPMH's overseas customers. BPMH pays to Beijing Yan Long Import & Export Company a sales agency fee at the rate of 3% of total export sales in the relevant financial year. BPMH is responsible for all expenses relating to marketing and after-sales services provided by BGC.

Under the terms of an agreement with BGC, BPMH can access BGC's research facilities when undertaking research and development work on new products. Pursuant to the research agreement, BPMH pays an annual fee of RMB450,000 to BGC for use of its research facilities.

BGC has registered the "Beiren" trademark in the PRC. BPMH has entered into a trademark licensing agreement with BGC whereby BPMH has the exclusive right to use the "Beiren" trademark for its products for sale in the PRC and overseas. Under the licensing agreement, BPMH pays a licensing fee, on a quarterly basis, of RMB15,000 or at the rate of one percent of the sales proceeds of products using the "Beiren" trademark during the relevant period, whichever is the higher, to BGC.

Under the terms of an agreement with BPMH, BGC will be responsible for the provision of benefits relating to housing for BPMH's staff including those currently in employmnet and those who have retired. In consideration of such provision, BPMH pays to BGC a total fee, payable semi-annually, equal to 6% of BPMH's profit after tax.

Under the terms of an agreement with BGC, BPMH has agreed to pay BGC a sum equal to BPMH's contribution in respect of the state retirement fund organised by the State. BGC will aggregate such sum with its own contribution for its staff and submit the aggregation sum to the state retirement fund.

Observation of Planning Influence: Shift from "High-Medium Corporate" to "Medium-Low Corporate" since 1992.

### Section 6 : Control System

#### 6.1 Decentralisation and Control

As far as the organisation structure is concerned, Beiren Printing Machinery Holdings Ltd. (BPMH) has four distinct levels of management hierarchy:

- (1) Board of Directors (including chief executives of BPMH)
- (2) Top Management (general, deputy-general managers, chief accountant, chief engineer and chief economist)
- (3) Middle Management (factory managers and department heads)
- (4) Lower Management (foremen and supervisors)

The deputy-general managers, factory managers and the three chiefs can decide on their own divisional structures, staffing and their roles and functions, and interactions between their sub-units (workshops or sections). They are also responsible for certain personnel functions such as recruitment, assignment, training, evaluation and remuneration (distribution of bonus). But termination of employment with any staff is a difficult task which will be explained in the rewards and incentives section.

(Please refer to Q6.1.1-3 on the questionnaire extracts in Appendix 1.)

Since BPMH is a listing enterprise with higher management autonomy delegated by the government authorities and is responsible to more stakeholders, including the shareholders as the general public, the board of directors and top management are compelled to focus on more strategic plans and tactical moves in order to maintain a balance of the different requirements. Therefore, the decentralistion and control in the context of organisation structure are more dynamic and flexible compared with the other wholly state-owned enterprise. However, financial objectives are still important factors in the control mechanisms used in the decentralized operation of BPMH.

Observation of Control Influence: shift from "Financial Control" to "Moderate Strategic Control" since 1992.

# 6.2 Agreeing Objectives

Beiren Printing Mechinery Holdings Ltd. (BPMH) sets similar objectives for its production factories: factory managers must meet their agreed IRC targets for the year and expect improvement in performance year after year except under adverse market conditions and other uncontrollable factors.

The critical occasion, therefore, is the annual budget review. In view of the keen competition within this industry, the production factories sometimes feel passive in setting their objectives or targets in the budgets or IRCs because their activities are depending on the sales demand. A high pressure to achieve the budgeted production and internal profit is put on the factory managers at the quarterly or monthly review. They fully understand that their gross wages and group bonuses are tied in with the budget or IRC and they also depend on the overall performance of the enterprise as a whole. In terms of expenses, control is tighter and a system of standard cost has been implemented. Although the non-production departments do not have the IRCs, they have agreed specific objectives or targets with the general manager, for example, amounts of working capital employed, levels of expenses and management by objectives.

In addition to the formal quarterly or monthly review process, many ad hoc meetings (sometimes on a weekly basis) and informal communications are made between the top and middle management.

(Please refer to Q6.2.1-2 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

#### 6.3 Monitoring Results (Reporting & Performance Measurement)

Beiren Printing Machinery Holdings Ltd. (BPMH) regards it as essential to catch variances from budget or IRC before they have gone too far. To this end the top management monitor results on a monthly and quarterly basis. All the factories, workshops and departments submit monthly results on standard forms to their respective deputy-general managers and also to the chief accountant for vetting and comparison with budgets and IRCs. The production factories are also required to submit production progress reports to the top management on a weekly basis.

Any significant variances (without specifying tolerance limits) will be highlighted in order to bring the attention to the top management. Then all the monthly reports are submitted to the general manager for review. For any serious adverse variances shown on any report, the general manager will contact with the respective deputy managers, factory managers or department heads to dig out the underlying reasons or ask them to perform investigation immediately. It is expected that corrective actions can be taken to remedy the situation as soon as possible.

The following is the format of the Quarterly Performance Report of individual factories or workshops compared with the IRC targets:

		Factory/Work	sho	αο	1	2	3		Tota	al
(11) (12)	Sales Income Cost of Sales Sales Tax Interest Expenses Selling Expenses Interest on Cost of Other Non-Operating Net Profit (8=1-2-3 Internal Transfer Sa Internal Transfer Co Total Net Profit (1: IRC Total Net Profit Profit Variance (11:	Capital Income (Net) -4-5-6+7) ales Income ost of Sales 1=8+9-10) t Target				_				
	following is the for vidual factories or v									
	ory/Workshop : of Report* :									
(1)	Economic Targets	This Month				nth		'D tual	YTD Targe	et
1.3 1.4	Sales Income Cost of Sales Sales Tax Pension Fund Interest on Cost of Net Profit (1.6=1.1	Capital		_						
(2)	Working Capital Targ	gets				Montl	ı		s Mont	th
	Total Average Working Fixed Average Working Capital	ng Capital	day		tua	1		Tar	get	
(3)		ts This Month Actual			s Mo get	nth		TD Ctual		et
	Tools			-	-					
	Consumables Sub-Contract Work									
	Electricity									
3.5	Gas									
	Heat									
3.7	Water	_								

This monthly report is usually handed into the Enterprise Management Office on 4th the next month.

Repair & Maintenance

BPMH's senior management hold monthly meetings to discuss production planning, scheduling and management, marketing and sales, economic performance and personnel affairs. During the economic performance meeting, the general manager will put forward the monthly results for open discussion. The factory managers and the department heads may be asked to explain briefly the significant variances. Consistent failure (say over 12 months) in meeting the targets which are controllable by a factory manager, probably he will be replaced by somebody else. On the other hand, the favourable results will be openly praised by the top management.

After the monthly meeting, all the approved results will be passed back to the personnel and manpower department for calculating the gross wages and group bonus of each factory, workshop or department for last month. Then the accounting department will process the payments at the end of the month (i.e. payment of monthly bonus is lagged by one month).

Now, BPMH views a budget or IRC as a contract between the top management and the department or workshop. The monitoring process is used to maintain the pressure for performance. Top management's close surveillance of results enables them to ensure that no department goes too far astray before remedial action is taken. It also gives top management an understanding of the reasons for variances from budget.

(Please refer to Q6.3.1-3 & Q6.4.1-14 on the questionnaire extracts in Appendix 1.)

Observation of Control Influence: shift from "Financial Control" to "Moderate Strategic Control" since 1992.

#### 6.4 Rewards and Incentives

It is the general policy imposed by the central government that the annual gross wages (including bonus) growth rate of all the state-owned enterprises cannot exceed either one of the following limits:

- (1) "Income Before Tax" annual growth rate; and
- (2) "Productivity Per Employee" annual growth rate.

Within these two ceilings, the BPMH is allowed to increase the wages and bonus payable to its employees. This rule is trying to motivate all the employees to enhance the productivity, efficiency and profitability in order to increase their remuneration.

The average annual gross wages per employee was around RMB8,000 in 1993, and due to high inflation rate of 21%, this average figure was increased to RMB9,500 in 1994. It was expected that the annual gross wages per employee would be further increased to RMB11,000 in 1995.

The take-home pay of each employee in BPMH is mainly composed of basic wages, bonus and allowances.

The basic wages are divided into 21 grades which entry point or promotion depends of post, skills, seniority and experience. There are two portions for the "allowance". The first part is determined by the Manpower and Wages Bureau of the Beijing Government at least once in each year mainly for the purpose of combating inflation in food, transportation, gas and electricity.

The second part is decided by the BPMH which may include housing, meals, travel, education, attendance, overtime, hair-washing, festival gifts etc. The payment of monthly "allowance" is about RMB120 to RMB150 whose purpose is trying to balance the relatively low basic wages and maintain a reasonable standard of living for the employees.

The calculation of "bonus" for the employees in the factories or workshops, as described in the above sections, is based on the accomplishment of the IRC. An IRC signed between the general manager and a factory manager decides what level of group bonus will be given to the department. Of course, it is up to the factory manager to award that lump sum of group bonus to his or her subordinates according to individual performance.

The bonus is distributed in cash to all employees on a monthly basis but a certain percentage (10% - 20%) will be retained in a reserve in order to make up the low bonus obtained during the months with poor performance.

How is the bonus determined for the management and administrative staff in the other departments? It can be described in the following steps:

- (1) Calculation of management score
  - (a) Performance according to targets set
  - (b) Discipline according to rules and regulations
  - (c) Management methods and styles
  - (d) Security and safety
- (2) Calculation of average bonus

Management score % (1) x Monthly average production bonus

(3) Calculation of individual bonus

# Average monthly bonus (2) x Individual index\*

\* Different indexes for different grades of staff, i.e.

Factory Manager = 2.0
Deputy-Factory Manager = 1.8
Department Head = 1.6
Deputy Department Head = 1.5
Supervisor = 1.4

If the annual profit before tax can achieve better than the planned levels, a "year-end bonus" will be awarded to all the employees and distributed in a way very similar to the monthly bonus.

Pursuant to the relevant provisions of the "Decision on the Reformation of Pension Scheme of Retired Employees of the Enterprises" of the State Council, BPMH contributes 19% of the total payroll of its employees as basic employee's pension expense. The total expenses of this basic employees' pension in 1994 amounted to RMB8,706,000.

The government will ultimately responsible for the future pension payments to the BPMH's employees. The government is now considering to ask for an additional 16% - 18% on total payroll from the state-owned enterprises as contribution to cover the medical, unemployment and disable allowances for the employees.

One of the 57 clauses in the "SOE Mechanism Transformation Regulations" enacted in 1992 is to assign the power and freedom to the top management to implement the "Employment Contract System" to replace the long-established "Life-Long Employment" or "Iron Rice Bowl" practices. The spirit behind this new system is to initiate the self-motivation (in a positive way) of or to impose threat of termination (in a negative way) on the SOE's employees. At the end of June 1995, the total number of employees in all the state-owned enterprises was 143 millions, accounting for 86% of the industrial and commercial workforce in China. Therefore, it takes a long time to change the working attitudes of this huge amount of employed population.

However, to lay off a certain percentage of redundant employees may cause many social problems in light of the current insufficient employment social welfare and benefits existed in China. Therefore, the changing to employment contract system may not create a threat to the employees nor motivate their own initiatives.

Instead of fully implementing this contract employment system, BPMH has signed "In-Post Contracts" with most of the employees for periods from one to five years. This contract signifies that an employee is qualified for that specific post and he or she is eligible to receive basic wages (according to class in pay-scale), allowance and bonus. Without such a contract, that employee is out of job but he or she is still an employee of BPMH and is allowed to received a basic monthly subsidy of about RMB200. This measure may not impose a serious threat to the lazy employees, but it can motivate the marginal employees to work better.

Another means to absorb the redundant employees is to transfer them to a few "tertiary enterprises" (service enterprises), such as restaurant, transportation, repair and maintenance, canteen and nursary, which are self-financed independent profit centres. This is the solution adopted by Beiren Group Company (BGC) since the early 1990s including the establishment of a small hotel in 1994.

(Please refer to Q6.5.1-23 on the questionnaire extracts in Appendix 1.)

In summary, BPMH believes in the "stick" as a motivation tool. Its incentive system - the financial carrot (bonus) - may be used to replace managers, to apply pressure through the monitoring process, and more effectively, to recognize and acclaim good performance.

Observation of Control Influence: shift from "Financial Control" to "Moderate Financial Control" since 1992.

### Section 7 : Summary

The above planning and control influences are summarised in the following table in order to assess what are the responsibility accounting styles that Beiren Printing Machinery Holdings Ltd. (BPMH) belonged to before and after 1992.

Influences	Before 1992	After 1992
Planning Influences :		
Organisation Structure*	High Corporate	Medium Corporate
Review Process*	High/Medium Corporate	Low Corporate
Strategic Themes, Thrusts and Suggestions*	High Corporate	Medium Corporate
Long-term Plans* (Resource Allocation)	High Corporate	Medium/Low Corporate
Short-Term Plan/Budgeting* (Resource Allocations)	Medium Corporate	Low Corporate
Internal Responsibility Contract	High/Medium Corporate	Medium/Low Corporate
Management of Interdependencies* (Transfer Pricing)	High/Medium Corporate	Medium/Low Corporate
Control Influences :		
Organization Control*	Financial	Moderate Strategic
Agreeing Objectives*	Financial	Moderate Financial
Monitoring Results*	Financial	Moderate Strategic
Rewards & Incentives*	Financial	Moderate Financial

\* Parameters of planning and control influences used by Goold & Campbell.

Based on the above summarized planning and control influences, the following mapping on the "Responsibility Accounting Style" can be identified.

Planning Influence	Control Influence			
	Tight Strategic	Tight Financial		
High Corporate	(Strategic (Financial Programming)			
Medium Corporate	[Pos	[Pre-1992]              st-1992]		
Low Corporate	(Strategic Control)	(Financial Control)		

#### Section 8 : Conclusion

After the above detail analysis of the planning and control influences on the responsibility accounting adopted by the Beiren Printing Machinery Holdings Ltd. (BPMH) before and after 1992, it can be concluded that the "Responsibility Accounting Style" has been shifting gradually from "Financial Programming" (Pre-1992) to "Strategic Control" (Post-1992) although it has not yet reached a strong-form (low corporate) of strategic control style as described by Goold's and Campbell's Strategic Style. It seems to be in the "middle of the road" between this two styles.

Revised: 24 March 1996

## QUESTIONNAIRE FOR INTERVIEWS THE MANAGEMENT IN SOES

Name	of Enterprise :	
Addr	ess:	Tel.
Staf:	f Interviewed:	
(1)	Name :	
	Position:	
	No. of years - in enterprise	
	- in this position	:
(2)	Name :	
	Position:	
	No. of years - in enterprise	
	- in this position	:
(3)	Name :	
	Position:	
	No. of years - in enterprise	•
	- in this position	:
Date	: Remarks :	
=====		

# Section 1 : History and Background

- 1.1 When was this enterprise formed or established?
- 1.2 Which manufacturing or service industry does the enterprise belong to?

- 1.3 What were/are the major product (service) lines manufactured (provided) before and after 1992?
- 1.4 What were/are the major markets (local and overseas) for selling (rendering) the products (service) before or after 1992?
- 1.5 What will be the future product/market development in the next five years?

# Section 2: Legal Form and Organisation Structure

2.1 What was/is/will be the enterprise legal form in the past,
 present and future? (please tick)

Wholly SOE Shareholding SOE Other

Before 1992

In 1992

After 1992

2.2 If the legal form was/is/will be a shareholding SOE, what percentages of share were/are/will be held by the respective parties?

	Before 1992	In 199	2 After 1992
Government	8	8	8
Other SOEs	8	8	8
Management	*	*	ફ
Employees	8	%	ફ
Individuals (Outsiders)	8	%	8
Others: please specify			
	8	१	*
	100%	100% =====	100%

2.4	What is the position of this enterprise in the whole organization? (please tick)
	(a) the holding enterprise
	(b) a subsidiary enterprise
	(c) an individual enterprise (neither holding nor subsidiary
	(d) Other (please explain) :
2.5	Do you have the following posts in the top management elite? (If there are any, please indicate the numbers of people)
	Board of Directors (BOD)
	Executive Directors in BOD
	/ Chairman/Vice Chairman(s) in BOD
	Chief Executive Officer/Enterprise General Manager
	Deputy CEO(s)/Deputy Enterprise General Manager
	Chief Accountant
	Chief Economist
	Chief Engineering
	Other (please specify)
2.6	Who has ultimate responsibility for determination of the enterprise's long-term plans or corporate mission before and after 1992?
2.7	In practice, are other management levels involved in the setting of enterprise long-term plans or corporate mission? If yes, please specify.
2.8	Can you briefly mention each of your subsidiary enterprises in terms of : (this question is for holding enterprises)
	<ul> <li>(a) name and year of establishment;</li> <li>(b) manufacturing or service industry;</li> <li>(c) major product or service lines;</li> <li>(d) major markets (local and foreign);</li> <li>(e) wholly state-owned or shareholding;</li> <li>(f) total number of employees; and</li> </ul>

٠,

- (g) total turnover (sales) in last year;
- (h) total income before tax in last year; and
- (i) total income after tax in last year?
- 2.9 Can you briefly mention each of your major divisions or departments in terms of :
  - (a) number of employees (including workers);
  - (b) management structure (middle or lower management);
  - (c) major functions; and
  - (d) interactions with other divisions or departements?
- 2.10 What is the total number of employees in your enterprise overall at present?
- 2.11 What is the total number of employees in your part of the enterprise?

# (3) Financial Indicators (this part of the enterprise)

- 3.1 What was the total assets in this enterprise last year?
- 3.2 What was the total turnover (sales) in last year?
- 3.3 What was the split of domestic and export turnover (sales) in last year?
- 3.4 Do you have inter-transfer or internal sales to the holding or other subsidiary enterprises? If yes, what was/were the proportion(s) to total turnover (sales) in last year? (This question applies to group enterprise.)
- 3.5 What was the net income before tax in last year?
- 3.6 What was the net income after tax in last year?
- 3.7 Can estimates or forecasts on any of the the above figures (3.1 - 3.6) for this year be made now? If yes, please provide the details.
- 3.8 Are there any long-term (say within 5 years) plans for the above key financial indicators (3.1 3.6) at this moment?

## Section 4: Economic Responsibility Contract System (ERCS)

- 4.1 Has your enterprise ever signed a "Economic Responsibility Contract" (ERC) with the government (central or local)? If yes, when?
- 4.2 What were the basic amounts of "gross turnover (sales)" and "income after tax" agreed upon when signing such an ERC in the first year?
- 4.3 On what "bases" were the two figures arrived at in the above question (4.2)?
- 4.4 How have the "growth factors" on the above two contracted financial targets been determined year by year since after the first year?
- 4.5 Do you think the "bases" (4.3) and "growth factors" (4.4) described above have been fairly and realistically set? Why?
- 4.6 What other important targets, other than the above mentioned two financial targets, have been set in the ERC?
- 4.7 Did you participate in determining the two financial targets (4.2) and other targets (4.6)?
- 4.8 Did you participate in determining the level at which the performance measures (i.e. "bases", "growth factors", etc.) are set?
- 4.9 What have been the actual performances achieved by your enterprises compared against the above pre-determined financial and non-finanicaal targets since the first year signing up the ERC?
- 4.10 If the actual performances have not been satisfactory in the past years, what were the major reasons, other than the possibilities raised in 4.5 above, for the real situations?
- 4.11 Has your enterprise withdrawn from the ERCS already? If yes, why?
- 4.12 Are you anticipating to withdraw from the ERCS in the near future? If yes, why?
- 4.13 What is or will be the alternative system to enhance the productivity and efficiency in your enterprise instead of using the ERCS?

\_\_\_\_\_\_\_ Section 5 : Planning System 5.1 Organisation Structure How many in each type of the following responsibility 5.1.1 centres (RCs) have been set up in your enterprises? Investment Centres Profit Centres \_\_\_\_\_ Cost Centres \_\_\_\_ Expense Centres \_\_\_\_\_ Others, please specify : \_\_\_\_\_ What are the major criteria (e.g. products, markets, 5.1.2 geographic, clients, etc. ) in setting the Investment Centres; Profit Centres; Cost Centres; Expense Centres; and Other Centres? Are there any major problems encountered in setting the 5.1.3 above RCs? What are major relationships and interdependencies among the RCs? Are any of them involved in the internal transfer of goods or services? Are central 5.1.4 services provided for all the RCs? 5.1.5 Will there be any changes in setting and defining the RCs in the next two years? 5.2 Strategic Themes 5.2.1 How is/was the abolishment of the "three iron bowls" (i.e. iron employment, iron position and iron wages)

What are the difficulties encountered in abolishing the

"three iron bowls"? How can these difficulties be

implemented?

solved?

5.2.2

- 5.2.3 What are the results (i.e. employees' motivation and incentives) in abolishing the "three iron bowls so far?
- 5.2.4 Are there any other strategic themes (e.g. quality control) or distinctive competences (e.g. industrial safety) explicitly stated by the top management?
- 5.2.5 Are these strategic themes or distinctive competences helpful in planning and actual implementation?
- 5.2.6 When and under what circumstances will these themes and competences be changed? Do you participate in the change process?
- 5.2.7 How are these themes and competences communicated to every level of management and employees within the enterprise?

#### 5.3 Broad Strategic Thrusts

- 5.3.1 Are there any strategic thrusts or guidelines (e.g. productivity, profitability, assets turnover, product or market diversification etc.) laid down by the top management?
- 5.3.2 How do these strategic thrusts or guidelines affect the strategic planning and setting targets or budgets in different levels of management?
- 5.3.3 When and under what circumstances will these strategic thrusts or guidelines be changed?
- 5.3.4 How are these strategic thrusts or guidelines communicated to every level of management within the enterprise?

# 5.4 Long-Term Plans (Management's Participation, Review and Modification)

- 5.4.1 Do the top management set long-term (within 5 years) strategic plans? If yes, how long is the time-frame?
- 5.4.2 What are major context of the strategic plans? (please tick and describe briefly)

 Product development :	
diversification	

			differ	entiat.	ion				
		Market	develo	pment	:				
			divers	ificat	ion				
			penetra	ation					
		Organis	ation S	Struct	ıre :				
			merger	and ta	akeove	er			
			shareho	olding					
			joint-v	ventur	9				
			divestr	ment					
			others	pleas	se spe	ecify -			
		Others,	please	spec:	ify:				
5.4.3	existe member	d? If	yes, mpositi	how i	s it trate	committed operati gic pla	ng in	terms	of
5.4.4	in for	mulating	the and the an	bove s no par consul attend and gr initia discus	trated cticip lt for l plan lve su ate pr ss in	managem gic plan pation at deas of ining com aggestion coposals, planning decision	s? (p all only mitte s onl plans g comm	lease reeti y and	rank
	Levels	of Mana	gement	: Top	(a)	Middle	(b)	Lower	(c)
Produ	Divers	elopment ificatio entiatio	n						
Marke		lopment ificatio ation							
Organ	Merger Shareho	n Struct & takeo olding venture							

Divestment
Others (please specify)
Others (please specify):

(a)	Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief Economist and Chief Engineering (assume the final decisions are made either by the government or the board of directors if ranking is not 4).
(b)	Middle management is defined as the divisional or departmental managers.
(c)	Lower management is defined as the departmental or sectional supervisors or foremen.
5.4.5	Is formulating strategic plans a way for the top management to allocate the resources to different business units according to (please tick):
	long term business plan;
	project-by-project approach;
	relative importance of units;
	power of unit managers;
	other external factors;
	earning or profitability potentials; or
	other (please specify)?
5.4.6	How far can the participation in formulating the strategic plans enhance the communication between different levels of management?
5.4.7	How frequent are the strategic plans reviewed either formally by the planning committee or infromally by the top management?
	yearly
	half-yearly
	quarterly

\_\_\_\_ monthly

	Other (please specify):
5.4.8	What are the major factors for justifying the modification of those strategic plans? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief or bias
	other (please specify)?
5.4.9	How are the determined strategic plans be communicated to the various levels of management?
	meetings
	written report
	notice board
	Others (please specify) :
	t-Term Plan (Management's Participation, Review and fication)
5.5.1	What is the extent of autonomy can the *top management exercise in each of the following short-term (within one year) plans? (please rank from 0-4, i.e.

\*Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief Economist and Chief Engineering.

0 = no autonomy at all 1 = consult for ideas only 2 = make suggestions and discuss

3 = initiate plans and negotiate
4 = have full autonomy subject to
 macro-economical adjustments)

Ranking 0 1 2 3 4 Reason Short-term Plan: Sales -Price Volume Mix Production -Capacity Quantity Mix Material -Price Quantity Mix Labour -Rates Bonus Number In-take Lay-off Inventory -Level Valuation EOO Ordering time Servicing Depts. -Headcount In-take Lay-off Salaries Expenses Income Before Tax Others (please specify) -

and determination?

How the above short-term plans are developed? Is there any formal planning committee or equivalent existed? If yes, how it is operating in terms of membership composition, short-term plans formulation, evaluation

5.5.2

How far the middle and lower management participate in 5.5.3 determining the above (5.5.1) short-term plans? (please rank from 0 - 4, i.e. 0 = no participation at all 1 = consultation for ideas only 2 = attend planning committee meeting and give suggestions only 3 = initiate proposals/plans and discuss in planning committee 4 = make final decision) Name of Department: Levels of Management: Middle (a) Lower (b) Short-term Plan: Sales -Price Volume Mix Production -Capacity Quantity Mix Material -Price Quantity Mix Labour -Rates Bonus Number In-take Lay-off Inventory -Level Valuation EOQ Ordering time

Servicing Depts. Headcount
In-take
Lay-off
Salaries
Expenses

	Levels of Management: Middle (a) Lower (b)
Income Be	fore Tax
Transfer	Pricing
Others (p	lease specify) -
(a)	Middle management is defined as the divisional or departmental managers.
(b)	Lower management is defined as the departmental or sectional supervisors or foremen.
5.5.4	Is formulating short-term plans a way for the top management to allocate the resources to different business units according to (please tick):
	long term business plan;
	project-by-project approach;
	relative importance of units;
	power of unit managers;
	other external factors;
	earning or profitability potentials; or
	other (please specify)?
5.5.5	How far can the participation in formulating the short-term plans enhance the communication between different levels of management?
5.5.6	How frequent are the short-plans reviewed either formally by the planning committee or infromally by the top and middle management?
5.5.7	What are the major factors for justifying the modification of these short-term plans? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit

	management's knowledge and experience
	management's personal belief or bias
	other (please specify)?
5.5.8	How the determined short-term plans be communicated to the various levels of management?
	ing Targets Through Internal Responsibility Contracts ] (Management's Participation, Review and Modification)
5.6.1	When was the IRC system started to be employed in this enterprise?
5.6.2	How are the IRCs correlated to the Economic Responsibility Contract signed with the government?
5.6.3	What is the duration of each IRC?
5.6.4	Which responsibility centres in this enterprise have signed the IRCs with the top management?
5.6.5	Can you provide me with a few samples of the IRCs (before and after 1992) for reference?
5.6.6	What are the major "targets" (both financial and non-financial) set in these few IRCs? (take a few responsibility centres, i.e. production, purchasing, sales etc., as examples)
5.6.7	What are the formal procedures (i.e. planning committee or equivalent) in setting these targets?
5.6.8	How far the middle and lower management participate in setting the various targets in their IRCs? (please rank from 0 - 4, i.e. 0 = no participation at all  1 = consultation for ideas only 2 = attend planning committee meeting and give suggestions only 3 = initiate targets and negotiate in planning committee 4 = make final decision)
	Name of Department .

	Targets:
	(1)
	(2)
	(3)
	(4)
	(5)
(a)	Middle management is defined as the divisional or departmental managers.
(b)	Lower management is defined as the departmental or sectional supervisors or foremen.
5.6.9	Are the above targets related (or responsibility delegated) to the levels of management within the responsibility centre (or department)? How? (please tick and explain)
	Name of Department :
	*Section *Sub-section Individual
	Targets:
	(1)
	(2)
	(3)
	(4)
•	(5)
	* Please define these levels of management.
5.6.10	Is formulating targets in the IRCs a way for the top management to allocate the resources to different business units according to (please tick):
	long term business plan;
	project-by-project approach;
	relative importance of units;

Levels of Management: Middle (a) Lower (b)

	power of unit managers;
	other external factors;
	earning or profitability potentials; or
	other (please specify)?
5.6.11	How far can the participation in formulating the targets in the IRCs enhance the communication between different levels of management?
5.6.12	How frequently are the targets in the IRCs reviewed either formally by the planning committee or informally by the top and middle management?
5.6.13	What are the major factors for justifying the modification of these targets? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief or bias
	other (please specify)?
5.6.14	Are these targets modified in a way similar to the "flexible budget" concept (i.e. according to actual or current performance/condition)?
5.6.15	How the determined or agreed targets be communicated to the various levels of management?
5.6.16	What have been the results (i.e. turnover, profitability, labour productivity or efficiency, etc.) since the employment of the IRC system? How were they compared with the performance before using this system?

ing Targets Through Budgets (Management's Participation, ew and Modification)
When was the budgeting system started to be employed in this enterprise?
Can you outline the budgeting structure or hierarchy and indicate which responsibility centres (RCs) are involved?
What is the duration of each budget? What is the time-schedule of the budgeting cycle?
Can you provide me a few samples of proforma budgets for reference?
What are the formal procedures (i.e. budget committee or equivalent) in setting these budgets?
How far the middle and lower management participate in setting the various budgets in their RCs? (please rank from 0 - 4, i.e. 0 = no participation at all 1 = consult for ideas only 2 = attend planning committee meeting and give suggestions only 3 = initiate budgets and negotiate in planning committee 4 = make final decisions)
Name of Department :
Levels of Management: Middle (a) Lower (b)
budgeted items :
(1)
(2)

(a) Middle management is defined as the divisional or departmental managers.

(3)

(4)

(5) \_\_\_\_\_

(b) Lower management is defined as the departmental or sectional supervisors or foremen.

5.7.7	Are the above budgets related (or responsibility delegated) to the levels of management within the responsibility centre (or department)? How? (please tick and explain)								
	Name of Department :								
	*Section *Sub-section Individual								
	budgeted items :								
	(1)								
	(2)								
	(3)								
	(4)								
	(5)								
	* Please define these levels of management.								
5.7.8	Is formulating the budgets a way for the top management to allocate resources to different business units according to (please tick):								
	long-term business plan;								
	project-by-project approach;								
	relative importance of units;								
	power of unit managers;								
	other external factors;								
	earning or profitability potentials; or								
•	others (please specify)?								
5.7.9	How far the process of budgettng can enhance the communication in the various levels of management?								
5.7.10	How frequent the budgets in the RCs are reviewed either formally by the planning committee or informally by the top and middle management?								

5.7.11	What are the major factors for justifying the modification of these budgets? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief and bias
	others (please specify)?
5.7.12	Are "flexible budgets" used? If yes, how?
5.7.13	How the determined or agreed budgets be communicated to the various levels of management?
5.7.14	What have been the results since the employment of the budgeting system? How were they compared with the performance before using this system?
	ital Budgeting (Management's Participation, Review and ification)
5.8.1	When was the capital buegeting system started to be employed in this enterprise?
5.8.2	How long is the coverage of the capital budgets?
5.8.3	What are the formal procedures (i.e. budget committee or equivalent) in setting these capital budgets?
5.8.4	Can you provide me a few samples of capital budget forms for reference?

- 5.8.5 How far the various levels of management participate in setting the capital budgets in their RCs? (please rank from 0-4, i.e. 0= no participation at all
  - 1 = consult for ideas only
  - 2 = attend planning committee meeting and give suggestions only
  - 3 = initiate budgets and negotiate
    in planning committee
  - 4 = make final decisions)

Name of Department:				<del></del>
Levels of Management	:	Top(a)	Middle(b)	Lower(c)

capital budgeted items :

- (1) Land & Building
- (2) Plant & Machinery
- (3) Motor Vehicles
- (4) Fixtures & Fittings
- (5) Research & Development
- (6) Advertising
- (7) Others (please specify):

<sup>(</sup>a) Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountant, Chief Economists and Chief Engineer. (Assume the final decisions are made by either the government or the board of directors if ranking is not 4).

<sup>(</sup>b) Middle management is defined as the divisional or departmental managers.

<sup>(</sup>c) Lower management is defined as the departmental or sectional supervisors or foremen.

<sup>5.8.6</sup> What kinds of techniques (i.e. DCF, Pay-back, ROI, RI etc.) have been used for evaluating the capital budgets at the planning stage?

5.8.7	Is formulating the capital budgets a way for the top management to allocate resources according to (please tick):
	long-term business plan;
	project-by-project approach;
	relative importance of units;
	power of unit managers;
	other external factors;
	earning or profitability potentials; or
	others (please specify)?
5.8.8	How frequent the capital budgets are reviewed either formally by the planning committee or informally by the top and middle management?
5.8.9	What are the major factors for justifying the modification of these capital budgets? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief and bias
,	others (please specify)?
5.8.10	How the capital budgets be communicated to the various levels of management?
5.8.11	What have been the results since the employment of the capital budgeting system? How were they compared with the performance before using this system?

- 5.9 Transfer Pricing (Management's Participation, Review and Modification)
- 5.9.1 What kinds of transactions within your enterprise (or group of enterprises) involve the setting of transfer prices? (Please describe the divisions or departments involved, the nature of transfers and the purposes of setting transfer prices.)
- 5.9.2 On what bases are the transfer prices determined? Are negotiations allowed by the selling and buying divisions?
- 5.9.3 Are there any outside markets to sell the intermediate products instead of transfer internally? Are the market prices higher or lower than the internal transfer prices?
- 5.9.4 Are the intermediate products available from external suppliers instead of purchasing internally? Are the market prices for these external supplies higher or lower than the internal transfer prices?
- 5.9.5 On what bases are the transfer quantities determined?
  Are negotiations allowed by the selling and buying divisions?
- 5.9.6 Do the top management interfere with the setting of transfer prices and/or quantities? How?
- 5.9.7 Does the government determine or the economic responsibility contract stipulate the transfer prices and/or or quantities? How?
- 5.9.8 What is the extent of participation by the divisional managers in determining each transfer price in general? (Please rank from 0 4, i.e.
  - 0 = no participation at all
  - 1 = consult of ideas only
  - 2 = suggest and discuss
  - 3 = propose and negotiate
  - 4 = determine on their own)

TP No.	Nature of Transfer	Rank	Remarks
1			

2

3

4 etc.

5.9.9	How frequent the transfer prices are reviewed either formally in the meetings or informally by the
	<ul><li>(1) top management;</li><li>(2) middle management;</li><li>(3) top &amp; middle management; and</li><li>(4) other (please specify)?</li></ul>
5.9.10	What are the major factors for justifying the modification of these transfer prices? (please tick):
	central government plan
	local government plan
	long-term enterprise's benefit
	short-term enterprise's benefit
	management's knowledge and experience
	management's personal belief and bias
	others (please specify)?
5.9.11	Is internal and external information available for negotiating and determining the transfer prices? Why?
5.9.12	Is internal and external information sufficient for negotiating and determining the transfer prices? Why?
SECTION 6	: CONTROL SYSTEM
6.1 Decer	ntralisation and Control
6.1.1	In gneral, how far the decentralisation in the following few managerial aspects is delegated to the different levels of management? (please rank from 0 - 4 and describe briefly, i.e. 0 = no autonomy is given  1 = low autonomy 2 = moderate autonomy 3 = high autonomy 4 = full autonomy
	Major Division:

Levels of Management: Top(a) Middle(b) Lower(c)

Managerial Aspects:

Organisational design Structure
Staffing
Roles & functions
Interactions

Employees/Workers Recruitment
Assignment
Training
Evaluation
Remmuneration
Termination

Operations Getting resources
Using resources
Disposing resources

Others (please sepcify):

<sup>(</sup>a) General Manager (EGM), Deputy EGMs, Chief Accountant, Chief Economists and Chief Engineer. (Assume the final decisions are made by either the government or the board of directors if ranking is not 4).

<sup>(</sup>b) Middle management is defined as the divisional or departmental managers.

<sup>(</sup>c) Lower management is defined as the departmental or sectional supervisors or foremen.

<sup>6.1.2</sup> What type(s) of control mechanism, both financial and non-financial, is(are) used to ensure the effective performance of the following functions under certain degree of decentralisation?

<sup>(</sup>a) Personnel

<sup>(</sup>b) Production

<sup>(</sup>c) Purchasing and supplies

<sup>(</sup>d) Sales and distribution

<sup>(</sup>e) Finance and administration

- (f) Others (please specify)
- 6.1.3 What kinds of communication channels or information systems (both formal or informal) are employed to make the above managerial aspects (6.1.1) and the associated control mechanisms (6.1.2) known to the various levels of management?

#### 6.2 Agreeing Targets

6.2.1 How the following factors affect the types and styles of control mechanisms employed by the different levels of management? i.e. 0 = no influence

1 = little influence

2 = moderate influence

3 = high influence

Major Division : $\_\_$		<del> </del>	
Control mechanisms e	mployed:		
			· · · · ·
	-		
Levels of Management :	Top(a)	Middle(b)	Lower(c)

Factors or Variables :

- \*Precision and detail of targets
- \*Balance between objective and subjective target measurement
- \*Timeframe for achieving the targets
- \*Degree of "stretch" built into the targets
- \*Emphasis on financial vs non-financial targets
- \*Management inluence on setting targets

- (a) Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountant, Chief Economist and Chief Engineer.
- (b) Middle management is defined as the divisional or departmental managers.
- (c) Lower management is defined as the departmental or sectional supervisors or foremen.
- 6.2.2 What kinds of communication channels or information systems (both formal or informal) are employed to make the above control mechanisms (6.2.1) known to the various levels of management?

#### 6.3 Reporting Requirements

6.3.1 What are the requirements for the \*control reports to be submitted to the top management? Please answer (with brief descriptions) the following checklist for the control report(s) which reflect the responsibility in each major division or department. Please also provide a sample (perhaps a blank one) of each control report if possible.

\* This question refers to the control reports submitted by the middle management (i.e. divisional or departmental managers) to the top management.

Division/Department	:	

- (1) What is the title of the report?
- (2) What is the purpose of the report?
- (3) What is the frequency of the report?
- (4) Is this a financial or a non-financial or a combined control report?
- (5) What are the major contains of the report?
- (6) Who prepare the report?
- (7) Who check the report?

Control Report No. :

- (8) Who sumit the report?
- (9) Who receive the report?
- (10) Who review the report?
- (11) Who evaluate the report?
- (12) Will feedback be given by (9)-(11)?
- (13) Will discussion held between sender and (9)-(11)?
- (14) What follow-up actions will be taken?
- (15) Will the report affect performance evaluation and remuneration or incentive? How?
- (16) Can computer aid in compiling this report?
- (17) Is this report relate to, link up or integrate with other reports?
- (18) What changes will be made in this report (1)-(17) in the next 12 months? Why?
- 6.3.2 What are the requirements for the \*control reports to be submitted to the middle management? Please answer (with brief descriptions) the following checklist for the control report(s) which reflect the responsibility in each major division or department. Please also provide a sample (perhaps a blank one) of each control report if possible.

\* This question refers to the control reports submitted by the lower management (i.e. departmental or sectional supervisors or foremen) to the middle management (i.e. divisional or departmental managers).

Department/Section	:	
Control Report No.	:	

- What is the title of the report? (1)
- What is the purpose of the report? (2)
- What is the frequency of the report? (3)
- (4)Is this a financial or a non-financial or a combined control report?
- What are the major contains of the report? (5)
- (6) Who prepare the report?
- (7) Who check the report?
- (8) Who sumit the report?
- Who receive the report? (9)
- (10) Who review the report?
  (11) Who evaluate the report?
- (12) Will feedback be given by (9)-(11)?
- (13) Will discussion held between sender and (9)-(11)?
- (14) What follow-up actions will be taken?
- (15) Will the report affect performance evaluation and remuneration or incentive? How?
- (16) Can computer aid in compiling this report?
- (17) Is this report relate to, link up or integrate with other reports?
- (18) What changes will be made in this report (1)-(17) in the next 12 months? Why?
- 6.3.3 Is there (Will there be) any integrated (i.e. covered most of the key functions) "Accounting Information System (AIS)" or "Management Information System (MIS)" for overall managerial control purposes? If yes, how far it has been (will be) computerized? If no, what are the constraints in designing and implementing such a system?

#### Performance Measurement Criteria

- 6.4.1 What are the importance (or weightings) the following "financial" criteria or indicators have been used to measure the performance of different divisions or departments? (please give reasons and rank from 0-4, i.e. 0 = do not use at all
  - 1 = low weighting
  - 2 = moderate weighting

3 = high weighting

4 = the only criterion)

Name of Department :

Ranking: 0 1 2 3 4 Reason

Residual income\*

Return on investment

Profit before tax

Profit after tax

Profit % sales

Profit growth %

Profit per employee

Sales growth %

Sales per employee

Cash flow

Added value#

Others: (please specify)

<sup>\*</sup> Residual income = Income after tax - (notional interest rate x capital employed)

<sup>#</sup> Added value = Sales - Outside purchased materials and services costs

What are the importance (or weightings) the following "financial" criteria or indicators have been used to measure the performance of different levels of management? (please give reasons and rank from 0-4,

i.e. 0 = do not use at all

<sup>1 =</sup> low weighting

<sup>2 =</sup> moderate weighting

<sup>3 =</sup> high weighting

<sup>4 =</sup> the only criterion)

_					
Levels of Management	:	Top(a)	Middle	(b)	Lower(c)
Residual Income					
Return on Investment					
Profit before tax					
Profit after tax					
Profit % sales					
Profit growth %					·
Profit per employee					
Sales growth %					
Sales per employee					
Others: (please spec	cify	)			

Name of Department:

<sup>(</sup>a) Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief Economist and Chief Engineer.

<sup>(</sup>b) Middle management is defined as the divisional or departmental managers.

<sup>(</sup>c) Lower management is defined as the departmental or sectional supervisors or foremen.

<sup>6.4.3</sup> When the actual results of the above "financial" criteria or indicators be communicated to the various levels of management and employees?

<sup>6.4.4</sup> How the actual results of the above "financial" criteria or indicators be communicated to the various levels of management and employees?

<sup>6.4.5</sup> What happens when the actual results of the above "financial" criteria or indicators are received by the top or middle management?

- 6.4.6 How frequent the above "financial" criteria or indicators be reviewed by the top and middle management?
- 6.4.7 What are the factors affecting the mondification or changes of the above "financial" criteria or indicators?
- What are the importance (or weightings) the following "non-financial" criteria or indicators have been used to measure the performance of different divisions or departments? (please give reasons and rank from 0-4, i.e. 0 = do not use at all

1

2

3

4

Reason

1 = low weighting

Name of Department : \_\_\_\_

- 2 = moderate weighting
- 3 = high weighting
- 4 = the only criterion)

Ranking : 0
Production quality
Production capacity
Production volume
Product development
Product quality
Product mix
Material consumptions
Inventory levels
Labour efficiency
Labour cost
Labour turnover
Expenses levels
Safety records
Birth control
Others : (please specify)

What are the importance (or weightings) the following "non-financial" criteria or indicators have been used 6.4.7 to measure the performance of different levels of (please give reasons and rank from 0-4, management? i.e. 0 = do not use at all 1 = low weighting 2 = moderate weighting 3 = high weighting 4 = the only criterion) Name of Department : \_\_\_\_ Levels of Management: Top(a) Middle (b) Lower(c) Production quality Production capacity Production volume Product development Product quality Product mix Material consumptions Inventory levels Labour efficiency Labour cost Labour turnover Expenses levels

Safety records

Birth control

Others: (please specify)

<sup>(</sup>a) Top management is defined as the Enterprise General Manager (EGM), Deputy EGMs, Chief Accountants, Chief Economist and Chief Engineer.

- (b) Middle management is defined as the divisional or departmental managers.
- (c) Lower management is defined as the departmental or sectional supervisors or foremen.
- 6.4.8 When the actual results of the above "non-financial" criteria or indicators be communicated to the various levels of management and employees?
- 6.4.9 How the actual results of the above "non-financial" criteria or indicators be communicated to the various levels of management and employees?
- 6.4.10 How frequent the above "non-financial" criteria or indicators be reviewed by the top and middle management?
- 6.4.11 What happens when the actual results of the above "non-financial" criteria or indicators are received by the top and middle management?
- 6.4.12 What are the factors affecting the mondification or changes of the above "non-financial" criteria or indicators?

#### 6.5 Rewards and Incentives

- 6.5.1 What is (was) the average "basic wages" per worker in this (last) year?
- 6.5.2 What are the factors (i.e. performance, grade, seniority, inflation, qualification, experience etc.) in determining the "basic wages" of the workers?
- 6.5.3 How frequent the "basic wages" is reviewed?
- 6.5.4 What are the factors (i.e. performance, grade, seniority, inflation, qualification, experience etc.) in determining the "basic salaries" of the non-manufacturing staff?
- 6.5.5 How frequent the "basic salaries" is reviewed?
- 6.5.6 What are the types of "allowances" (i.e. housing, meals, travel, child, attendance, overtime, inflation, stoppage etc.) paid to the workers and staff?

- 6.5.7 What is (was) the average "total allowances" per worker in this (last) year?
- 6.5.8 How frequent these "allowances" are reviewed?
- 6.5.9 What are the weightings of the following measurement criteria used in the "incentive scheme" for workers in various divisions or departments? Are these criteria measured on "Group" (G) or "Individual" (I) basis?

Meas	urement Criteria	Weightings	Basis	(G)/(
(1)	Production quality			
(2)	Production capacity			
	Production volume			
(4)	Product development			
(5)	Product quality Product mix			
	Material consumptions			
	Inventory levels			
	Labour efficiency			
	Labour cost			
	Labour turnover			
	Expenses levels			
(13)	Safety records			
(14)	Birth control			
	Others: (please specify)	1		
(15)				
(16)	<u></u>			
		100%		
		100%		

- 6.5.10 How the above measurement criteria (6.5.9) is assessed i.e. actuals vs actuals, actuals vs budgets or targets etc.?
- 6.5.11 How frequent the bonus is calculated and distributed to workers in the various divisions or departments based on the criteria listed in 6.5.9 above?
- 6.5.12 Are there any ceilings for the bonus?
- 6.5.13 If the above incentive system is formal, how the criteria, weightings and bases (6.5.9), the calculation and distribution (6.5.10) of bonus be communicated to the workers? How frequent are these rules reviewed and under what circumstances will they be modified? Do the workers participate in designing and reviewing this incentive scheme?

- How and when the workers know the amounts of bonus that 6.5.14 they can get? In what forms the bonus are paid to the workers?
- 6.5.15 Will there be any penalties if the workers can not achieve any of the measurement criteria stated in 6.5.9 above?
- When was this "incentive scheme" for workers adopted? 6.5.16 How this scheme is improving the productivity, efficiency and profitability of the enterprise as a whole?
- What are the weightings of the following measurement criiteria used in the "incentive scheme" for 6.5.17 non-manufacturing staff in various divisions or departments? Are these criteria measured on "Group" (G) or "Individual" (I) basis?

Name of Department : \_\_\_\_

#### Weightings Basis (G)/(I) Measurement Criteria

- Residual Income (1)
- Return on Investment (2)
- (3) Profit before tax
- (4) Profit after tax
- Profit % sales (5)
- Profit growth % (6)
- Profit per employee (7)
- (8) Sales growth %
- (9) Sales per employee Others: (please specify)
- (10)

(11)

100%

- How the above measurement criteria is assessed i.e. 6.5.18 actuals vs actuals, actuals vs budgets or targets etc.?
- How frequent the bonus is calculated and distirbuted to 6.5.19 non-manufacturing staff in the various divisions or departments based on the criteria listed in 6.5.17 above? Are there any ceilings for the bonus?

- 6.5.20 If the above incentive system is formal, how the criteria, weightings and bases (6.5.17), the calculation and distribution (6.5.19) of bonus be communicated to the non-manufacturing staff? How frequent are these rules reviewed and under what circumstances will they be modified? Do the staff participate in designing and reviewing this incentive scheme?
- 6.5.21 How and when the non-manufacturing staff know the amounts of bonus that they can get? In what forms the bonus are paid to the staff?
- 6.5.22 Will there be any penalties if the non-manufacturing staff can not achieve any of the measurement criteria stated in 6.5.17 above?
- 6.5.23 When was this "incentive scheme" for non-manufacturing staff adopted? How this scheme is improving the productivity, efficiency and profitability of the enterprise as a whole?

28 April 1993