

**ACCOUNTING ISSUES IN INTERNATIONAL JOINT VENTURES
IN THE PEOPLE'S REPUBLIC OF CHINA**

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ABSTRACT

Joint venture relationships have become an important strategy for multinational corporations for their global expansion into overseas markets. The purpose of this research is to investigate some new accounting problems relating to international joint ventures with special reference to China. The thesis covers such accounting issues as: the relationship between accounting differences and business decisions in the context of international joint ventures; the economic consequences of international harmonisation of accounting standards; foreign influences on accounting practices in joint ventures; and the interaction between culture and accounting practices.

INTERNATIONAL ACCOUNTING DIVERSITY AND BUSINESS DECISIONS

This aspect of the study explored whether the diversity among national accounting and disclosure practices and regulations affects the business decisions of major foreign users of financial statements. The study focused on Chinese joint venture financial statements and the use of them by UK multinational companies in relation to the business decisions about a joint venture.

The research methodology used here was on a case study basis for the UK MNCs which have joint ventures in China. The findings are consistent with the notion that accounting differences may affect the business decisions of parent companies in relation to a joint venture.

ECONOMIC CONSEQUENCES OF INTERNATIONAL HARMONISATION OF ACCOUNTING STANDARDS

The issue of economic consequences of the international harmonisation of accounting standards is also investigated. In this regard, a theoretical model is proposed which

attempts to explain and predict the harmonisation of accounting standards across countries. The theory proposed emphasises the economic consequences of the suggested harmonisation of accounting standards on local affected groups. This model is then used to try to explain the process of harmonisation of accounting standards in the case of Chinese joint ventures. Finally a case study of the financial statements of a joint venture presents an observed cash flow effect of changes of accounting methods used for measurement and valuation.

FOREIGN INFLUENCE ON ACCOUNTING MEASUREMENT PRACTICES

A study of accounting choice in joint ventures is also carried out, investigating whether accounting measurement practices appear differently as between joint ventures with different foreign backgrounds. The focus is on the major foreign partners in Chinese joint ventures: US, Japan, Hong Kong and UK investors. Rather than testing individual accounting method choice separately, an attempt is made to conduct an overall assessment of accounting practices of Chinese joint ventures. For this purpose, a point-system is designed to measure the extent to which a joint venture uses income-decreasing or conservative accounting measurement methods for each joint venture taken from a random sample of companies. Then comparisons of the conservative measurement scale are made between different joint venture groups using univariate and multivariate analyses. The findings support the hypothesis that there are significant differences in accounting choices between joint ventures with different foreign backgrounds.

CULTURE AND ACCOUNTING STANDARDS

The interaction of cultural factors and accounting standards is also investigated. In particular, the study is concerned with how the accounting environment affects judgments about the appropriateness of accounting standards in terms of the truthfulness and fair-

ness of financial statements. The hypothesis is that people from different accounting subcultures may have different judgment as to whether a particular accounting standard can provide a true and fair view of financial position and results.

The research tests the attitudes of British and Chinese people towards the Chinese joint venture accounting regulations as to whether the regulations can give a true and fair view of financial position and results. Contrasting views were found between the two groups of subjects from Britain and China.

CONCLUDING OVERVIEW

The study focused on accounting issues in a relatively new research field, that of international joint ventures. The findings increased our understanding about accounting practices used in Chinese-foreign joint ventures. The study also provided new insights into a number of accounting debates and unsolved problems. The research, subject to certain limitations, either presented evidence supporting already known hypotheses, e.g. accounting diversity and decision-making, interaction between culture and accounting; or raised some new accounting issues for further research consideration, e.g. economic consequences of the harmonisation of accounting standards. It is hoped that the achievements in this area facilitate the progress of international harmonisation of accounting and financial reporting practices.

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CHAPTER 1

INTERNATIONAL JOINT VENTURES IN THE PEOPLE'S REPUBLIC OF CHINA

1.1 INTRODUCTION

The objective of this research was to contribute to the international accounting literature by addressing some new accounting issues relating to international joint ventures. The study investigated the main accounting problems in joint ventures in China: 1) How do accounting differences between home and foreign countries affect business decisions in the context of international joint ventures? 2) What are the economic consequences of international harmonisation of accounting standards in Chinese joint ventures? 3) What are the foreign influences on accounting practices in joint ventures? 4) How do culture and accounting interact? In chapter 1 and chapter 2, there is a general discussion about joint ventures in China and a discussion of the Chinese economic system and the local and joint venture accounting regulations. Individual accounting issues are discussed from chapter 3 to chapter 6. Chapter 7 concludes the thesis.

1.2 THE MEANING OF "JOINT VENTURES"

The modern business environment has encouraged enterprises to conduct suitable business activities through joint venture relationships. This has become an important strategy for some multinational corporations for their global expansion when they pursue overseas markets. The formation of new joint ventures are frequently reported in the financial

press, and a lot of unpublicised joint ventures are created all the time. Nowadays even business rivals are making joint ventures as well¹. This is indicative of the most recent and significant development of the strategy of using joint venture relationships by multi-national corporations which is having a far reaching influence on world business.

A study of joint venture accounting in the context of international business activity calls for a clear definition of the term "joint venture", which is referred to in a number of particular business arrangements. The narrower or broader coverage of the concept "joint venture" gives rise to differences in what is meant by the term. At first, it is necessary to distinguish between contractual joint venture vs. equity joint venture:

(i) Equity joint venture, from a legal point of view, involve the participation of two or more partners in the creation of a new corporate entity in which each partner owns a given share of the equity capital, or in the redistribution between the parties of the shares of an existing company;

(ii) In a contractual joint venture the parties do not establish a jointly-owned new company for the carrying out of the joint venture activities, nor do they arrange for the redistribution among themselves of the shares of an existing corporation. The internal legal relations between the parties are structured and regulated on a contractual basis(ECE 1987).

¹ For instance, Daimler-Benz, maker of the Mercedes-Benz, the world's best-selling luxury car, and a leader in aircraft manufacture and electronics, ranked as Germany's largest industrial group, and Japan's Mitsubishi Corp created a series of joint ventures that could link their businesses across a wide range of interests, including automobiles, aerospace and electronics. (Time International, No. 12 March 19, 1990).

Another definition of equity joint venture was introduced by the Accounting Principles Board:

"An enterprise, corporation or partnership, formed by two or more companies, individuals, or organisations, at least one of which is an operating entity that wishes to broaden its activities, for the purpose of conducting a new, profit-motivated business of permanent duration. In general, the ownership is shared by the participants with more or less equal equity distribution and without absolute dominance by one party"(APB 1971).

Because this definition is not broad enough to cover some business relationships between two or more separate entities that are outside the specific limitations of the APB's definition, the FASB presented in an issues paper entitled "Joint Venture Accounting"(FASB 1979) two definitions that more adequately cover the business substance which are referred to as joint ventures. The first one appeared originally in Section 3055 of the Canadian Institute of Chartered Accountants ("CICA") Handbook:

"A joint venture is an arrangement whereby two or more parties (the venturers) jointly control a specific business undertaking and contribute resources towards its accomplishment. The life of the joint venture is limited to that of the undertaking which may be of short or long-term duration depending on the circumstances. A distinctive feature of a joint venture is that the relationship between the venturers is governed by an agreement (usually in writing) which establishes joint control. Decisions in all areas essential to the accomplishment of a joint venture require the consent of the venturers, as provided by the agreement; none of the individual venturers in a position to unilaterally control the venture. This feature of joint control distinguishes investments in joint ventures from investments in other enterprises where control of decisions is related to the proportion of voting interest held."

The FASB recommended that the above definition be adopted in substance for accounting purposes. This definition is similar to that used by International Accounting Standards Committee in the recent international accounting standard 31, financial reporting of interests in joint ventures(IASC 1991).

Another definition mentioned in the issues paper of FASB (1979) is taken from an unpublished draft of an accounting research study on intercorporate investments authorised by the APB. According to that definition, a joint venture entity is:

"An entity owned by a limited number of investors who have entered into operating agreements and contracts under which the 'joint owners' assume all the characteristics and obligations of venturers. The 'joint owners' may consist of two or more investors

who may or may not have equal interests in the corporation. One of the 'joint owners' may even own a majority interest. The joint venture corporation itself may either (1) pass on the costs and expenses of its product or services to the 'joint owners' or (2) operate as a profit-making corporation, in which case the 'joint owners' share in the net income generated.

"Other joint-endeavour entities that should be included in any discussion of the problem, whether cost-sharing or profit-making, are the joint venture, the partnership, and various joint-operating agreements... each constitutes a business entity or a business component. The assets used in the operation may be the property of the entity itself or of one or more of the "joint owners" who agree that such assets are merely to be used by the entity. In the latter case, the entity comprises only the operations conducted under the joint-operating agreement. The term 'joint venture entity' refers then to both corporate and noncorporate joint-ownership ventures, whether they are distinct business entities or components of a business entity."

The International Accounting Standards Committee in the recent international accounting standard 31, financial reporting of interests in joint ventures provides following definition of a joint venture (IASC 1991).

"A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity which is subject to joint control.

Control is the power to govern the financial and operating policies of an economic activity so as to obtain benefits from it.

Joint control is the contractually agreed sharing of control over an economic activity(IASC 1991)."

The Committee distinguished a venturer and an investor:

"A venturer is a party to a joint venture and has joint control over that joint venture.

An investor in a joint venture is a party to a joint venture and does not have joint control over that joint venture(IASC 1991)."

The Committee further offered following explanation of the definition:

"17. A jointly controlled entity is a joint venture which involves the establishment of a corporation, partnership or other entity in which each venturer has an interest. The entity operates in the same way as other enterprises, except that a contractual arrangement between the venturers establishes joint control over the economic activity of the entity.

"18. A jointly controlled entity controls the assets of the joint venture, incurs liabilities and expenses and earns income. It may enter into contracts in its own name and raise finance for the purposes of the joint venture activity. Each venturer is entitled to share of the results of the jointly controlled entity, although some jointly controlled entities also involve a sharing of the output of the joint venture.

"19. A common example of a jointly controlled entity is when two enterprise combine their activities in a particular line of business by transferring the relevant assets and liabilities into a jointly controlled entity. Another example arises when an enterprise commences a business in a foreign country in conjunction with the government or other agency in that country by establishing a separate entity which is jointly controlled by the enterprise and the government or agency.

....

"21. A jointly controlled entity maintains its own accounting records and prepares and presents financial statements in the same way as other enterprises in conformity with the appropriate national requirements and International Accounting Standards.

"22. Each venturer usually contributes cash or other resources to the jointly controlled entity. These contributions are included in the accounting records of the venturer and recognised in its separate financial statements as an investment in the jointly controlled entity(IASC 1991)."

In sum, in the present study, the following five features are considered to reflect the essential characteristics of a joint venture:

(i) an agreement between the parties on common long-term business objectives, such as production, purchasing, sales, maintenance, repair, research co-operation, consultations, financing;

(ii) a pooling by the parties, for the achievement of the agreed objectives, of resources, such as money, plant, machinery, equipment, management know-how, intellectual property rights and other facilities;

(iii) a characterisation of the pooled resources as capital contributions by the parties;

(iv) a pursuance of the agreed objectives through management organs which are separate from the management organs of the parties, but under the control of the investors or venturers; and

(v) a sharing between the parties, usually in proportion to their respective capital contributions, of the profits resulting from, and the risks associated with, the pursuance of the agreed objectives, the liability of the parties being normally limited to their capital contributions (UN 1988).

For a contractual joint venture not considered a separate business entity, accounting and reporting problems are less serious than that in a equity joint venture. This project is mainly addressing the accounting problems relating to equity joint ventures. The definition of IASC is used, but no distinction between investor and venturer is made. This is because investors in a Chinese joint venture normally jointly control the firm, so that the term "venturer" is not used in the study.

1.3 MOTIVES FOR JOINT VENTURES

To a certain degree, there is a need to explain why a partner has to be brought into the venture. The factors which facilitate enterprises to establish joint ventures derive from the internal organisation and dynamics of the enterprise itself, from market conditions and opportunities, and from governmental policy measures regulating the economic behaviour of the enterprise.

1.3.1 General business motives

A number of classic business circumstances frequently motivate the creation of a joint venture instead of undertaking a business activity alone:

(i) The need to pool and utilise the expertise, skills and other business resources of other entity.

An enterprise may be interested in a business opportunity but does not have all the expertise, skills or other business resources that are essential for success. For a company which is expanding its operation and penetrating the market of a new country, starting production with local partner may be the best first step, due to, for example, tariff barriers for imported goods, high transportation costs, etc. A foreigner may be granted the investment permission only if it is undertaken in the partnership with a local enterprise. In that

case, the joint venture may be the most appropriate form of operation. As a foreign investor wants to select joint venture participants that can provide the maximum benefit to the joint venture through the pooling of complementary (as opposed to duplicative) expertise, a local partner may enable the joint venture to acquire sufficient know-how about the local markets, and sometimes to use its existing marketing network for the marketing of the products of the joint venture.

A local partner of a joint venture with a selected foreign investor may be interested in the new technology available from the latter. And the managerial expertise of the foreign investor is also valuable for the local partner. A local partner would also take into account the marketing know-how or international marketing network of the foreign partner which is essential to enter a world market.

(ii) The requirement for greater capital investment and other financial sources than a single entity is willing or able to provide.

Some business opportunities require significant amounts of funds that a single entity can not finance. A local enterprise often seeks a foreign partner to finance its business and operation through a joint venture. On the other hand, as far as finance is concerned, a joint venture with a local partner may be granted tax concessions or other financial incentives. Labour costs and other production inputs may also be less costly than in the foreign investor's home country.

(iii) Reduce or spread the business risks among more than one entity of setting up new capacity.

(iv) Off balance sheet financing by utilising the form of joint venture. Most joint ventures are not consolidated in the participants' financial statements, but are reported on a "one-line" basis under the method of equity accounting. Therefore the participants are

not required to include the indebtedness of a joint venture in the reported balance sheet liabilities, although they must often guarantee obligations of a joint venture so that the joint venture can obtain credit and loans. In that case, a participant must disclose in the notes to the financial statements any significant guarantees of indebtedness to other entities. Nevertheless, it does improve the appearance of the participant's financial position in the primary financial statements because the indebtedness of a joint venture does not appear on the face of the participant's balance sheet, even though significant guarantees must be disclosed in the notes².

² The business objectives of creation of joint ventures can well be illustrated by the case of Daimler-Benz and Mitsubishi:

"Daimler-Benz is convinced that forging ties with Mitsubishi will bolster its AEG electronics and housewares group; meantime Mitsubishi's lagging auto division might gain entry into the European market. The most promising area of cooperation is in aerospace, where Daimler-Benz is particularly eager to expand. Last September its Deutsche Aerospace subsidiary purchased a controlling stake in Messerschmitt-Bolkow-Blohm (MBB), the chief German partner in the European Airbus consortium. A connection with Mitsubishi might help persuade Japan's commercial airlines to buy Airbus jets, which they have so far been reluctant to do in significant numbers. For Mitsubishi, a partnership with Daimler-Benz could provide admission to the lucrative business of aircraft development, for which Japan's underdeveloped aerospace industry has hungered for 20 years. On a broader level, the Daimler-Mitsubishi bond will give Mitsubishi a crucial foothold in Europe and allow Daimler-Benz better access to Japan's domestic market." Businessmen and trade ministers believe that the collaboration will enable the Japanese to find ways to assert themselves powerfully in the post-1992 European Community market, especially the \$155 billion European auto market, the world's largest (Time, International, No.12 March 19,1990).

1.3.2 Government objectives

Some governments have established specific objectives for a joint venture to be created:

- Obtain new technology and technical know-how;
- Increase exports and obtain hard foreign currency income;
- Substitute imports and therefore save foreign currency;
- Increase foreign investment;
- Acquire business management know-how;
- Create employment opportunity, increase labour productivity and train local employees;
- Save manpower, material, energy, and other resources, and increase profitability (UN 1988).

The specific objectives of the Chinese Government are discussed in section 1.4.2.

1.4 INTERNATIONAL JOINT VENTURES IN CHINA

1.4.1 Foreign direct investment in China

The wide Chinese market and abundant investment opportunities have attracted great attention from foreign investors. However, foreign direct investment by investors from Western countries was forbidden in China from 1949 to 1979. Since 1979, there has been a steady increase in foreign direct investment with the new open policy to the outside world. The Chinese government has recognised the advantages of attracting foreign investment and decided to draw on them in its efforts to realise a modern economy. These changes have produced a surge of increase in foreign investment and have made China become one of the leading host developing countries in terms of both its accumulated stock of foreign investment and its annual flow. Because of the size of the

economy, foreign investment is small in relation to the total economy, but assumes importance in certain areas such as the four Special Economic Zones (SEZs) in Guangdong Province adjacent to Hong Kong, and in neighbouring Fujian Province, and open coastal cities, for most foreign investment takes place in these areas. Up to 1985, there were over 2300 joint ventures, 3700 joint operating enterprises and 120 foreign-owned enterprises. However, at the end of 1988 there were more than 11000 such projects in total, roughly double the number in 1985. One year later, at the end of 1989, there were more than 22,000 enterprises with foreign investment (including more than 12,000 joint ventures, 8,000 joint operating enterprises and 1,500 foreign-owned enterprises) and a total foreign investment of \$ US 15.4 billion. At the end of 1991, the total realised foreign investment(including loans) was \$US 80 billion; the total foreign invested enterprises were 37,189, including 22,791 joint ventures(Data source: People's Daily, January 27, April 21, 1992). At present, China has the world's seventh largest economy with a GNP of more than 1300 billion RMB Yuan(Chinese currency), and has had an annual growth rate of more than 9% for the last 10 years. China was the 32nd country in terms of exports in the world in 1979, and the 14th in 1989, with exports being increased by 286% in the last ten years (Data source: People's Daily, April 27, 1990). Details of foreign direct investment, joint ventures in China are presented in Appendix 1-1 to 1-4.

Unfortunately, after June 1989, foreign investment in China has dropped sharply and becomes a highly risky business for political reasons. Now, it seems that the normal situation in China has gradually been restored. For example, from 1989 to June 1991, the Chinese government approved 18,000 foreign invested enterprises, which were more than the total number of those from 1979 to 1989(People's Daily, November 8,1991). As long as the Chinese government keeps the door open, the desire to gain direct access to a market of 1.1 billion people will always lead to increasing foreign investment to China, though at a higher risk. Since China will undoubtedly be a major trading nation in the world's economy by the turn of the century, Chinese joint venture accounting systems and practices have become of great interest and importance to international economists,

academic accountants and accounting practitioners. Moreover, the number of such ventures authorised in China and the volume of foreign direct investment committed to them afford many insights into the process of mutual adjustment which is necessary if joint ventures are to succeed in meeting the objectives sought by each side.

1.4.2 Objectives of joint ventures in China

No other country has acquired as much experience as the People's Republic of China in formulating and implementing legislation permitting foreign direct investment in joint ventures and related forms of interfirm co-operation within the framework of a planned economy. The main purposes of China to encourage foreign investors to form joint ventures are summarised as follows:

(i) to acquire advanced technology, introduce modern production systems into China, thereby raising the productivity, improving product quality, reducing waste and inefficiency;

(ii) to supply capital for the development of the economy;

(iii) to obtain managerial expertise and skills to raise the level of enterprise management and train domestic employees;

(iv) to achieve the international balance of payments of foreign exchange during the period of rapid growth of the economy and generate foreign exchange by increasing exports and import substitution.

From the new enforced and revised laws, the Government has made it more and more clear that one of the essential aims of encouraging enterprises with foreign investment is to sell their products on international markets. Access to the local market is limited for

joint ventures (or other enterprises with foreign investment) which either substitute for imports or introduce advanced technology. With regard to exports, the Government hopes that foreign companies will also provide China, so as to develop its export markets, with some of its international marketing network in order to reduce its pressure on the balance-of-payments constraint.

The main objective of foreign investors would appear to be to gain access to an enormous market of 1.1 billion population. In addition to the vast potential market, a foreign company also appreciates some other merits of the investment in China: for example, the Chinese economy is growing as fast as most economies in the world and most of its demands for production methods and technologies which are not available in China could be satisfied by those now mature in the developed countries. Because China has a limited availability of liquidity in foreign currency, large scale imports are not likely. So the best strategy and means of access to this market is considered as being by locating business and production within the country.

Many foreign investors have been impressed by the comprehensive legal framework which the Government has developed and have appreciated the measures taken to improve the investment environment. The Government has so far enacted more than 200 laws and regulations relating to foreign investment (People's Daily, Overseas Edition, Oct.29,1992). These measures are regulatory and incentive as well. For example, on October 1986, a set of provisions for the encouragement of foreign investment were introduced and on March 1, 1987, eight additional provisions were introduced including a favourable tax regime for foreign enterprises. Other steps have been taken to attract foreign direct investment. For example, by the end of 1986, investment promotion and protection agreements with 18 western countries (including UK, France, and West Germany) and double-taxation agreements with 16 countries (including USA, Japan and the above three countries) had been concluded. Up to October 1992, China signed mutual investment protection agreements with 41 countries in the world (People's Daily, Over-

seas Edition, Oct.29,1992). It should be noted that favourable conditions are particularly offered in Chinese Special Economic Zones(SECs)(Herbst 1986, Osborne 1986). The following outline some of the special treatments available for foreign investment in China, particularly in SEZs and open coastal cities:

(i) Key equipment and instruments, imported to help accelerate the technical transformation of local enterprises, shall be exempted from customs duties and the Industrial and Commercial Consolidated Tax.

(ii) A 15% preferential enterprise income tax shall be levied on the income of qualified joint ventures, co-operative enterprises or enterprises with sole foreign investment. When foreign investors remit abroad legal profits distributed to them, the amount remitted shall be exempted from income tax.

(iii) A 15% preferential enterprises income tax shall be allowed for projects with advanced technology or which are knowledge-intensive, and with a long lead time. The same treatment is also applied to those investments which belong to the fields of energy, communications and port construction(Chinese Government 1991a, 1991b; see Cho et al, 1992, for a full discussion of Chinese income tax law for foreign investment).

In order to balance foreign exchange revenue and expenditure, the "Regulations on foreign currency balance of equity joint ventures" enforced in early 1986 eased the restrictions on the repatriation of profits in hard currency from joint ventures and provided various means for foreign investors to increase their foreign exchange earnings. On 16 November 1987 new rules on import substitution were announced which allowed joint ventures' output to be sold on the domestic market as long as it qualified for import substitute status.

1.4.3 Features of joint ventures in China

There are a number of studies about international joint ventures. For example, Hladik(1985) presented an economic analysis of U.S-Foreign joint ventures. Fine(1989) discussed the law and policy of the EEC about the mergers and joint ventures in Europe. In particular, Pearson(1991) provided a detailed analysis of the control of foreign direct investment using joint venture from the legislation, administrative, taxation and other measures of the Chinese government.

The nature and form of joint ventures had been shaped, and the distinction between a local enterprise and a joint venture had been recognised, by a series of Chinese laws and regulations about joint ventures. The basic law for joint ventures in China is the initial Law, "The Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment" (the Chinese Government 1979, revised in 1990) and the more detailed "Regulations for the implementation of the law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment" (the Chinese Government 1983). During the last decade years, based on the above "Law" and "Regulation", various laws, regulations about taxation, finance, administration and operation for joint ventures have been elaborated and implemented with the intention to create a favourable climate and environment for foreign investment needed to modernise the Chinese economy. Consequently, a joint venture in China becomes a unique business entity which is like neither a local enterprise nor a typical one in a free market. The following discussion of the features of joint ventures is based on these two official documents "The Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment" (1979, 1990) and "Regulations for the implementation of the law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment" (1983).

1.4.3.1 Nature of ownership

An international joint venture in China has been defined as a legal person which has at least one foreign investor who establishes a business in China with a Chinese partner(s). A foreign investor is usually from a western country or a market oriented economy, such as Japan and Hong Kong. A Chinese international joint venture takes the form and assumes the nature of a limited liability company, i.e. the participants share the obligations as well as profits and losses, in proportion to and limited to their contributions to the registered capital.

A foreign participant of a joint venture should contribute no less than 25% of the total amount of investment, but no ceiling limit is laid down, so a foreign investment could account for as much as 99% of the total investment. This is contrasted with the rules of some other countries where there is a ceiling amount of investment in a joint venture, e.g. the maximum proportion of foreign investment could only account for no more than 49%(UN 1988), which ensures the local participant could control the firm and maintain national sovereignty. According to the rule concerning the proportions relating to local and foreign investment, a foreign participant could exercise significant influence on the managerial decision including accounting policy-making, since foreign investment always accounts for no less than 25% of the whole registered capital of a joint venture. That is the amount which is considered to be enough to meet the criteria of significant influence in an associated company used in some western countries.

1.4.3.2 Authority

A joint venture could be more independent than a local enterprise, because it is free of most plans and financial control from the government. All major issues concerning a joint venture and essential to the accomplishment of agreed-upon goals are decided by the board of directors which is the highest authority of a joint venture. The directors are

appointed by the participants. The distribution of the number of directors must be ascertained through consultation by the participants with reference to the proportion of contributed investment.

The control of decision-making is not exactly or strictly related to the voting interest in accordance with proportion of investment held. Instead, the approach of consultation is encouraged to reach the essential decisions for the success of a joint venture and solve the potential conflict between members of the board of directors. "In handling an important problem, the board of directors shall reach decision through consultation by the participants on the principle of equality and mutual benefit"(Chinese government 1990). More specifically, it requires consent of all the directors to reach decisions on:

- Revision and amendment of the articles of association of the joint venture concerned;
- Termination and dissolution of the venture;
- Increase or assignment of the registered capital of the joint venture;
- Merger of the joint venture with another economic unit.

There used to be a rule that the chairman of the board of directors should be from the Chinese partner. However, this rule has finally been withdrawn from the revised "The Law of The People's Republic of China on Joint Ventures Using Chinese and Foreign Investment" in 1990.

With regard to daily operations, a general manager and several deputy general managers are responsible for management of a joint venture. Both general and deputy general managers could be from the Chinese or foreign partner. When western citizens take the office of managers of a joint venture, typical western-style business philosophy and corporate culture and practice are introduced into joint venture management.

1.4.3.3 Business transactions

A joint venture frequently deals with some transactions which rarely occur in a typical local enterprise. For instance, a joint venture could be engaged in more import and export transactions. Other transactions which a state enterprise will hardly encounter are: mergers and takeovers, investment from abroad, and so on. These give rise to accounting problems involving foreign currency and foreign investment, valuation of intangible assets such as goodwill, exchange losses and gains, etc. The situation is also complicated by the nature of ownership. Chinese local enterprise usually involves single ownership, i.e. state or collective ownership, whilst a joint venture is a mixture of ownership, by definition, in which the capital structure and financial source may be quite different from that of an enterprise with single ownership.

1.4.3.4 Going concern

The concept of going concern is well demonstrated in Chinese local enterprise. Whilst there have been very few cases involving bankruptcy of a state enterprise in the last 40 years, the business life of a joint venture is limited by law and regulation. The duration of a joint venture engaged in an ordinary project would be between 10-30 years and for those engaged in projects requiring large amounts of investment, long construction periods and low return rate on investment the term of business could be extended to more than 30 years. Though the revised law allows longer joint ventures, most joint ventures are eventually going to terminate and will involve a liquidation. Therefore, on the one hand, an accounting policy based on the assumption of going concern could be less justified in the case of a joint venture than a local enterprise; on the other hand, accounting for termination, liquidation and bankruptcy will be necessary.

1.4.3.5 Financial channels.

A joint venture could perhaps get quite different financial assistance compared to a local enterprise. Whilst a Chinese state enterprise is closely related to the government budget and public finance, a joint venture is financially independent from the government. While the capital market in China is just in its infancy stage and isolated from the international capital market, a local enterprise usually is not able to access capital markets outside China. A joint venture could have more choices in financial channels than local enterprises.

However, it should be noted that a joint venture and a local enterprise share some similar characteristics, and some regulations and control over local enterprises are also applied to a joint venture. For instance, like a local enterprise, joint ventures should normally settle their accounts through Chinese banks and be under the supervision of a state bank. Credit sales are strictly restricted in respect to both local and joint ventures. The recruitment policy of a joint venture is under the control of employment policy of the government. The level of labour wages is also subject to some regulations.

Whilst the differences and similarities discussed above are far from exhaustive, it may be enough to justify a change in accounting systems for joint ventures which are more flexible, more independent and market-oriented than local enterprises.

1.4.3.6 Foreign company experience

Most Chinese-foreign joint ventures are doing well. For example, Chen et al(1991) report a positive wealth effect of U.S.-China joint ventures in China. They use a sample of 88 U.S.-China joint venture announcements made from 1979 to 1990, and find statistically significant positive portfolio excess returns (0.52%) on the announcement date for investing U.S. firms. Additionally, they find that the average scaled gain of the announce-

ments is 3.70. The results support the hypothesis that establishing joint ventures in China, creates positive wealth gains for shareholders.

However, some joint ventures have difficulty in running businesses in China. It has been estimated that one-third of the number of joint ventures are running smoothly, one-third are doing well but have foreign exchange problems, and the rest are losing money. During the last 10 years, there were some fluctuations of foreign investment in China. For example there was a decline in the number of new joint ventures concluded in 1986 compared to 1985, and a 42% fall in investment commitments during the first nine months of 1986 compared to the corresponding period in 1985. Many factors account for this fact. Among them a shortage of foreign exchange and high operating costs were given by the Government as the main reasons for the marked slowdown in foreign investment. The difficulties the foreign companies encounter include the following:

- (i) conversion of profit in local currency into convertible currencies;
- (ii) a comparatively low quality of labour; high costs of land rents and office accommodation, energy and other inputs; and high expense of negotiation of contracts;
- (iii) differences of approach in the negotiation, approval, administration and enforcement of contracts;
- (iv) uncertainties and "fluidity" of regulation relating to joint ventures
- (v) the existence of a second tier of administrative rules for local partner's use only. Some laws and regulations are stated in broad, ambiguous and sometimes conflicting terms, leaving local and central implementing agencies wide scope for interpretation.

Two major factors account for the lack of success of some existing joint ventures. The first factor deals with the eagerness of foreign firms to do business in China and the second factor concerns the apparent lack of understanding of Chinese ideology and its perspectives on joint ventures so that many Western executives are not fully conversant with China's aspirations, its socialist ideology, and its market planning and pricing mechanisms. The net impact of these two major factors was succinctly captured by the U.S. Ambassador to China, Winston Lord, in a speech of 1986: "Many business people are frustrated by high costs, price gouging, tight foreign-exchange controls, limited access to the Chinese market, bureaucratic foot dragging, lack of qualified local personnel, and unpredictability."

Whilst the characteristics of the Chinese economy are discussed in Chapter 2, it should be pointed out here that in China, since many enterprises are owned by the Government, it is not meaningful to distinguish between a Chinese firm and the Government. Private entrepreneurship at the corporate level, as is understood in Western economies, is still in a stage of infancy and not allowed to form a joint venture with foreigners. Finally, it is not easy for two foreign companies to create a joint venture in China. So, for all practical purposes, joint ventures in China are formed with a government-owned enterprise or a collective enterprise as partner.

1.5 RESEARCH OBJECTIVES AND METHODOLOGY

1.5.1 Accounting for versus. accounting in joint ventures

The importance of and the need for accounting standards involving joint ventures have long been recognised in the last two or so decades. Joint venture accounting could be complex, particularly when a foreign operation is involved. The growth and expansion of multi-national corporations, the increasing interdependence of national monetary systems, the trend toward international participation in capital markets, and the desire for

international planning and allocation of natural resources all suggest an acute need for a co-ordinated approach to accounting on an international basis which will provide a realistic, profitable, and acceptable atmosphere for international business.

Accounting issues and problems involving joint ventures can be categorised into two types: accounting **in** joint ventures and accounting **for** joint ventures. Accounting in joint ventures means investee's accounting for the joint venture's business whilst accounting for joint ventures is the investor's accounting for the investment in a joint venture. Accounting problems for joint ventures have been well defined, i.e. how to, from a parent company's point of view, account for the investment in a joint venture in the consolidated financial statements of the parent company. In that case, the accounting policies adopted by the partners and the joint venture itself are usually ignored except for the timing of reporting.

Through the course of time, three basic methods have evolved to account for the investment and profit of international joint ventures. These are cost, equity and the proportionate share methods. A number of variations of these methods have been developed as well. Each of these methods is recommended to fit the specifics of a particular situation.

Under the equity method, the investment account of the investor is adjusted in the financial statements for the change in the investor's share of net assets of the joint venture. The second method is called the proportionate share method. Under this method, an investor's pro rata share of each of the assets, liabilities, revenues and expenses of a joint venture is aggregated with those of the investor in its financial statements.

The cost method is used where there is significant doubt that the earnings of an joint venture will return to the investor for reasons such as substantial restrictions on the movement of funds out of a country. Under this method, the investment in the joint venture is recorded at cost. The income of the joint venture is only recognised by the

investor to the extent that the investor receives distributions from the net accumulated profit of the joint venture arising after the date of acquisition by the investor. Distributions from the joint venture received in excess of such profits are treated as recovery of investment and are recorded as a reduction of the investment cost.

Whilst numerous efforts have been made concentrating on the issues of accounting for joint ventures, the other side of the problem has been overshadowed. The overlooked fact is that the share of interest of the participants of a joint venture could be more or less affected by the accounting policies adopted by the joint venture when it is using the particular accounting standards to evaluate the investment of the participants and measure the profit generated by the joint venture. Suppose two companies from two different countries decide to establish a joint venture located in one of the participant's countries, and the two countries have different accounting standards and systems. When the joint venture is created a decision has to be made, i.e. what accounting standards should be adopted by the joint venture relating to the valuation of the investment and the measurement of profit. Because both participants have a significant influence on the joint venture, three approaches are available to solve the potential conflict caused by the different accounting standards: the joint venture could follow the host country's accounting standards; in this case, the joint venture's accounting will be different from the accounting practice of the parent company of the home country; or the joint venture could follow the home country's accounting standards, in which case it would be different from that of the parent company of the host country; or finally, the joint venture could adopt accounting standards which are neither the practice of the host country nor that of the home country but some compromise between the two. In practice, for instance, the Russian and most East European joint ventures follow the first model (UN 1988), whereas the Chinese joint ventures follow the third model. But the second is not practical, for this could give rise to some tax and legal problems (accounting problems as well), if a joint venture's accounting significantly departs from the host country's standards.

Several accounting problems are related to international joint ventures. For example, do differences in accounting standards used between a joint venture and its parent company significantly affect the decisions of the parent company for the investment in the joint venture? In other words, to what extent, is the financial information offered by the joint venture influential on decision-making by the parent company? Another related accounting issue is, how do participants of joint ventures deal with the accounting differences? i.e. how does harmonisation of accounting standard takes place in the context of joint venture business, and what is the effects of the changes of accounting policy on the interests of the participants of a joint venture?

The accounting literature has hardly addressed these important problems. It is apparent that the answer could never be general but individual depending on particular conditions. However, some evidence shows that parent companies have often encountered difficulties when a joint venture uses different accounting standards. For instance, Western company executives with experience in negotiating the formation of joint ventures with East European partners and Chinese partners frequently report that the accounting regulations incorporated in the countries' joint venture legislation present problems for western accountants who are unaccustomed to enterprise practices in planned economies (UN 1988, 1989).

It is obvious that the increasing number of international joint ventures has made the accounting problems in joint ventures an urgent and pending issue which needs attention and the effort of the accounting profession and academics in the context of international accounting harmonisation.

Whilst there is a lack of research in the accounting literature in this area, some international organisations have paid considerable attention to the accounting problems in joint ventures. For instance, the Centre on Transnational Corporations in the United Nations is by no means considered an accounting body. But it did organise some workshops to

discuss the accounting problems in East-West joint ventures and Chinese joint ventures. The investigations and case-studies made by the Centre are precious original material and data available for further analysis and research(UN 1989).

The Chinese authorities have also made significant efforts to mitigate the conflict of accounting standards of host and home countries for the formation and operation of joint ventures. Although some Chinese accounting practices follow international norms (e.g.international accounting standards issued by the International Accounting Standards Committee), there are some differences in respect of major accounting standards. Hoyt and Maples(1980) pointed out the major accounting problems in joint ventures with China and the USSR: "the critical elements of accounting for joint venture include the following items: 1, (different) valuation standards for investments based on contractual relationships with foreign governments. 2, absence of convertible currency by which to measure international transfers between partners, 3 income-timing considerations, and, 4, accounting standards designed to fit market-type economies(Hoyt and Maples 1980)." In recognising that the pure accounting standards of the host country are not satisfactory or acceptable by the Western participants, the Chinese authorities have established a separate accounting system from local companies for international joint ventures in China in which some typical Western financial and accounting norms have been taken into consideration and where the significant influence of Western accounting practice can be seen. This legislation makes it possible to harmonise the accounting standards for joint ventures with foreign investors and to formulate accounting policies acceptable to both partners.

However, there is much room for improvement and the joint venture accounting system in China has not eliminated all accounting problems. The efforts made by international organisations, host country' authorities and parent companies of both host and home countries are still far from creating a satisfactory business environment for international joint ventures.

1.5.2 Research questions and methods

Chapter 2 is a discussion of the Chinese economic system and local and joint venture accounting regulations. This provides a background of the research project. The accounting issues subject to major investigation in this study are outlined as follows:

1) International accounting diversity and business decisions by the UK multinational Corporations (chapter 3)

This chapter investigates whether the diversity among national accounting and disclosure practices and regulations affects the business decisions of major foreign users of financial statements. The study focuses on how UK MNCs use financial statements of the Chinese joint ventures and how accounting differences limit the use in relation to the business decisions about a joint venture.

The research methodology used here was to use a case study basis for 9 British MNCs which have joint ventures in China. Questionnaire and interview techniques were used. The interviews conducted were structured but open-ended. The questionnaire included factual and behavioural questions relating to decision processes, information requirements, nature of accounting diversity, coping mechanisms, and capital market effects.

2) Economic consequences of international harmonisation of accounting standards(chapter 4)

This chapter discusses the issue of economic consequences of international harmonisation of accounting standards-a subject which is neglected in the current accounting literature. Then a theoretical model is proposed which may be used to explain and predict harmonisation of accounting standards across countries. The theory proposed empha-

sises the economic consequences of suggested harmonisation of accounting standards on local affected groups. Not only should the benefits of harmonisation exceed the costs, but also the benefits and costs should be fairly distributed among affected groups.

This model is then used to explain the process of harmonisation of accounting standards in the case of Chinese joint ventures. The relationship between these economic factors and harmonisation is examined. Evidence is provided that foreign investors get most of the direct benefits of changes in accounting regulations, while local groups bear most of the direct costs and unfavourable economic consequences. But the host country benefits from a long-run strategic advantage of encouraging foreign investment. Based on this consideration, local groups and regulators may be willing to see a real change in accounting to take place.

3) Foreign influence on accounting measurement practices(chapter 5)

This chapter investigates whether there are differences in accounting measurement practices as between joint ventures with different foreign backgrounds. The study focuses on the major foreign partners in Chinese joint ventures: US, Japan, Hong Kong and UK investors. Rather than testing only individual accounting method choice separately, the study attempts to make an overall assessment of accounting practices of Chinese joint ventures. For this purpose, a point-system is designed to measure the extent to which a joint venture uses income-decreasing or conservative accounting measurement methods for each joint venture taken from a random sample. Then comparisons of the conservative measurement scale are made between different joint venture groups using univariate and multivariate analyses.

As to the specific reason for the accounting difference between joint venture groups, three competing hypotheses are examined to see whether they have the power to explain the difference: income tax considerations, firm size, and investor confidence.

In addition to a portfolio analysis of individual accounting method choices, the study also performs separate tests on individual accounting treatments for the depreciation of fixed assets, provision for loss on stocks, capitalisation of R & D, and the inventory valuation method.

4) Culture and accounting standards(chapter 6)

This chapter investigates the interaction of cultural factor and accounting standards. In particular, the study is concerned with how the accounting environment affects people's judgment about the appropriateness of accounting standards in terms of truthfulness and fairness of financial statements. The hypothesis is that people from different accounting subcultures may have different judgments as to whether a particular accounting standard can provide a true and fair view of financial position and results.

The research tests the attitudes of British and Chinese people towards Chinese joint venture accounting regulations as to whether the regulations can give true and fair view of financial position and results. The subjects of this experiment are people who are in accounting practice, research, and teaching work in China and in Britain. Subjects in Britain were selected from the Big-Six partners, accountants from other accounting firms, and financial managers from large UK companies which have joint ventures in China. Subjects in China are accountants in accounting firms, accounting teachers, and accountants in joint ventures and other companies. All together there were 53 subjects; 30 from China, and 23 from Britain. Every subject was given a copy of the questionnaire. After being given a brief description of the main accounting standards in Chinese joint venture, they were asked whether they think the standard is suitable. They were also asked as to whether a particular accounting standard should be introduced in the joint ventures. Finally, they were invited to offer an overall judgment based on their knowledge whether, taken as a whole, the regulation can provide a true and fair view of the

profit, and the value of the assets and liabilities of a joint venture. The analyses are based on the views of these subjects.

In the next chapter the Chinese economic system and local and joint venture accounting regulations will be discussed.

CHAPTER 2

CHINESE ECONOMIC SYSTEMS AND ACCOUNTING REGULATIONS FOR LOCAL FIRMS AND JOINT VENTURES

Research in international accounting has suggested that national accounting systems and standards are strongly influenced by environmental factors. Accounting practice is so deeply rooted in the environment that its features and development can only be understood in the context of the economic, political and cultural background of a country (Mueller 1967, Zeff 1971, Radebaugh 1975, Nobes 1983, Nair and Frank 1980, Gray 1988). In China, the economic system is the overwhelming influence on accounting practice, though other factors, for example, culture, also have an obvious influence on it. The development of Chinese economy and the recent economic reforms are well documented (e.g. Tsao 1987, Nolan and Dong 1990, ESCAP 1989, Riskin 1987, Lee 1987, Hamrin 1990) Although it is difficult to describe fully a changing economic structure, the following trend in economic reforms are perhaps the more important characteristics influencing Chinese accounting practices.

2.1 CHANGES IN ECONOMIC SYSTEMS

2.1.1 From isolation to open-door

The Chinese economy used to be isolated from the outside world and China developed its economy with little foreign trade and investment from the early 1960s to the late 1970s. Before 1960, the Soviet Union was the only main trade partner, and there had been very little investment from Western countries until 1979. However, since China opened its doors to the outside world in the late 1970s, a previously potential market has been expanded, and commercial channels have widened progressively and extensively.

The 'open door' symbolises China's sharp turn towards participation in the international market to speed up economic growth and technological modernisation. Both imports and exports have been expanding at a rate of 15% a year for the last decade. The wide market and abundant investment opportunities have attracted great attention from foreign investors. At present, China was the 14th country in terms of exports in the world in 1989. Up to October of 1992, the total foreign investments in China was \$US 28.2 billion from more than 60 countries and areas, and there were more than 60,000 foreign invested enterprises, i.e. foreign equity joint ventures, foreign contractual joint ventures and wholly foreign-owned enterprises (People's Daily, Overseas Edition, October 29, 1992).

It is apparent that the change from isolation to open-door economy has a great deal influence on the development of modern Chinese accounting practice. First of all, foreign trade and investment especially those from Western countries has brought Western accounting practice into China. For example, ten years ago, the terms and concepts of objective cost and profit, responsible cost and profit, standard cost and present value were first introduced into China. But now there are many corporations and enterprises which are using these concepts and techniques to modernise their management successfully (see Bromwich and Wang 1991, and Skousen and Yang 1988 for a discussion of Chinese management accounting). On the other hand, new accounting approaches are needed to deal with transactions involving foreign trade and investment. For instance, before 1979, there were very few foreign exchange transactions in state enterprises and no such accounting standard was needed. However, now foreign transactions are essential business for the joint ventures and other domestic enterprises which have some business relationships with foreign partners.

2.1.2. From a centrally planned economy to market economy

China is undergoing a gradual but steady change from a centrally planned economy to a market economy. Economic reforms are expected to be quickened by the recent re-

placement of old leaders with younger and reform-minded members in the 14th general congress of the Chinese Communist Party held in October, 1992.

The Chinese economy comes from a centrally planned economic system. A major determinant of the nature of Chinese accounting and finance is the centralisation of the economy. Within this framework, which has existed since the foundation of the People's Republic of China 40 years ago, the government has established an enormous and comprehensive system to allocate national resources, labour and products to enterprises and economic units (Hamrin 1990). Great emphasis is placed on the macro- and long-term economic benefits, and not much room is left for the market to exercise a role in the development of the economy. The government's state plans for the development of the economy lay down the scale and the category of the business in which most important enterprises are to be engaged. Enterprises which are subject to state plans receive funds and the means of production from government, and return their products and profits (now income tax instead) to the government. The enterprises themselves do not have the right to decide the nature or quantity of the products they produce, nor can they decide and choose financial arrangements or labour policy. The interests of the whole nation are guaranteed in principle by the centralised economy and state plans. Local interests and the interests of individual enterprises are subordinated to that national interest and, indeed, may on occasion be ignored or compromised as a result.

However, following the failure efficiently to allocate the nation's scarce resources, a reform of the economic structure in the last decade has seen a movement from a planned economy to a planned market or a mixed economy based upon state plans, but subject to market influences; from centralisation to decentralisation. This economy is now called a "socialist market economy" in China. Although the state plans still play an important role and government regulates via financial measures such as taxation and credit, the market has been allowed to take part in allocating resources. With decentralisation, more authority and power have been given to local governments to solve their own financial and

economic problems, and enterprises have become more independent of the state plans.

2.1.3 From single ownership to multiple ownership of enterprises

Chinese accounting systems and practices are closely connected to forms of business ownership, as these have differing financial structures. The form of ownership is in turn a major factor in determining the nature of the basic economic system. In the centralised economy, public ownership dominated the economy. There were two major types of public ownership: state and collective. However, economic reform has brought with it individual and other diversified types of ownership, including joint ventures with foreigners, stock companies, and private enterprises, which now coexist with the original two major types of public ownership. Dong(1990) discusses the reform of ownership forms and structure, which is an important part of the overall programme of reform of China's economic system.

State ownership is intended to embrace those productive resources which are the mainstay of the national economy, and ensure that the economy develops along a course leading to socialism. Almost all important and large enterprises in various industries are therefore state-owned. Collective and individual ownership are usually found in medium and small businesses in cities, towns and rural areas dealing in handicrafts, building, transport industries, and commercial and service trades. The major difference between a state and a collective enterprise is that a state enterprise is under the strict control of state plans for its operation and finance whilst a collective enterprise would enjoy more independence. For example, a state enterprise should produce products according to the state plans; its business is usually financed by the government. Large steel, oil, chemical, and commercial companies are typical state enterprises. Chinese accounting and finance practices are deeply rooted in the context of state ownership, which accounted for roughly 70% to 80% of the national economy during the period when the accounting systems were established in the 1950s. A collective enterprise may follow the same accounting

principles, but would have different requirements in reporting its financial and operating results.

Whilst the predominant types of ownership remain state and collective, the economic reforms have resulted in a rapid change in the relative importance of the different forms of ownership. In 1978, the proportion(in terms of GNP) of state and collective ownership were 80% and 20% respectively, with no individual ownership at all. However, in 1986, the proportion of state ownership had declined to 68.7%, that of collective ownership had increased to 29.2%, and that of individual and other forms of ownership was 2.1%. By the end of 1991, the relative importance of collective and private and foreign involved enterprises in terms of number and GNP further increased to more than 35%. Collective enterprises, particularly in small towns and rural areas, become a very important economic force, generating one-third of GNP in China.

Private enterprises, which used to be illegal, are now protected by the Constitution adopted by the National People's Congress in April, 1988, and are actively encouraged by the government as a supplement to state and collective ownership. The private economy has become more and more active and important in the national economy. It has taken a dominant role in the local economies of some small towns and cities. As of the end of 1988, there were 210,000 private enterprises in industry, mining, construction, transport, commerce, aquatic products, catering, and repairs. Some of them are large with more than 100 workers and over 30 million Yuan (Chinese currency, about £ 4 million) of annual gross product. It is probable that the decrease in the proportion of state ownership and the increase in the collective, individual, private and other forms of ownership will continue at least until the end of the century. Another important change is the expanding of stock companies and capital market in recent years. All these changes will in turn influence the future development of accounting and finance, which were originally oriented to the needs of public ownership and of a centralised and planned economy. In particular, with the rapid growth of the capital market, the establishment

and improvement of accounting and reporting standards for the companies listed on stock exchange requires urgent attention from Chinese legislators and accountants.

2.2 OVERVIEW OF ACCOUNTING PRACTICE IN CHINA

2.2.1 Variety of activities of accounting

Some features distinguish Chinese accounting from others. Zhou(1988) discussed some main aspects of Chinese accounting systems and practices in state enterprises. "Accounting systems" instead of accounting standards or principles are used in China to cover a much more broader functions and areas of accounting practice undertaken by Chinese accountants. The difference between "accounting standards" and "accounting systems" is that standards are set for the preparation of financial statements to narrow the choices of alternative methods while accounting systems are for the regulation of accounting practice which is defined by law and far beyond the preparation of financial statements. The "Accounting Law" is the basis of the Chinese accounting system. This was adopted on January 21, 1985 at the Ninth Session of the Standing Committee of the Sixth National People's Congress. The law deals with Chinese accounting activities covering three main areas:

(1) Dealing with business transactions and financial reporting.

This is the basic and traditional activity undertaken by accountants. The Law identifies cash, properties, debt and credit, fund, revenue, expenses, and financial result, and other transactions which need to be dealt with. Bookkeeping techniques are used to record and account for these transactions. However, fund sources and applications are the main concern of Chinese financial reporting. Key users of financial statements are governmental agencies such as public finance departments and tax departments. The content and users of financial reporting are discussed in detail in section 2.2.5.

From a technical point of view, Chinese accounting embraces many of the techniques and methodology familiar in the West for recording the various business activities and financial transactions of an economic entity. These include bookkeeping methods, the accrual concept, and the basic concept of depreciation.

(2) Supervising the behaviour of enterprise - Accounting supervision

Accounting supervision is a typical Chinese accounting concept not seen in the West. In order to control the whole economy, the Chinese government has a number of direct administrative measures which guarantee the enforcement of its policies, and which control and oversee the behaviour of enterprises. Amongst these, accounting systems play an important role in the macro-economic managerial system. The accounting law says that "Accounting unit and personnel in an organisation exercise accounting supervision over the organisation(Chinese government 1985)." Accounting personnel are entitled to supervise the financial transactions of the enterprise to ensure that they are reasonable, legal and consistent with state financial regulations issued by the Ministry of Finance and other government agencies to regulate and control the enterprise's business. Accounting personnel are obliged to stop or report any attempt to violate the regulations.

Two important regulations concern costs and funds respectively, and have been enacted to control the allocation of national resources in the whole economy with a view to macro- and long-term economic benefits. The cost regulation, for example, defines clearly what kind of expenses can be classified as product costs. The fund regulation assures the legal acquisition and use of funds from state and other sources. According to this regulation, different expenses arise from different sources of funds. Thus the expenses of production come from the production fund and payments for capital construction from the capital investment fund. There are other special funds: for example, the "overhaul fund" and the "renewal and renovation fund" relate to equipment maintenance and replacement respectively. The accounting personnel keep records of the funds' increases

and decreases (representing the acquisition and usage of funds), production expenses, and cost of products, and reject any attempt to abuse state funds and violate these regulations. But, if the supposed illegal transaction thought by accounting personnel is authorised by the chief manager who insists that the transaction is legal, the accounting personnel could complete the transaction and at the same time must report it to higher authorities, otherwise the accounting personnel are co-responsible for the violation of the regulation.

However, since in China accounting personnel are appointed by, and subordinate to, senior management it is difficult for them to supervise the activities of management. In fact, they are responsible to both senior management and to the government financial agency from which they receive professional instruction and guidance. The quality of the accounting supervision is guaranteed by the independence it enjoys from the enterprise's management. This independence is supposedly protected by the Accounting Law and by the financial and economic regulations. In practice, however, it may be prejudicial to their professional careers for accounting personnel to exercise authority over the managers of their own enterprises.

(3) Participating in decision-making.

This is another obligation of accountants. The Law says that: "The main obligation of accounting unit and personnel are:, (4) to participate in making economic plans and operation plans," . Making plans is the same thing as making decisions. However, it is not clear to what extent and how many accounting units and personnel are actually involved in the process of economic decision-making. The situation is different from enterprise to enterprise.

2.2.2 Broad objective of accounting

It is apparent that accounting activities in China are covering a wider area than that in a Western country. Accordingly, Chinese accounting serves a broader objective. The main objective of accounting is stated in the Accounting Law, Article 1: "Accounting practice is to maintain the state public financial systems and business financial systems, protect socialist public property and improve business management and increase economic benefit."

In contrast to Western accounting practice, the accounting objectives in China for state and collective companies cannot be defined in terms of true and fair financial statements because of the variety of accounting practice. It should be noted that in the leading article of the accounting law there is nothing mentioned about the provision of financial statements. The first concern of accounting is to "maintain the state public financial systems and business financial systems". This is because that companies are in a different situation in China. They are owned and financed mainly by the government which is concerned, firstly, not with the true and fair view of its financial position and the profit or loss, but the efficiency of the management and completeness and return of its investment in the company. "To maintain financial systems" means to supervise the enterprise to observe the regulation of use of the funds from the government; "To protect the public property" means to keep the government funds complete and not taken by fraud and other irregularities; and last, "To improve economic management and increase economic benefit" means to improve the efficiency of the management and increase the return on the investment. From the variety of these activities, it could be concluded that Chinese accounting practice is to facilitate macro-economic control, and to strengthen public ownership by assisting in making and enforcing the government's economic policies and plans through accounting supervision and the use of relevant accounting information. On the other hand, the internal use of financial information by management is also emphasised. Financial accounting information, together with managerial accounting

information, are used internally by the management to exert an internal control to achieve managerial objectives.

2.2.3 Legal status of accounting

The accounting law establishes the legal status of accounting practice and personnel to enable accounting to play a full role in the development of the economy. It stipulates the obligations, duties, rights, tasks, responsibilities and qualifications of accounting personnel; the requirements for the appointment of accounting personnel; the ethics of the profession; the rewards and penalties for accounting personnel. The detailed regulations and requirements of accounting practice including principles of measurement of income, valuation of assets and liabilities, and requirements of financial reporting are stipulated by the government. All of the requirements are the subject of law, statute and regulation. Enterprises and companies are legally bound to abide by them. The violation of existing accounting systems is against the law and the persons involved can be prosecuted.

The Accounting Law indicates that China has established a centralised accounting system with which the government can formulate economic policy, and with which it can control and guide the national economy. This system is called the "uniform accounting system" and typified in the state industrial enterprises which, therefore, are used here as the basis for describing the Chinese local accounting system.

2.2.4 Regulation of the accounting profession

The objectives and tasks of accounting considered above determine the nature of the regulation of the accounting profession. This is accomplished by centralised management, statutory control, and prescriptive legal requirements. In contrast to a typical Western country, where accountants exercise individual professional judgment and

maintain standards by professional self-regulation, in China the government -as designer of the uniform accounting system - alone manages and controls the whole profession. Accounting procedures, principles, standards, measurements, and the form and content of financial statements, are not established by the accounting profession itself through a process of discussion. Instead, they are promulgated by the government as regulations and statutes required to be complied with by all accounting personnel. However, during the economic reform, there are now some increasing demands and tendencies to create and develop an independent accounting profession.

According to the "Accounting Law", the national uniform accounting system is designed by the Ministry of Finance of the Central Government. Accounting decisions and policies are based on:

(i) The Accounting Law.

(ii) The requirements for the management of public finance. The Ministry of Finance, as the main user of accounting information, has a prime responsibility to discharge the government's public financial plans.

(iii) The general economic and financial policies and decisions of the government which have a direct influence on accounting affairs.

(iv) The type and nature of business in certain enterprises. Detailed regulations are established according to the particular type and nature of transaction and managerial requirement of the enterprises concerned.

The government agency in charge of accounting nation-wide is the Department of Administration of Accounting Affairs within the Ministry of Finance. The functions of the Department of Administration of Accounting Affairs in central government can be

summarised as:

- (i) to enforce the Accounting Law;
- (ii) to establish and issue accounting regulations, systems and policies;
- (iii) to supervise and direct the enforcement of the uniform accounting systems;
- (iv) whenever necessary, to replace, supplement or cancel regulations and systems which are out of date or unsuitable.

Departments of Finance in local governments, and other industrial departments (e.g. commercial and agricultural departments) in the State Council may design their own accounting systems or supplementary regulations, although these must be consistent with the "Accounting Law" and national accounting systems. In fact, these separate uniform accounting systems are similar in objectives, principles, and requirements with regard to accounting practice and personnel, but different in their detailed procedures for the processing of particular transactions, in their account titles, in the format and content of their financial statements, and in procedures and measurements for costing purposes. The different natures of transactions and systems designers account for the fact that several bookkeeping methods coexist in different industries. Whilst industrial enterprises universally use the debit-credit bookkeeping method, increase-decrease bookkeeping and receipts-payments bookkeeping, two unique bookkeeping techniques invented in China, are adopted in the state commercial firms and budgetary units (i.e. government agencies) respectively (see Tang and Hwang 1991, for a full discussion of the increase-decrease bookkeeping method).

With the enforcement of uniform accounting systems, all of the accounting items, including current and fixed assets, liabilities, funds, costs, revenues, profits, and gains and

losses, are uniformly defined, and use a uniform financial statements in order to make financial statements in one industry be comparable between enterprises and consistent between different accounting periods.

The enforcement of uniform accounting systems has been guaranteed through regular review and audit by the Ministry of Finance in central government, Departments of Finance in local governments, and by the Audit Administration. Any deviation from the uniform accounting systems without reasonable explanation must be corrected. Those accounting personnel who fail to implement the uniform accounting systems are disciplined or punished, possibly by downgrading or disqualification. In serious cases of offence against the Accounting Law, the person involved can be sued. However, there have been few prosecutions reported for violating the Accounting Law since its adoption in 1985.

2.2.5 Fund management and disclosure - nature and users of financial statements

1) Fund management

The financial management of Chinese state enterprises is characterised by fund management, since an enterprise is financed mainly by a government fund. Fund management is a key factor influencing the nature and structure of financial statements. The government needs to ensure that the fund which is invested in an enterprise is used properly and efficiently. Accounting information in the financial statements is therefore organised in such a way that the sources of funds and the utilisation of the fund are clearly disclosed. This feature is apparent in the balance sheet, which is considered the most important financial statement for the management of the funds.

2) Users of accounting information

The major users of the Chinese financial statements are not shareholders, creditors, and other social groups such as employees. The Chinese accounting system firstly identifies its particular users and their accounting information needs (for decision-making). These needs determine the nature and content of the financial statements. There are three main areas of use:

(i) Accounting information is used by the government through its individual ministers and state owned banks to make overall and detailed plans for economic development. The financial statements of individual enterprises in an industry or in an area are summarised and consolidated so that an overall picture of financial position can be drawn. The authorities are then able to assess the economic resources under their control, review the results of the existing economic policy, and make decisions for the future.

(ii) Accounting information is used by the government to supervise the movement of funds and monitor the consumption of resources by an enterprise. It is also used to supervise financial transactions in order to ensure that these are consistent with government economic policy and financial regulations.

(iii) Importance is attached to the use of the accounting information by the management of an enterprise in order to exercise internal control over resources.

It is the government who is the major user of business financial statements. According to the Accounting Law, a state enterprise is required to submit its financial statements only to higher authorities in charge of the industry to which the enterprise belongs. The authorities then consolidate all the financial statements of enterprises it controls and the consolidated financial statements finally reach the governmental agencies, i.e. the Department or Ministry of finance in central and local governments, and other related units.

(But the Law does not identify those "related units") The higher authorities are usually referred to as a holding company of the enterprise. A Chinese enterprise never publishes its financial statements so that financial information is not available to the public. This is because accounting information is classified according to related regulation. For instance, the Ministry of Finance and National Archives Bureau co-issued "Security regulation of accounting archives", in June 1, 1984. Accounting archives are referred to as accounting evidence, account books and financial statements in the Regulation. It says that a unit must "protect (accounting archives) from destroying, losing and divulging". Occasionally, accounting information could be used by other units, but must be through strict procedures and obtain the permission of chief accountant and manager of the unit. In practice, it is so difficult that it is rarely used by persons outside the unit.

Besides departments of public finance, the governmental agencies of audit administration and tax bureau are particularly mentioned in the law to be entitled to use the accounting information in order to supervise the unit. A unit should "provide (audit administration and tax bureau) with accounting evidence, accounting books and financial statements and other accounting information and other relevant information". However, a unit is not required to submit its financial statements to these agencies unless they demand it. So, they are not the regular users of financial statements.

The law does not mention banks. Banks are owned by the government and the banking systems is rather centralised. An enterprise is not free to choose banks so that a bank and enterprise usually have regular relationship. A bank usually has its representative in an enterprise who is responsible for credit to the enterprise. It is believed that accounting information is available to the bank, although the unit is not required to submit it to the bank involved.

Employees of an organisation could probably be excluded from being the users of accounting information. The law does not mention employees as entitled users. They

may not have the desire to know it. Employees of a state enterprise are not very concerned with the financial position and operational results of their own enterprise, because their main interest, i.e. wages and salaries are usually fixed and not affected by financial situation and operating results. Jobs in a state enterprise are fairly guaranteed. So it is not the tradition of Chinese employees to use financial statements to make their own decisions. It could be concluded that the key users of financial statements are departments of public finance and banks. It is also used for audit and tax purposes, although not as often as the first two users. The public and employees are, therefore, excluded from being users for the information is not available to them.

3) Nature and structure of the balance sheet

Fund management has an obvious influence on the content and structure of financial statements especially the balance sheet. The Chinese balance sheet consists of two vertical (horizontal) halves, as in its Western counterpart, but differently named (see Figure 1). The left side of the balance sheet is called "Fund Application" and the right "Fund Source". The title "Balance Sheet" is translated into Chinese which means "Fund Balance Sheet". Fund source could be from government appropriations, from the enterprise itself, from a bank loan, or from other debts. As soon as the fund is applied to the operation of an enterprise, it is transformed into various assets, such as machines, buildings, and inventories. This is the meaning of "Fund Application".

"Fund" has been defined in Chinese accounting literature as the monetary expression of property, goods, and materials used in the process of production (Wang and Qian 1987). Fund is a fundamental concept which reflects the resources of an enterprise. It should be noted that the term "fund" used in financial statements carries a different meaning from that in Western accounting. Western accounting also makes a distinction between "fund", "capital", and "liabilities". In China "fund" refers to all the resources in an enterprise, including borrowed resources. Accordingly, the term "borrowed funds" is used in place

of "liability". The term "Capital" is not used in China, because capital is interpreted in terms of private ownership and capitalism, which is misleading in a society dominated by public ownership.

Fund management is conducted in a strict regulatory framework. The principle has been adopted of using specific money or resources only for specific purposes. In order to supervise the use of the fund, and enforce the regulations, the fund source is divided into three sectors: fixed fund, current fund and specific fund. Assets are categorised into three corresponding sectors: fixed assets, current assets and specific assets. Each of them is financed by the corresponding different fund source. Fixed assets could come from direct investment by the government, or be financed by the enterprise itself. The total of the fund applications is equal to the total of fund sources (like the equation of assets equal liabilities plus capital). The subtotals of corresponding pairs of sectors should be equal. This is a distinctive feature of the Chinese balance sheet.

Although, generally speaking, a particular fund can not be used in an unspecified manner, an enterprise can occasionally and temporarily use an asset for another purpose. For example, some raw material (current asset) might be used for the repair of a fixed asset (which will be covered by a specific fund). This will result in an imbalance between the corresponding sectors. This is permissible as long as an adjustment is made in the following accounting period.

The principle of "specific fund for specific purpose" has been a highly controversial issue in the Chinese accounting literature since it was introduced from the USSR in the 1950s. It has been argued that state interests and macro-economic objectives would best be met through the planned use of funds although it seemed ridiculous to some writers that a firm could not manage its own funds flexibly. The dispute became more intense during the economic reforms, one of the purposes of which was to allow enterprises more independence and enjoy more managerial autonomy (Lee 1987). It is doubtful that the

advantage of regulation at the macro-economic level is strong enough to compensate for the lack of flexibility on the part of the enterprise. However, in the absence of an objective quantitative analysis comparing advantages and disadvantages the issue remains unresolved.

The Chinese balance sheet presents the financial position of an enterprise in such a way that the source and application of the government's investment (funds) can be clearly seen. This protects its scarce resources from arbitrary manipulation by the management of the enterprise. If the balance sheet were structured in the Western style, the relationship between the source and application of funds would disappear. Figure 1 provides a comparison of a Chinese balance sheet and a Western style balance sheet.

Unlike a Western balance sheet, a Chinese balance sheet does not show current and long-term liabilities separately. But, with the economic reforms, liquidity becomes more and more important for an enterprise. Moreover, financial sources are complicated. Thus fixed assets may not be financed by fixed funds, and current assets may not be financed by current funds. So that the balance between fixed assets and fixed funds, and between current assets and current funds no longer exist in many enterprises. In that case, a new form of balance sheet is used(Figure 2).

Figure 1: Comparison of the structure of a Chinese balance sheet and its Western style counterpart

Fund balance sheet
(Chinese Balance Sheet)

Fund application		Fund source
fixed assets	=	fixed fund
current assets	=	current fund
specific assets	=	specific fund

Western style balance sheet

Assets		Liability & Equity
current assets		current
		liabilities
fixed assets		long-term
		liabilities
		capital
		retained profit

Figure 2: Chinese Balance Sheet (new form)

Fund application	Fund source
1. fixed assets	1. fixed fund
	and
2. current assets	current fund
	2. borrowed fund
	3. settlement fund

3. specific assets	= 4. specific fund

In a Chinese financial statement a similar ratio to earnings per share, "ratio of profit to funds" is required to be provided as complementary information in the income statement. The ratio is defined as:

$$\text{Ratio of Profit to Funds} = \frac{\text{Current profit}}{\text{Fixed assets(historic costs) + Current assets (historic costs)}}$$

2.3 VALUATION OF ASSETS

2.3.1 Basic concepts

As mentioned before, Chinese accounting standards are normally called "accounting regulations" or "accounting systems" rather than "standards", because standards imply that these are for guidance, whilst regulation means mandatory compliance. So the term "standards" used here only for convenience and to be consistent with Western terminology. Whenever the term "standards" are used, it could be replaced by "regulations" as long as it refers to Chinese standards. For the same reason, the term "generally accepted accounting principles"(GAAP) is not used either.

In respect to valuation and measurement, the "Accounting Law" does not directly indicate the basic standards. In contrast to the true and fair concept, the desired fundamental quality of Chinese financial statements are truth, accuracy and completeness. The Law says that: "Accounting evidence, accounting books, accounting (financial) statements and other accounting information must be true, accurate and complete, and consistent with the stipulation of accounting systems." The terms "accurate" and "complete" are more concrete than "fair" although it is difficult to achieve an "accurate" accounting information when it involves some subjective estimate and judgment, e.g. the economic life of a fixed asset. However, the Law leaves little room for flexibility while it requires true, accurate and complete accounting information in contrast to as it could be enjoyed by Western accountants under the true and fair concepts.

By saying that financial statements must be "consistent with the stipulation of accounting systems", the Law leaves the detailed standards for valuation and measurement to the government. According to the current accounting system, only historic cost is permitted

as the base for valuation and measurement. Other concepts, such as replacement cost, current value, are not accepted for valuation and measurement purposes. When sticking to historic cost, the possibility of revaluation of assets is also ruled out.

2.3.2 Valuation of fixed assets and fixed fund

Fixed assets are defined as labour's means of production, e.g. machines, equipment, buildings and transportation facilities. Fixed assets account for a considerable part of the total governmental investment in an enterprise. The government is, therefore, particularly concerned with the sources of fixed funds and the utilisation of fixed assets. This is perhaps the reason why these items always take the leading place in a Chinese balance sheet.

Fairly traditional accounting methods are used for the valuation of fixed assets, i.e. on the basis of historic cost. Revaluation of fixed assets is not allowed. The original cost of a fixed asset can change only when it is reconstructed or renewed, and then all expenditure related to the reconstruction and renewal is added to the original cost of the fixed asset.

Depreciation

Depreciation of a fixed asset involves four factors: original cost, depreciation method, service or economic life and residual value at the end of the asset's economic life, and in this respect the concepts in Western and PRC accounting systems are similar.

The original cost of a fixed asset usually includes the price paid for it, any transportation and installation costs, and any assembly and test costs. If a fixed asset is made by the enterprise itself, then all costs incurred by the enterprise in doing so are included in the historical cost base. This treatment can give rise to inconsistencies between purchased

fixed assets and self-made fixed assets, since the price paid for a purchased fixed asset includes some element of profit, whilst self-made fixed assets do not.

Depreciation in the PRC is limited to the straight-line basis only, although there is much controversy over this depreciation method. Some accountants and economists strongly favour the introduction of accelerated depreciation in the context of economic reform, on the grounds that the present method cannot reflect the real consumption of fixed assets, and results in over-use of fixed assets, making it difficult to introduce new and advanced technology. As a minor variation, in the cases of some seasonal enterprises and vehicles for transportation (where the consumption of the asset is naturally related to units of production or working hours rather than fixed periods of time) units of production or working hours methods are adopted.

Economic life is left to the judgment of experts in the few cases where it is not stipulated by regulation. It is interesting to note that the estimate of service life is usually greater than it would be in a Western firm. Nevertheless, in order to attract foreign investors, the Chinese Tax Law relating to joint ventures stipulates the lower minimum service life of house and buildings (20 years), trains, ships, machines and other production facilities (10 years), electronic equipment and vehicles other than trains and ships (5 years).

The residual value concept is similar in the PRC to that used in the West, although again it is sometime subject to regulation. For example, the residual value of a fixed asset is stipulated to be 3% to 5% of its original cost when calculating the depreciation charge in a state enterprise.

The accounting depreciation approach used in China results in lower depreciation charges than does the Western approach. This is a deliberate component of government economic policy, without which the price of consumer goods would increase, and a level of reinvestment in fixed asset replacement which the government could not afford would

be required over a shorter period of time.

Fixed funds

Fixed assets are financed by the fixed fund. The main source of fixed funds for a state-owned enterprise is investment by the government through appropriation of public finance, and is recorded in the balance sheet as "State fixed fund". This used to be the main form of government investment, but failed to generate a satisfactory return from the investment because free fund for general use did not give sufficient incentive to the enterprises. Since 1985, however, appropriation from public finance has been replaced by a capital construction loan programme, and free funds are no longer available (except for certain important projects). Principal and interest on a loan normally have to be returned out of the income generated by the project which is financed by the loan. The loan becomes the fixed fund when the project is finished and a fixed asset is formed.

Another source of fixed fund called "Enterprise fixed fund" may be developed by an enterprise itself. The main sources are depreciation charges, and net profit after income tax.

2.3.3 Valuation of current assets

1) Definition of current assets

"Current assets" contains items similar to those in a Western balance sheet, such as cash, raw materials, work-in-process, and finished goods. However, an accounting term which might not be familiar to Western accountants and which does not appear in a Western balance sheet is "low cost and short-lived articles". These are items which otherwise would be thought of as fixed assets, but fail to reach a stipulated cost level (at present these are 200, 500, 800 Yuan RMB respectively, according to the scale of the enterprise),

2) Valuation of current assets

The historic cost method is applied to the valuation of current assets as it is to fixed assets.

With regard to inventory valuation, firms can select one of the familiar methods such as FIFO, average and weighted average. LIFO is not allowed under the historic cost basis used in China.

The FIFO method was introduced and used in the 1950s and 1960s when the economic system was dominated by centralised planning. The prices of goods were controlled, and fluctuations in prices were insignificant. Little interest was apparent in adopting LIFO as an alternative to FIFO in such circumstances.

In an atmosphere where conservatism and the prudence concept were labelled as typical products of Western ideology totally unsuitable to the Chinese situation, the method of lower of cost or market value was also not favoured by Chinese accountants. They saw as illogical a model in which any possible loss is recognised, but possible gain is not. On the other hand, as long as there was no free market for most of the resource used in production and the price was controlled by the price authority and not decided by an unpredictable market, the cost and market value of some items used to be fairly close, and there was little room for the justification of the method of lower of cost or market value in a steady price system.

Valuation and amortisation of low cost and short lived articles is another typical Chinese accounting issue. Sometimes the costs of low cost and short lived articles like raw materials are written off as soon as they are put into the production process, and sometimes at the end of their economic lives. However, actually they are often treated in a way differ-

ent either from fixed assets or current assets. This method is the called "fifty percent method", i.e. as soon as an article is put into use, half of its cost is written off, and another half will not be written off until the end of its life. It is apparent that under the first method (written off when it is put into use) the value of the assets is understated in the balance sheet, and under the second method it is overstated (written off at the end of its economic life). The "fifty percent method" is in the middle of the two methods.

In summary, a low cost and short lived article is a fixed asset in nature, but is treated differently. It is not depreciated, but an amortisation method is necessary for its valuation and the calculation of the cost of products involved. An important distinction between them is that fixed assets are financed by the fixed fund, whereas low cost and short lived articles are financed by the current fund. The latter is therefore listed under current assets in the balance sheet.

2.3.4 Valuation and disclosure of specific assets and specific funds

1) Definition and valuation of specific assets and funds

Specific business activities and items are characterised by those activities other than the normal operation which produce an enterprise's major products or services. Specific activities mainly involve replacement or overhaul of fixed assets, employee's welfare and bonus, and R & D activity.

Perhaps the most notable feature of a Chinese balance sheet is the section for the application and sources of specific funds relating to specific business activities. Specific funds are defined as funds which cannot be used for direct production. Typical specific funds are the renewal and renovation fund for the replacement and renovation of fixed assets. This fund comes mainly from the depreciation charge, but also sometimes from appropriation by the government through the public financial channel or higher authority. A

depreciation charge is accumulated in the depreciation fund as soon as it is made. A pre-determined proportion, depending on time and on industry, of the depreciation fund is transferred to the renewal and renovation fund. The rest of the depreciation fund goes to public finance, or to a higher authority, or both. Other specific funds are the overhaul fund source (for the repair of fixed assets), and the employee welfare fund source (for the welfare of employees, e.g. health and medical care expenditure).

Specific assets also have a fixed part (machines and equipment) and a current part (cash, accounts receivable and raw material). They are subject to the same standards for valuation as fixed assets and current assets.

2) Disclosure requirements for specific fund and specific assets

The specific fund system remains an important part of Chinese business finance, although its value is now in question.

Accounting is required to disclose fully the source and use of specific funds in every accounting period. Not only the summarised information involving specific assets and specific funds are shown in the balance sheet, but also a statement ("specific funds and specific appropriations statement") is required which discloses the detailed information about every specific fund and its application in the current accounting period.

The fixed part (e.g. heating facilities for a dormitory or dining room) of the specific assets is included in the fixed assets and is disclosed in the fixed sector of the balance sheet, whilst other property (e.g. some small tools and materials) are not included in current assets. They are instead combined into one item called "physical assets under specific fund". When the specific assets are used for a project which is unfinished, all the expenses so far attributed to the project are entered into an account called "specific project", and disclosed in balance sheet under the title "specific project expenditure".

When the project is finished, all the expenditure for the project becomes the original cost of fixed assets.

Different specific funds come from different sources. The renewal and renovation fund (for the replacement and renovation of fixed assets), overhaul fund (for the repair of fixed assets), and the employee welfare fund are charged to the cost of production. The research and development fund comes from current profit. The treatment of R & D expense is in contrast to some Western accounting practice. All R & D expense is capitalised until the failure of the project in a Chinese enterprise. The expense for R & D will be covered by a fund which is created from profit. Profit is not, however, the only source for an enterprise to finance its R & D activity. When a project can be proved essential to the national economy and the government is convinced of its importance and the unavailability of funds by an individual single enterprise from any other source, a government appropriation is available which is listed under the title "specific appropriations" in the balance sheet. Other specific funds are summarised and disclosed in the item "specific fund" in the balance sheet.

2.4 MEASUREMENT OF PROFIT

Income and profit are measured from the historical cost base. The matching concept is followed, and the accruals concept is adopted for the measurement of current revenue and expenses. The revenue in a typical manufacturing enterprise is recognised when certain circumstances occur:

- (i) goods have been delivered or service has been completed, and payment for it has been received;
- (ii) goods have been delivered or service has been completed, and payment for it has NOT been received, but the delivery has been confirmed and goods are accepted by the

customer;

Revenue is not recognised when:

- (i) payment is received, but goods and service have not been delivered or completed:
- (ii) goods and service have been delivered and completed but not accepted by the customers, whether payment is received or not.

Revenue in some particular enterprises, involving perhaps a large, long-term project may be recognised in each accounting period according to its percentage of completion.

The prudence concept has not been accepted policy in Chinese accounting. No reserve for doubtful debts is allowed in local enterprises.

The doubtful debts used not to be material in the context of the Chinese economic system. Most settlements between firms must be through a state bank, except for transactions of less than a certain value (50 yuan RMB, Chinese currency). As soon as a supplier delivers its goods, the delivering invoice and the contract are sent to the state bank through which its accounts with other entities are settled. The bank then passes the documents to the customer's bank. The customer's bank waits for no more than seven days for the customer's reply. As soon as the customer confirms the transaction and accepts the goods, the customer's bank transfers the money from the customer's account to the seller's account. The selling enterprise does not recognise its revenue until then. When a transaction involves individual customers, cash settlement is always required at the same time the goods or service are offered. Since April, 1989, there have been some changes in settlement approaches, and there is no guarantee that debts can be collected. In fact, bad debts are becoming a serious financial problem for many enterprises now.

When a bad debt occurs, it is written off from current profit as an extraordinary item, or treated as a current expense.

Because the principle of lower of cost and net realisable value and other conservative measures such as provisions for bad debts are not allowed, accounting policies used in a Chinese firm may lead to a higher accounting profit. Changing the accounting system will have a distribution effect on the allocation of profit between the government and enterprises. An example of it is the effect on income tax, as in China taxable income and reporting income are the same. Another example is the allocation of depreciation fund. If an enterprise retains all, or part, of the depreciation fund, then the depreciation method is important to them: the higher the current depreciation charge the less is the current profit, and less income tax to the government, and the more the enterprise can get from the depreciation fund, and vice versa.

However, the lack of conservatism, together with other measures taken by the government, has had undesirable consequences. When the government, under the current accounting system, took excessive profits or income tax from existing enterprises, the existing enterprises encountered major difficulties in maintaining their productive ability and in developing new technologies and products. It is obvious that before any profit can be made, an enterprise should be able to maintain its original net assets and productive ability, and the current system fails to do this.

All these considerations led to a recent dramatic accounting reform programme in China. In December 1992, the Chinese government announced a real change in accounting system. From July 1993, the current accounting regulations and systems will be completely replaced by a new one. The new accounting system is designed to serve a changing economic system and be consistent with international norms.

2.5 NEW ACCOUNTING ISSUES AND PROBLEMS IN THE ECONOMIC REFORMS

Over a period of 40 years, government agencies in China in charge of accounting have established comprehensive accounting systems which are generally suited to a centralised economic structure. However, with the economic reforms, enterprises are becoming increasingly independent from government. At the same time transactions are becoming more diversified and complex. A reform for the decision-making procedure has been recognised. Accountants in practice and in academia have complained that they have little opportunity to influence accounting affairs because of the exclusive decision-making procedure by government agencies. There is now a real possibility that the more diversified economic environment could lead to a more open procedure for the conduct of the profession.

Fang and Tang(1991) discussed the new frontiers of accounting reforms in China and identified the necessary interactions of the social-economic environment and development of accounting, and noted that Chinese accounting development will move towards internationalisation as long as China continues its economic reform policies.

The following accounting issues stemming from changes in economic systems and policies are facing Chinese accountants:

(i) Accounting systems where a contractor has operating responsibility. In order to invigorate both the state and collective enterprises, a special system has been introduced by the government. Under this system, the ownership remains unchanged, but the enterprises are rented to individuals (or organisations) under contract. The contractor usually mortgages its own property for the right to run the enterprise, assuming all the responsibility to fulfil the stated economic plans. This is an important programme of government and would probably be the main operating system for state and collective enterprises.

Possible accounting problems are: how to value assets at the beginning and end of the contract? how to account for operating results? what reporting and disclosure requirements are necessary? and are other accounting methods and policies such as accounting for R & D, for tax, for depreciation still suitable in the context of this system?

(ii) Accounting for inflation. Chinese accounting developed during a period of low inflation. In the last decade, however, high inflation has been seen. In 1987 and 1988, annual inflation was more than 20% . In 1989, despite a strong anti-inflation policy, the inflation rate was still 17.8% . All the accounting problems due to inflation face Chinese accountants who so far have ignored and avoided them.

(iii) Accounting for mergers and take-overs. Another significant change in the Chinese economy which has never been seen before is that of mergers and take-overs. These have become increasingly common, as a result of encouragement from special government policies. Up to March 1990, there have been more than 1,600 group companies formed by mergers or take-overs in China. The related accounting problems, such as accounting for consolidated accounts, and for investment and interest in other companies, for goodwill will be emerging.

(iv) Financial reporting for joint stock companies. More and more Chinese local enterprises have been re-organised as joint stock companies. As a result, stock markets are growing at full speed. It has been recognised that local accounting systems, measurement standards and reporting requirements for state-owned enterprises are not suitable for this new type of company.

(v) Accounting issues involving foreign investment. As mentioned above, foreign investors with different economic backgrounds are facing a number of accounting problems when they run businesses in China. The problems have been partially solved by the publication of joint ventures' accounting regulations in PRC by the Ministry of Finance,

PRC(Chinese government 1985b, 1992). However, some gaps in accounting standards still exist. With the second version of joint venture accounting regulations, more Western standards were introduced. But how well it fits joint ventures still remains to be seen.

Other accounting problems such as accounting for leases, for instalment sales, for use of land, for bankruptcy, and for foreign exchange also need to be resolved. With regard to the recognition of revenue, a considerable sum of bad debts has been created in recent years. The need to create a reserve for doubtful debts is becoming more pressing for local firms.

These problems are complicated by the fact that they are not individual and isolated, but interrelated with each other. For instance, accounting problems for mergers and take-overs need to be solved in the context of systems of contractor operating responsibility and inflation. It is hoped that the changes in current accounting regulations and practices will solve these problems and facilitate the economic reforms towards a market-based economic system.

2.6 ACCOUNTING REGULATIONS AND SYSTEMS FOR JOINT VENTURES

Separate accounting regulations are set by the Chinese government for Chinese-foreign joint ventures. The reason for separate accounting regulations is that there are many accounting differences between local accounting systems and Western or international standards. These differences are thought to be obstacles for foreign investments. However, to remove these differences and to introduce Western standards may need to change "Accounting Law". It was not possible in 1985, as the Law was just passed in January, 1985. So the Chinese government published the first version of joint venture accounting regulations in March 1985. This is an accounting regulation only applied to Chinese-foreign joint ventures, which introduces some international concepts and principles (Chinese government 1985b). In July 1992, the second version was published replacing the first one (Chinese government 1992). This is a modification of the first one. The main change in the second version is that the regulation is extended to be applied to all foreign invested enterprises, including wholly-foreign-owned firms. Another change is that the regulations allow more Western standards, e.g. provisions for bad debts, to be used in joint ventures. As the second version was just published recently, this study is based on the first version of the joint venture accounting regulations. Unless specified, the joint venture accounting regulations discussed refer only to the 1985 version.

2.6.1 Objectives of joint venture accounting

Chinese-foreign joint venture accounting regulations are different from the local regulations in terms of objectives and valuation and measurement standards. The objectives stated in the "Accounting law" which is underlying local systems does not cover joint ventures, for Article 2 of the Law excludes joint ventures from the business units required to observe the "Accounting Law". In fact, the joint venture accounting regulations significantly modified the objectives of local systems for joint ventures. In Article 7 of

the joint venture accounting system, it says: "accounting office and accounting personnel in a joint venture should carefully fulfil its responsibility, correctly account for, truly disclose and rigorously supervise each transaction of a joint venture, and protect the reasonable rights and interests of each of the partners of the joint venture."

From this statement, the basic objectives of the joint venture accounting system could be summarised as:

- 1) To correctly account for and truly disclose every transaction of the joint venture;
- 2) To protect the reasonable rights and interests of each of the partners of the joint venture;
- 3) To supervise the activities of the joint venture by supervision of transactions.

The requirements and objectives set out in Article 7 of the joint venture accounting regulations depart considerably from those set in the "Accounting Law", and may reflect the reality of joint ventures in many ways. First of all, state public finance systems and business finance systems are not mentioned, though it is thought to be the most important task and objective of Chinese local accounting. It does not make sense in the context of joint ventures, because joint ventures are independent from the state's public finance systems and its financial activities are not subject to most regulations which apply to local enterprises. For instance, the regulation relating to "specific funds for specific purposes" are not applied to joint ventures.

The objective of protection of socialist public properties is also withdrawn. The funds and assets in a local enterprise are thought to be socialist public properties. But, as soon as they are put into a joint venture, an independent economic unit, as registered capital, the resources of a joint venture as a whole are not regarded as socialist properties though

some of it may have been originally contributed to by a state enterprise.

Even for local accounting, the statement of improving management and maximising economic efficiency and the benefit of business seems too general. Consequently it does not appear in the joint venture accounting system.

The primary focus of joint venture accounting systems is on accounting for, and the disclosure of, each transaction and protection of the rights and interests of each of the partners. While to fairly or correctly account for and truly disclose each transaction are the fundamental and common accounting functions, to protect the reasonable rights and interests of each of the participants is a unique function. It may be clear that the determination of reasonable rights and interests of each of the partners should be by reference to Chinese laws and regulations. But questions are arising in respect to this statement, since no interpretation has been given. For example, in achieving this objective, should the accounting policy adopted be unbiased and not favour any one of the participants? Should accountants in a joint venture be neutral in a conflict between partners, or should they do something to protect one against another when they believe reasonable rights or interests may be damaged?

However, the influence of local accounting concepts and traditions can still be seen in the statement of objectives of joint venture accounting systems. For instance, accounting supervision has been set as one of the objectives for joint ventures. But it should be noted that much less emphasis is placed on it. No further detailed regulations are made to illustrate the importance of this concept in the joint venture system. Moreover, the authority for accountants to supervise was withdrawn from the regulation. Since accountants in joint ventures are not entitled to exercise supervision over the unit as in the "Accounting Law", it does not make sense to do so.

A rather strong influence of taxation has been seen in joint venture accounting systems. Taxable income should be the same as reporting income. The "Income Tax Law on Joint Ventures Using Chinese and Foreign Investment" is one of the legal bases on which the joint venture accounting systems are designed (Chinese government 1985b). Another base is the "The Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment". It is stipulated that individual joint ventures should design their accounting systems consistent with the relevant law and tax regulations, and report to authorities including the tax authority (Chinese government 1985b). A joint venture should report any changes in accounting policy to the tax authority. For example, the change of methods for the valuation of stocks, such as from the average method to FIFO, not only needs to be informed to the tax authority but also needs the approval of the authority. Accounting methods for fixed assets, classification of fixed assets, and depreciation methods are all pre-determined by the income tax law for joint ventures. Costing methods are also required to be reported to the tax authority if any changes have been made. The tax authority is one of the main users of financial and accounting information. Financial statements are required to be submitted to the tax authority, and the disposal of accounting documents is subject to the authorisation of the tax authority as well (Chinese government 1984). Finally, audit requirements are based on the income tax law for joint ventures.

2.6.2 Valuation of current assets

With regard to the valuation of current assets, the principle of lower of cost and net realisable value was still not permitted. Meanwhile LIFO was not allowed as well. However, Chinese joint venture accounting attempted to solve the problem by a special disclosure requirement. Article 33 of the joint venture accounting system says: "When an item of inventory in a joint venture needs to be disposed at a loss due to obsolescence, the transaction should be approved by the board of directors according to the regulation. The net loss is treated as a loss on sales after disposal. If the item needs to be, but has

not yet been disposed of at the final account date, the book value, the net realisable value and estimated loss of these items should be disclosed in the annual financial statements" (Chinese government 1985b).

It goes on to say: "If the net realisable value of each item in a joint venture is lower than its book value due to the fluctuation of market price, the book value as well as the net realisable value and estimated loss of these items should be disclosed in the annual financial statements" (Chinese government 1985b).

These two articles have significant implications in the transition from local accounting to joint venture accounting. It is reflecting the effort made to fill the gap between Chinese and western accounting practices. Article 33 means that the loss on stock and inventories cannot be charged to the current income statement until realised. This indicates that the joint venture accounting systems must still be based on historical cost. However, when a decision has been made to dispose of an item of inventory at a loss prior to the balance sheet date, the loss which is expected to be incurred should be disclosed in the financial statements for that period. Furthermore, any loss on the inventories with reference to market prices at the balance sheet date should also be disclosed in the financial statements for the period.

However, the change in joint venture accounting is subject to the following conditions: 1 the Chinese accounting tradition of never changing the book value of any items is reserved; 2 net realisable value information is provided; 3 income tax should not be affected adversely when using alternative accounting methods. Under this condition, a reserve for expected losses on stocks is allowed. But, the reserve should not be recorded through the income statement and the book value of stocks cannot be changed. Therefore, the net realisable value will be the difference between book value and the reserve for the stocks. Furthermore, the reserve should be made from the profit after income tax (Wang and Gaozuo 1989). While the losses on stocks are not regarded as realised losses, this stipu-

lation seems a compromise to bridge the gap between Chinese and western accounting practices. The reserve from profit after income tax will not affect the amount of currently generated income and income tax. On the other hand, this can provide the information about net realisable value which is recognised as being important in the context of joint ventures. These approaches are cautious steps towards the acceptance of the prudence concept.

In the second version of joint venture accounting regulation, accounting treatment for stock was modified. While the lower of cost of net realisable value is still not allowed, the unrealised losses on stock can be recognised in income statement, and the amount of losses should appear in the balance sheet as provisions for losses on stock. Thus the historical cost of stock will not change in the balance sheet (Chinese government 1992).

2.6.3 Valuation of fixed assets

In joint ventures, accounting for fixed assets in Chinese joint ventures are more flexible, for example, accelerated methods for depreciation could be used under special circumstances as long as they are approved by the tax authority. However, provisions for permanent diminution in value and revaluations of fixed assets are not accepted.

Accounting methods for intangible assets have been introduced in joint venture accounting which are similar to western practice. Intangible assets include patent rights, know how, trade marks, organisation costs(start-up costs), rights to use a site, etc. The value of intangible assets is based on the cost paid by a joint venture, which should be written off over its estimated useful life or over no less than 10 years, but this cannot be beyond the life of the joint venture. The maximum amount of annual amortisation in respect to organisation costs should also be no more than 20% of its total cost(i.e. over five years).

The accounting treatment for the use of land in joint ventures depends on two different circumstances. When the right for the use of a site by a joint venture is an investment of the Chinese partner, it is an intangible asset, and should be written off over an agreed period or 10 years. Otherwise, a joint venture will pay a certain fee for the use of a piece of land, and this fee should be charged in the current income statement.

2.6.4 Financial reporting

Chinese joint ventures use different format of balance sheet from local firms(Figure 4):

Figure 4: Form of balance sheet of joint ventures

ASSETS	LIABILITIES and CAPITAL
1 Current assets	1 Current liabilities
2 Long term investments	2 Long term liabilities
3 Fixed assets	3 Capital
4 Construction work in process	
5 Intangible and other assets	

It is obvious that the structure and content of the balance sheet of a joint venture is quite different from that of local enterprise. First of all, there is no longer a sector of specific assets and funds. This is because the principle of specific money only for specific purposes is not applied in a joint venture. Second, for the same reason, no corresponding pair of sectors are necessarily equal. For instance, current assets may not be equal to current liabilities. Third, the items in the balance sheet are arranged in a different way. The current liabilities and assets are in the leading position to indicate liquidity.

Another difference in respect to financial reporting is that a joint venture is required to prepare the "Statement of changes in financial position" which is never seen in any local enterprise. This statement shows the sources and applications of working capital where working capital is referred to as the balance of current assets and current liabilities. This requirement is due to the different financial regulation for joint ventures. Unlike local firms, the restriction on the use of funds is not applied to joint ventures, as the source and application of fund would be quite complicated. Therefore, this statement may provide useful information which is not directly available from the balance sheet and income statement. The form and structure of the three major financial statements are provided in Appendix 2-1, 2-2 and 2-3.

2.6.5 Some comments on Chinese joint venture accounting regulations and system

The Chinese joint venture accounting system is a reform in many ways of the local accounting system. It is an imaginative and effective approach to resolve the accounting problems of joint ventures. This approach to some extent has successfully closed the gap between Chinese and western accounting practices. But there is room for improvement.

First of all, the suitability of the underlying purpose of the joint venture accounting regulations is doubtful. For example, accounting supervision seems unsuitable in the context of joint ventures. Since accountants are not entitled to supervise the operations of joint ventures by law, supervision is beyond the scope and authority of accountants in a joint venture. At the same time there is no detailed regulation of accounting supervision available, so the task of supervision remains unclear and in some confusion. It seems that the requirement of supervision is a mirror of the Chinese accounting tradition for local enterprises. But this has lost its meaning in substance in the context of joint ventures. The tradition is so strong that it would have gone too far to have withdrawn it from the first version of joint venture accounting systems. However, the requirement has been withdrawn in the second version(Chinese government 1992).

The objective of protection of rights and interests of partners sounds reasonable in the particular circumstances of joint ventures. But it is definitely not the traditional task of accountants, and to protect the rights and interests of partners in joint ventures is a new challenge to modern accounting. Unfortunately, how this is to be done is also not clear in the joint venture accounting system.

The underlying concept of correctly accounting for and truly disclosing each transaction of a joint venture seems close to the western concept of a true and fair view of financial position and results, though it is subject to different interpretation.

The most significant difference in valuation and measurement is the rejection of the principle of lower of cost and net realisable value. The importance of this principle, however, has been recognised in Chinese joint venture accounting, and the problem has been approached by the introduction of some special disclosure requirements and accounting treatment. It can be expected that this principle be formally recognised in joint venture accounting and local accounting systems before long.

But the revaluation of fixed assets is not likely to be introduced in the near future in spite of a rather high rate of inflation. This is not only because it will significantly depart from the historical cost base, but also because there are a number of practical difficulties. For instance, there are not enough qualified and independent valuers to carry out such revaluations in China.

Provisions for bad debt are also a necessary change to the Chinese accounting especially when a significant amount of bad debts are expected to be incurred. Even for local enterprises bad debts are reported to be happening more and more frequently in the recent economic business environment. Eventually its need has been recognised in the new accounting system for foreign invested enterprises (i.e. the second version of joint venture accounting system), and provisions for bad debts are finally permitted (Chinese government 1992).

The joint venture accounting system is likely to have some effect on local systems. While some accounting treatments and practices are acceptable in joint ventures, but not yet in local enterprises, the use of these accounting standards may be considered an experiment. In the coming local accounting system, some joint venture accounting methods are eventually introduced into local enterprises.

In the next chapter, accounting diversity and the business decisions of users of international financial statements will be discussed. This chapter presents some empirical evidence as to how UK MNCs use financial statements of joint ventures, and how accounting differences affect their use for decision-making purpose.

CHAPTER 3

INTERNATIONAL ACCOUNTING DIVERSITY AND BUSINESS DECISIONS -HOW UK MNCs USE FINANCIAL STATEMENTS of JOINT VENTURES and HOW ACCOUNTING DIFFERENCES LIMIT THEIR USE: AN EMPIRICAL INVESTIGATION

3.1 SYNOPSIS AND INTRODUCTION

This chapter investigates whether the diversity among national accounting and disclosure practices and regulations affects the business decisions of major foreign users of financial statements. The study focuses on Chinese joint venture financial statements and the use of them by UK multinational companies in relation to the following decisions about a joint venture:

- 1) initial investment decision, i.e. the decision to create a joint venture with a local partner;
- 2) when a joint venture is created, assess the performance of the joint venture;
- 3) determine the value of existing joint ventures;
- 4) determine the interest of MNCs in existing joint ventures.

The main concern of the study is to what extent the financial statements of Chinese joint venture are associated with these decisions. Are accounting numbers useful for these

decisions? If yes, what is the problem if the accounting numbers are generated by different accounting standards? Among the 100 largest UK MNCs, 9 involve joint venture business in China. Using questionnaire and interviews, these UK MNCs are investigated. The main conclusions, subject to the reservation relating to the limited nature of the study, are that:

1) Most UK MNCs in the sample heavily rely on these financial statements to make business decisions;

2) Generally speaking, accounting differences affect UK MNC's decisions. But the effects on individual decisions are different depending on the nature of decisions involved.

3) The most serious problem of using Chinese financial statements is to determine the true and fair value of the existing joint venture. The majority of the UK companies investigated think Chinese financial statements cannot provide a true and fair value of the joint venture. Consequently, these differences affect the assessment of performance of the joint venture.

4) Accounting differences between China and the UK may be a less serious problem in terms of initial investment in a joint venture. The most important variables for investment decision-making are marketability, financial sources and legal requirements for foreign investment.

5) UK MNCs in the sample are aware of accounting diversity, and have developed coping mechanisms for accounting problems. The major approach by UK MNCs in the sample to deal with the differences in accounting standards is to establish a separate financial reporting system using UK standards to account for the investment in, to assess the performance of, and to determine the value of, a joint venture. Another way to solve the problem is, with the cooperation of the Chinese partner, to establish a joint venture accounting system which is similar to the UK system.

Although the differences between Chinese accounting and western accounting are quite significant, this study goes well beyond a discussion of the differences. The main concern of the study is whether the differences affect the decisions of foreign investors. This is an important question because thus far, accounting academics and professionals have focussed on identifying what the major differences in measurement and reporting practices and procedures are from country to country. As a result, there have been calls for increasing international coordination of measurement of reporting requirements in order to facilitate the globalisation of capital markets. But the question whether accounting differences affect business decisions of users of financial statements has not been fully discussed. So there is a lack of empirical studies which provide evidence that the difference negatively affect the globalisation of capital markets. The key question is: do differences in accounting principles actually hinder users' business decisions? If they do, what is effect of accounting diversity on user decisions, and would the benefits of harmonisation exceed the costs? Until sufficient evidence is accumulated, the efforts to harmonise accounting standards seem to be premature. This study attempts to provide empirical evidence on how a particular user of Chinese financial statements uses them for its decision, and how accounting differences affect that use.

The implication of the study is that the headquarters(HQs) of MNCs use Chinese joint ventures' financial statements in a similar manner as a shareholder uses financial statements to make decisions. This is because the HQ normally does not involve day-to-day management. Although it can be informed of other information, the generation and collection of the extra information is costly and may not be timely. If UK MNCs have difficulty in using Chinese financial reports, it would be more difficult for other foreign users if they need to use them. So harmonisation may be justified from the viewpoint of foreign investors in general.

3.2 PREVIOUS STUDIES

Thus far, academics and practising professionals have focused on identifying what the major differences in accounting practices and procedures are from country to country. As a result, accounting differences across national borders have been well documented (e.g. Mueller 1967; Nobes 1983; Gray 1980; Choi and Bavishi 1982; Choi, et al 1983; Gray, et al 1984; Nobes 1988; Tonkin 1989; Weetman and Gray 1990, 1991; Cooke and Wallace 1990).

Yet, while there is a growing appreciation of the existence of accounting differences in the context of the growing globalisation of securities markets, there is a lack of empirical evidence as to what extent users of financial statements have difficulty when using the information to make investment decisions, and to what extent international accounting differences negatively affect the process of globalisation of securities markets.

Choi (1989) argues that, logically, the design of accounting policies and regulatory prescription must be based on a clear understanding of the impact of accounting diversity on economic decisions. Therefore, there is a real need for empirical studies that identify just who the beneficiaries of such standards might be and the precise nature of those benefits. Specifically, given the trend toward globalisation of securities markets, it would be useful to ascertain whether and to what extent the decisions of investors, corporate issuers, underwriters, and market regulators are affected by international accounting diversity. That is to say, do differences in accounting measurement rules hinder their decision processes? If so, do these differences actually impact their capital market decisions in terms of the location of their market activities, the types of securities that are traded, their information processing or preparation costs, and ultimately the pricing of foreign securities and a firm's capital costs?

Based on this argument, Choi and Levich(1990) make perhaps by far the first attempt to investigate whether the diversity among national accounting and disclosure practices and regulations affect the business decisions of major users and preparers of financial statements. The research methodology adopted was to pool the opinions (through extensive interviews) of 52 knowledgeable market operators, i.e. institutional investors, corporate issuers, underwriters, market regulators, in the global capital market from Germany, Japan, Switzerland, the United Kingdom, and the United States. The results suggest that half of the respondents gave the impression that their business decisions were directly affected by the international diversity in accounting and corporate reporting practices while the other half indicated that their decisions were unaffected only because they could cope with the diversity. Though the study seems rather inconclusive it provides illuminating discussion on the potential effects of accounting diversity on institutional cross-border investors, preparers and regulators of corporate annual reports.

On the other hand, the role of accounting information in the relationship of MNC's headquarter and its subsidiaries has also been investigated. In particular, how MNC's headquarters use accounting information in the financial reports of subsidiaries for decision-making(e.g. assessment of performance of subsidiaries) is discussed. Hassel(1991) studies headquarter(HQ) reliance on accounting performance measures(APM) in a European multinational organisation. The results suggest that HQ relies more on APMs when dynamism increases. European MNCs typically manage their foreign operations as a portfolio of relatively independent national businesses(Bartlett and Ghoshal, 1989). In line with previous work on APMs in a limited country setting(Govindarajan, 1984; Brownell, 1987), the HQ relies less on APMs in monitoring domestic units that face environmental instability. However, in the case of geographically dispersed foreign subsidiaries, the HQ emphasises APMs more when dynamism increases. This is because of the greater cost and difficulty of using information-intensive alternatives to APMs for units that are geographically and culturally distant from the HQ.

Control of foreign operations has been considered to be a greater problem in a MNC than in a domestic company because of the complex environment facing most MNCs and the greater geographical and cultural distances separating the sub-units. In a multidomestic setting foreign operations are likely to be more autonomous and allow for higher national responsiveness. The fact that headquarters(HQs) typically rely on simple financial control systems, often designed for home country operations and extended to foreign subsidiaries, has generally been seen as a problem in MNCs. Therefore, concern has been expressed in the multinational accounting literature that the profit-centre concept is not applicable to MNCs' foreign operations in general and that simple APMs are not relevant measures of subsidiary managers' performance(Hawkins, 1965; AAA 1973,1974; Choi and Mueller, 1984; Abdallah and Keller,1985). The difficulties of financial control arise because of the variety of environments across which MNCs operate and from the interdependencies among units in a multinational context. However, the notion of APMs as poor surrogates of managerial performance does not necessarily apply universally to all MNCs independent of their organisation model. A multinational organisation with autonomous foreign operations seems most amenable to the profit-centre concept and the use of simple APMs.

The evaluation style studies in single-country settings have found support for the idea that the environment of the sub-unit determines the bases for HQ accounting control(Otley, 1978; Govindarajan,1984) or reliance on APMs (Brownell, 1987). When the environment becomes more uncertain or dynamic, senior managers tend to deemphasise the role of budgets. These findings can be contrasted with Egelhof's(1988) results in studying MNCs that when the degree of change inherent in foreign subsidiaries' operating environment increases, the level of financial performance control exercised by the parent over the subsidiary will increase. Hassel finds that in the case of foreign operations the HQ will increase its reliance on APMs as environments become more dynamic. The reason is that the communication between the HQ and the foreign units with great geographical and cultural distance is difficult and, therefore, information-intensive alter-

natives to APMs that are used in a domestic context are not considered feasible or effective in a multinational context. The environment is an important issue as regards the question of managerial evaluation style.

The HQ has few alternatives but to rely on APMs and, even if financial measures do not reflect all the controllable dimensions of the environments, the HQ has to rely on financial control. In a multinational organisation, the operating entities abroad are autonomous profit-centres (Bartlett and Ghoshal, 1989) and not subject to intense HQ coordination which in itself makes the use of APM's more appropriate. The pattern whereby MNCs tend to increase performance control, when instability around the foreign subsidiary increases, to better monitor subsidiary level performance, has been suggested earlier. Egelhof(1988) provides support for the idea that the level of HQ financial control increases when product, manufacturing technology, competitive climate, and supplier situation change increases, i.e., when dynamism in the subsidiaries' operating environments increases. Hassel(1991) suggests that reliance on APMs is positively related to dynamism in the operating environments of the foreign subunits, even if such a relationship is contrary to the ideal model of efficient APM-management in a single-country setting.

3.3 RESEARCH METHODOLOGY AND SURVEY DESIGN

This study extends previous research on whether and how international accounting differences affect business decisions, and how MNCs rely on the financial statements of foreign subsidiaries for business decisions in the context of relationships in UK MNCs and Chinese joint ventures. The study provides some evidence as to the question of why British multinational companies are concerned with the accounting standards used in the joint ventures and how the problem has been dealt with.

Obviously, the key question of whether accounting differences affect the decisions of users of foreign financial statements will be determined ultimately by whether or not

international accounting diversity affects prices of securities and volume and location of trading in these securities. However, it is very difficult, if not impossible, to determine quantitatively the impact of accounting differences across countries on security prices. There are so many macroeconomic and institutional factors affecting securities pricing and the location and growth of market activity (Choi and Levich 1990,p 35), so that to isolate accounting effects from other effects of relevant factors is extremely difficult. In the absence of a well-specified model of the equilibrium pricing of securities in various national markets(we do not know if all these markets are efficient, or at the same level of efficiency), it is impossible to determine whether security prices have been misled and whether international capital flows and portfolio holdings of securities have been suboptimal.

As a result, instead of providing quantitative measures of the impact of accounting differences on share prices, the study gathers information directly from users of foreign financial reports using different accounting standards. The goal of this study is to ascertain whether foreign users of financial statements experience problems when using the reports for decision-making, and asks them to describe the nature of these problems. It also assesses how users cope with accounting diversity and whether their coping mechanisms are successful. It is expected that the study will clarify the nature and scope of the problems associated with accounting diversity and thereby suggest a set of specific quantifiable relationships that will provide the basis for further research. If the participants in the sample are representative of the broader population the findings will suggest whether international accounting diversity has a significant impact on foreign investment evaluations.

The study focuses on the relationship between decision-making and accounting differences. In order to arrive at representative decisions related to accounting information, the universe of business decisions was stratified into several dimensions-investment, valuation of assets and liabilities, assessment of performance, and a particular decision

for joint ventures, i.e. allocation of profit among partners.

To be sure that the information gathered in the study had a direct bearing on the research questions, participants were sampled who may take an interest in international financial statements. In the interest of time and resources, the choice was narrowed to UK MNCs.

The participants in the sample met following criteria:

1) The UK MNCs must be among the 100 largest companies. It was decided to include only large companies, because organisation size may affect the degree of sophistication that is brought to bear on dealing with international accounting differences;

2) The UK MNCs must have a considerable interest in China. This condition is essential, otherwise problems stemming from accounting differences will not be brought to the attention of the company. This was decided by looking at the annual reports of UK companies which disclose a principal interest in China.

3) The UK MNCs must have at least one joint venture in China.

4) The joint venture operation is disclosed in the annual report.

Out of the 100 largest UK companies, 13 have disclosed their interest in China because the operations in China were deemed to principally affect the accounts of the group companies in their 1991 consolidated annual reports. Among them 9 have joint ventures in China. Another four companies have 100% owned subsidiaries in China, or their interest in China is from their Hong Kong subsidiaries. The final version of the sample included 8 companies which have joint ventures in China, and disclose the operation in their annual reports and 1 company which has a Chinese joint venture, but did not disclose it in the 1991 annual report. One company has two joint ventures in China. So the study is involved with 9 UK companies and 10 UK-China joint ventures (see Appen-

dix 3-1). There were 10 people from these companies representing the 10 joint ventures who joined the research project. These companies selected all have a significant degree of involvement in terms of direct investment in China. However, because of the limited resources available, the sample is not large. However, 8 out of 9 UK MNCs which meet the criteria were investigated. The findings should thus be fairly representative of UK MNCs which have joint ventures in China.

The focus here on Chinese joint ventures and foreign MNCs is motivated by the fact that the case of Chinese joint ventures provides an opportunity with a unique advantage to explore the association between accounting differences and decision-making. This is because:

1) Chinese financial measurement practices and disclosure requirements depart quite significantly from international norms and developed Western countries' standards. The scope and depth of the differences in objectives, conceptual frameworks, regulations and practices of accounting between China and most Western countries should be greater than the differences perceived between western countries, e.g. between UK and USA, or between UK and continental European countries, though the influx of foreign investment has pushed Chinese accounting closer to international standards. Accordingly, the differences of accounting may be significant enough to have a noticeable or observable effect on business decisions.

2) China is a geographically far away and culturally unfamiliar country for UK investors, so that it is expected that UK MNCs will rely on the joint venture's formal financial statements as the main information source for their decisions. Thus it is possible to isolate the effect of accounting differences on decisions from other factors relevant to decisions, e.g. general economic information about the industry and the country, though it is not expected that UK MNCs would make decisions based only on accounting information.

3) Foreign MNCs which have joint ventures in China are the main users of Chinese financial statements, because joint ventures are required to submit financial reports to foreign partners. The Chinese capital market is very young and foreign companies are not allowed to be listed on Chinese stock exchanges. Very few Chinese companies have begun to issue their stocks abroad, and are yet to be listed in international capital markets in Europe, America, Japan and Hong Kong. But Chinese companies are going to the world, eventually, and inevitably accounting differences will be revealed to other international capital market participants, such as investors, underwriters, bankers, and so on. The experience of UK MNCs will thus be valuable for other foreign users of Chinese reports.

However, the study emphasises the distinction between UK MNCs and other potential ordinary foreign users, because UK MNCs are not external users of the financial information. The MNC partly controls the joint venture so that other information is available. But this study shows that most British MNCs rely on the information for their decisions. In fact, some of the British MNCs use the financial statements as the main source of information for their decisions. In this sense, the study of British MNCs might be applied to other external users. The difficulty the British MNCs encounter may be the same as, or similar to, other users of Chinese financial reports.

Besides reporting purposes, the study also notices the economic consequences of international accounting differences and the cash flow effect of differences. Imagine the situation of two countries A and B. A is using income-increasing and B is using income-decreasing accounting standards. If tax is based on reported income, then companies in country A will have higher tax obligations than in country B. The question is, will investors transfer fund from A to B, in order to avoid higher tax obligation, if other things are the same, or unchanged?

The research presented here is on a case study basis for 9 British MNCs which have joint ventures in China using questionnaire and interview techniques. The interviews conducted were structured but open-ended. The questionnaire includes factual and behavioural questions relating to decision processes, information requirements, nature of accounting diversity, coping mechanisms, and capital market effects. In addition to responses of the yes/no variety, most questions were left open-ended to enable the researcher to learn more about why a particular response was given and the nature of such a response. A sample of the interview questionnaire used is included in the Appendix 3-2. Before personal interviews were conducted, the questionnaire was sent to the company in order to let them be familiarised with the purpose of the study and the questions to be discussed. The individuals surveyed were mainly senior financial managers but there were also some non-financial managers who have worked in Chinese joint ventures as executive managers. The interviews with the non-financial managers were helpful, for they provide some first-hand information about management in Chinese joint ventures which makes some situations clearer. All the respondents in the study were high enough in the management hierarchy to have decision responsibility, that is, actually make international investment and other decisions. All survey subjects were promised that their names, company characteristics and remarks would be kept confidential. An analysis was made of recordings and notes taken during and after the interviews and of information supplied by returned questionnaires. Word by word quotes are given where appropriate. They have been edited only as much as necessary to prevent the identification of interviewees of companies. No real company names are given, and a company named Company A in one section will not necessarily be the Company A of another section.

To the best of my ability, I coded answers that were most representative of the opinions expressed in the survey and actions taken by the organisations. The case report includes all critical pieces of evidence, and crucial rival hypotheses are considered. The researcher hopes the approach used in this study that combines questionnaire and structured

interview techniques will take advantage of the merits of both methods and avoid the shortcomings of each method. For example, mail questionnaires may cause misunderstandings, and in personal interviews the interviewer may exert bias on the answers. This approach was chosen because, with the non-quantitative nature of the study, it seemed an appropriate method to produce the wide-ranging and intuitive answers and personal opinions aimed for. This is why only very limited statistical tests have been applied in the study. It should also be noted that the answers of the individuals interviewed are naturally subjective and need not always be identical with the attitudes and policies of the respective company. Finally, given the research methodology chosen, the analysis was undertaken without the benefit of an explicit conceptual framework. This inevitably created problems when attempting to explain the findings. Undoubtedly the development of such a conceptual framework is an area worthy of further consideration by all involved in research in this area.

Because of these, the interpretation of the results of the study is subject to the limitations imposed by the scale of the study and the research method used. The study uses a sample of 9 companies and therefore does not claim to be a representative study of UK MNCs which do not have joint ventures in China. So that all conclusions from the survey may be sample specific. Any generalisation from it must be cautious. The term "UK MNCs" used in all the main conclusions of the study means "UK MNCs in the sample" , though the words "in the sample" or "surveyed" may be omitted for convenience.

On the other hand, since the study is only on a case study basis, a case study generalisation logic, rather than statistical generalisation logic, should apply. Yin(1989) suggests that when a "how" or "why" question is asked about a contemporary test of events, over which the investigator has little or no control, there is a tendency to view a case as a sample of one from which statistical generalisation is not possible. Even multiple-case designs involving half a dozen cases are suspect. This is not how the generalisation

from case studies works. Yin(p.43) make this point strongly: "Critics typically state that single cases offer a poor basis for generalising. However, such critics are implicitly contrasting survey research, where "sample"(if correctly selected) readily generalises to a larger universe. This analogy to samples and universes is incorrect when dealing with case studies. This is because survey research relies on statistical generalisation, whereas case studies...rely on analytical generalisation. ...As with experiments replication logic is followed. Replication may be sought by studying sets of similar and dissimilar cases. If the additional cases result in patterns of evidence which match back to theoretical patterns then support for the generalisability of the theory is strengthened. ...The main point is that sampling logic is not applicable in case research, replication logic is." Eisenhardt(1989) in management and Scapens(1990) in accounting also address this distinction between the different forms of generalisation.

3.4 SOME RESULTS

3.4.1 UK MNCs' investment in Chinese joint ventures

Table 3-1 presents the business information about the joint ventures and related UK MNCs. Chinese joint ventures with UK MNCs have a larger investment than average. Chinese-UK(MNC) joint ventures have an average total investment(including debt and equity) of \$20.84m, 80 times as large as that of the whole population(n=1037). The largest joint venture has a total investment of \$100m. This is because there are a great many other joint ventures with small partners from nearby areas, e.g. Hong Kong, Macaw and Taiwan, taking advantage of similar culture, language, and are close to China. A lot of small companies in these regions benefit from the opportunity of investing in Chinese joint ventures. These joint ventures are usually small and medium sized. But it is more difficult for small domestic UK companies to involve a great deal of investment in a geographically unfamiliar country such as China, because of lack of experience and financial resources.

UK MNCs also commit themselves to a longer period of joint venture business. The average business life of a Chinese-UK(MNC) joint venture is 27.13 years, almost double that of other joint ventures(14.76 years). The maximum business life agreement is also as long as half a century. But the average share of equity of a Chinese-UK(MNC)joint venture(31.83%) is lower than that of other joint ventures(41.43%).

Table 3-1 UK MNCs' joint ventures in China

	UK MNCs' JVs in China (n=10)			Whole population (n=1037) (see table 5-1, 5-2, chapter 5)
	average	maximum	minimum	average
Total investment	\$20.84m	\$100m	\$7m	\$0.257m
Share of equity	43.65%	51%	12.5%	41.43%
Duration of business (years)	27.13	50	15*	14.76

* two joint ventures have an undefined business duration

The results perhaps suggest that some UK MNCs in the sample are determined to enter the Chinese market with an investment scale, and business term well above the average level. But, most UK MNCs in the sample are not willing to share more than 50% of the business risk. After all, to most UK companies surveyed, even though they are internationally diversified, China is a relatively unfamiliar investment environment. It may be safer to let local partners share more business risk.

3.4.2 UK MNCs' objectives of investment in China

The first concern of the study is whether accounting differences damage the objectives of foreign investment in China. There was a fear by the Chinese government that so many differences in accounting would adversely affect foreign investors' decisions to create joint ventures in China. Consequently, joint venture accounting regulations were issued in order to encourage foreign investment. However, it is not very clear how accounting differences are related to the objectives of foreign investment and whether accounting seriously affects these objectives. So it is important to understand what these objectives are, and how accounting is related to these objectives and the factors associated with investment decisions.

Three basic objectives of investment in China often found common in the literature (e.g. Pearson 1991) were provided for consideration by the people surveyed: 1) to have access to a potentially huge market; 2) to achieve a higher level of profitability; and 3) to have access to cheap labour. They were asked to add whatever they think their other objectives are, and indicate the relative importance of these objectives by ranking every item (5 scale, 1-not applicable, 5-very important). Then the relative importance of each item was decided on the basis of their average rank. For example, 8 rank "to have access to a potentially huge market" at 5, and two rank it 4, then this item gets an average rank 4.80:

$$(5*8 + 4*2)/10 = 48/10 = 4.80.$$

This rank is between important (rank 4) and very important (rank 5).

The results are summarised in table 3-2. To have access to a potentially huge market is the most important objective (average rank 4.80). The next objective is to achieve a higher level of profitability (average rank 3.90). To have access to cheap labour is the

least important objective. Meanwhile, one person added that, to maintain market leadership, and two added that, to provide service to customers, are their primary objectives of creating joint ventures in China. But these two objectives are in fact another statement relevant to the market factor. Thus it can be concluded that market presence is the first and most important aim of British MNCs in the sample to establish joint ventures in China. It should be noted that marketability may not be necessarily the same thing as profitability. A new comer in a market may suffer from losses at the beginning, then make profits. In the case of UK MNCs in the sample, their strategy seems like that, i.e. to enter the market first and then make profits.

If to maintain or expand market share is the primary purpose of foreign investment in China, it is doubtful that accounting differences can do anything to damage this objective. So it is believed that accounting differences will not directly affect the investment decision. But, it should be noted that, as long as profitability is of concern, most people surveyed believe that accounting differences may affect the cash flow of a joint venture. This is particularly relevant to the tax obligation, as their reported profit should be the same as taxable profit according to the Chinese regulations.

Table 3-2 UK Multinationals' objectives
of investment in China
(n=10)

Objective	Score	average rank
1 to have access to a potentially huge market	48	4.80
2 to achieve a higher level of profitability	39	3.90
3 for access to cheap labour	27	2.70
4 to provide service to customers	10	
5 to maintain market leadership	5	

3.4.3 Factors relevant to investment-decisions

Are local accounting regulations among factors relevant to decisions considered by UK companies? In other words, do UK companies take accounting differences into account when making investment decisions? The answer is, they will, if UK companies think it would significantly affect their objectives, either favourably or adversely. From pilot interviews and the literature review six factors including accounting regulation are selected for discussion:

1 marketability; 2 legal requirements for foreign investment; 3 availability of financial resources; 4 labour sources; 5 tax incentives; 6 accounting regulations.

Some of these factors are similar to the objectives, e.g. marketability, labour sources. Others are means to achieve the goals, e.g. financial resources, and environmental factors, legal requirements, tax and accounting rules. Similarly, respondents were asked to indicate the main factors they took into account in the decision to create a joint venture, and to indicate the relative importance of these factors by ranking each item(5 point scale, 1-not applicable, 5-very important). Then the relative importance of each item is decided on the basis of its average rank.

The results are summarised in Table 3-3. Again, marketability got the highest rank 4.89. Next was legal requirements for foreign investment; followed by availability of financial resources, labour sources, tax incentives and accounting regulations. One respondent added that avoidance of import duties was one of the most important factors to be taken into account. The result is consistent with the objectives of MNCs that market presence or marketability is the most important objective.

Table 3-3 Factors relevant to decision-making
of UK MNCs' investment in China
(n=10)

Factors	Score	average rank
1 marketability	48	4.80
2 legal requirements for foreign investment	42	4.20
3 availability of financial source	39	3.90
4 labour source	38	3.80
5 tax incentives	37	3.70
6 accounting regulations	32	3.20
7 avoidance of import duties	5	
8 reliability of local partners	5	

The conclusion is that, although the accounting factor is not the priority for consideration, accounting is not irrelevant to investment decisions. This is because the tax obligation will vary if different accounting methods are used, and accounting would thus affect the joint venture's cash flow and the assessment of performance. As one interviewee put it, "When a decision is made, we consider accounting differences, though do not take it seriously."

3.4.4 How UK companies use original financial statements of joint ventures

When a decision is made to create a joint venture, other decisions which are related to joint ventures are:

- (1) assessment of the joint venture's performance;
- (2) determination of the joint venture's value;
- (3) determination of the value of the UK company's share of equity in joint ventures;
- (4) allocation of profit of the joint venture between partners.

Now the study goes on to investigate how accounting information is related to these decisions, and how UK HQs rely on the original financial statements of joint ventures to make such decisions. This information can be acquired by the frequency of the use of these statements by UK companies. If the companies involved are frequently using financial reports, this indicates that the companies rely heavily on them. On the other hand, if the HQs hardly or never use these reports, this suggests the financial statements are not useful.

The study focuses on the principal financial statements prepared by joint ventures, i.e. income statement, balance sheet and statement of changes in financial position. These are the formal financial reports which Chinese joint ventures are required to submit to both Chinese and foreign partners, and the Chinese authorities as well. The financial statements must be prepared according to Chinese joint venture accounting regulations.

Table 3-4 shows the responses to the question as to how often the company uses the financial statements prepared by the joint venture in China. No company said they never use them. 8 companies said that they very often or often use the financial statements, but 2 said they hardly use them at all.

The results suggest that most UK HQs rely to a significant extent on original accounting information in the financial statements of joint ventures. This is consistent with previous studies that HQs of MNCs rely on more accounting information when dynamism increases. In order to further understand how this financial information is useful for business decisions, the use of these reports are related to defined purposes, and respondents were asked to indicate whether they use these reports to make a specific decision. The results are summarised in Table 3-5.

Table 3-4

How often the headquarters of UK MNCs use
joint venture's financial statements
(n=10)

	Very often	Often	Hardly	Never
Frequency	4	4	2	0

Table 3-5

Purposes of UK headquarters to use
joint venture's financial statements (n=10)

Purposes	Yes	No
(1) For the assessment of the performance of the joint venture	6	4
(2) For the determination of the value of the joint venture	4	6
(3) For the determination of the value of your share of equity of the joint venture	4	6
(4) For the allocation of profit of the joint venture between partners	8	2

UK companies appear divided as to the necessity or utility of the financial reports in terms of assessment of performance. 6 respondents said they use the reports for assessment of performance of the joint ventures involved, but 4 said "no". Most UK HQs do not use the reports for the purpose of determination of the value of the joint venture and its share of equity in the joint venture. However, the reports are particularly useful in allocating profit between partners. 8 companies said they used the reports for this purpose. Only two said that they did not.

Further, the usefulness of individual financial statements was discussed. Respondents were asked to indicate the relative importance of the principal financial statements of the joint ventures in relation to the defined business decisions. Respondents were asked to rank each financial statement from 1, not applicable, to 5, very important for the related purpose. Then the relative importance of each statement was determined on the basis of its average rank. The higher the rank, the more useful the statement is. Table 3-6 shows the results of the investigation.

Table 3-6 Relative importance of individual financial statements (n=9)

	Average rank			
	assessment of performance	Determination of value	Allocation of profit	Overall average
i)balance sheet	4	3.89	4.22	4.04
ii)income statement	4.33	3.89	4.56	4.26
iii)statement of changes in financial position	4.11	3.44	3.78	3.78
Average rank	4.15	3.74	4.19	

Notes:

a: For the purpose of assessment of performance(column 1)

	Score	Average
i)balance sheet	36	36/9=4
ii)income statement	39	39/9=4.33
iii)statement of changes in financial position	37	37/9=4.11

Average rank: $(4 + 4.33 + 4.11)/3 = 4.15$

b: For the purpose of determination of true value(column 2)

	Score	Average
i)balance sheet	35	3.89
ii)income statement	35	3.89
iii)statement of changes in financial position	31	3.44

Average rank: $(3.89 + 3.89 + 3.44)/3 = 3.74$

c: For the purpose of allocation of the profit of the joint venture between partners(column 3)

	Score	Average
i)balance sheet	38	4.22
ii)income statement	41	4.56
iii)statement of changes in financial position	34	3.78

Average rank: $(4.22 + 4.56 + 3.78)/3 = 12.56/3 = 4.19$

d: Overall average rank(last column)

	average rank
i)balance sheet (line 1)	$(36 + 35 + 38)/27 = 109/27 = 4.04$ or $(4 + 3.89 + 4.22)/3 = 4.04$
ii)income statement (line 2)	$(39 + 35 + 41)/27 = 115/27 = 4.26$
iii)statement of changes in financial position (line 3)	$(37 + 31 + 34)/27 = 102/27 = 3.78$

Column 1 of table 3-6 indicates the relative importance of each financial statement in terms of assessment of the joint venture's performance. The income statement is perceived by UK HQs to be the most important report in the decision as to whether a joint venture is going well or not. The balance sheet is the least important statement among the three principal financial reports for assessment of performance. Column 2 suggests that for the determination of the value of the joint venture, the balance sheet and income statement are of the same importance, and the statement of changes in financial position is the least useful source of financial information. Column 3 shows that the income statement is the most important source of information for the allocation of profit, while the statement of changes in financial position is not very useful. The last column is the overall average rank of each report in relation to all the main purposes defined. The income statement is regarded by UK companies as the most important and useful financial report for these business decisions (average rank 4.26), while the statement of changes in financial position gets the lowest rank of 3.78.

The first line of the table gives the information about the relative utility of the balance sheet in relation to the main business decisions. The balance sheet is more useful in allocating profit than in assessing performance and in determining value. This is rather strange, because information in the balance sheet appears more related to the value of assets and liabilities than earnings.

According to the second line, the income statement is also ranked highly for the purpose of allocation of profit. In fact, the Table shows that the income statement gets the highest rank(4.56) for the purpose of allocation of profit. The next highest rank is also for the income statement in assessment of performance. The third highest rank is for the balance sheet in allocation of profit. However, the income statement is also relatively less important in the determination of value, compared with its rules for other decision-making. Line 3 suggests that the statement of change of financial position may be more useful in

assessment of performance than determination of value of the enterprise (lowest rank in the table is 3.44).

The final line of the table indicates that, taking all the three reports as a whole, they are less useful in the determination of value than in the allocation of profit and assessment of performance. This is consistent with the fact that UK companies use these reports more to assess performance and allocate profit than to determine the value of the joint venture and its share of equity in the joint venture.

Though the study only involved 9 UK companies and 10 joint ventures (respondents), many results cross-check, and are consistent with each other. For example, the result that the main reports are relatively less important in determining the value of a joint venture is consistent with the result (table 3-5) that most UK companies do not use the reports to determine the value and express the opinion that these financial statements cannot provide a true and fair view of the value of a joint venture.

It can be concluded that UK HQs rely to a significant extent on accounting information in the financial statements, because most of them frequently use the financial reports.

However, these reports are not equally important in terms of the main decisions involved in a joint venture. UK companies focus on the assessment of performance of joint ventures and allocation of profit when using the principal financial statements. These statements are not perceived to be very useful particularly for the purpose of determination of the true value of a joint venture. Therefore, most UK companies do not use them for this purpose.

Individual financial statements are appreciated differently in terms of specific decision purposes. Generally speaking, the income statement is the most important and useful report, and the statement of changes in financial position is the least. However, for the

purpose of assessing performance, the statement of changes in financial position appears more important than the balance sheet.

3.4.5 What are the problems with the financial reports of joint ventures

It should be noted that there are still a few UK HQs which hardly use the financial statements of joint ventures to make decisions. Even those which often or very often use the statements report that these financial statements are not very useful for the determination of the value of the joint venture.

Thus the study further examines the main problems of the financial statements in relation to business decision. If the financial reports can be useful for decision-making, they should provide a true and fair view of the financial position and results. Thus two questions are discussed in particular:

- 1) Can Chinese joint venture accounting regulations for the measurement of profit provide a true and fair profit for the joint venture? and
- 2) Can Chinese joint venture accounting regulations for the valuation of assets and liabilities provide a true and fair value of the joint venture?

The two questions are somewhat related, but their purposes are distinguishable. Measurement and valuation are the fundamental objectives of accounting. If accounting information is of any use, it should be correctly reflecting economic reality, i.e. to give a true and fair view of financial position and result of an enterprise. If financial reporting fails to do this, any decision based on these reports will be bound to be wrong.

Unfortunately, it is difficult to decide whether a financial statement is true and fair or not. In practice, particularly in the UK and USA, it is left to professional judgment. So it is

believed in this study that the opinions from UK MNCs may be an indicator of the true-ness and fairness of the financial statements of Chinese joint ventures. The answer of each respondent is given 1 to 5 point, i.e. the answer strongly disagree is given 1 point, and disagree is given 2 points, and so on, and strongly agree is given 5 points. The average score of all respondents is an indicator of the degree of satisfaction of the respondents towards the joint venture book profit and value. The average score is then compared with 4, an agree point, and 5, strongly agree point. A paired t test is used. If the average score is significantly less than these two figures, that means the respondents hold negative view on joint venture book value and profit. The results are summarised in Table 3-7.

Table 3-7 Views of UK MNCs on book profit and value of joint ventures (n=10)

Question 1: "Can Chinese joint venture accounting regulations for valuation of assets and liabilities provide a true and fair value of the joint venture?"

Question 2: "Can Chinese joint venture accounting regulations for measurement of profit provide a true and fair profit for the joint venture?"

	strongly disagree	disagree	neutral/no opinion	agree	strongly agree	
answers to Question 1	0	6	3	1	0	
answers to Question 2	0	4	3	3	0	
paired t test:						
	mean score	standard deviation		t	degree of freedom	p
view on value	2.5	0.707	2.5<5	11.18	9	0.000
view on value	2.5	0.707	2.5<4	6.71	9	0.000
view on profit	2.9	0.876	2.9<5	7.58	9	0.000
view on profit	2.9	0.876	2.9<4	3.97	9	0.002

The answers to the two questions indicate serious problems about joint venture financial reporting. Only one of these respondents thinks that these reports can provide a true and fair financial view about the value of joint ventures(one agrees, 6 disagree and 3 neutral to the statement). In terms of profit measurement, things are a little bit better. Two persons who think the financial reports cannot provide a true and fair value, however, think they can provide a true and fair profit. The results of paired t tests in table 3-7 suggest that the respondents tend to hold a negative view on joint venture profit and value which significantly departs from a positive view, i.e. agree or strongly agree with the joint venture book profit and value. This result is consistent with the results presented in the previous section that most UK companies do not use these reports to determine the value, and that the main reports are relatively less important in determining the value of joint venture from the point of view of UK respondents.

Most people who do not believe that a true and fair financial view is provided from Chinese regulation think that the rule is likely to provide overstated profit and value. For example, in the words of one respondent:

"The Chinese accounting rules as described here distort and tend to increase profit by our standards. These rules also increase value of inventories and receivables by our standards. "

When asked why they give this negative answer, some respondents list the following unsatisfactory accounting treatments which distort the value and profit of joint ventures:

"Chinese accounting treats workers fund (i.e. workers' welfare fund) as a reserve. But this fund is actually a expense rather than a reserve."(A)

"Chinese accounting regulations for fixed assets cause serious problems and set unrealistic rules for the useful life of assets. For example, the old assets contributed to the joint venture are depreciated at the same rate as the new joint venture assets. Intangible assets should be allowed to be written off immediately."(A)

"We consider that unrealised exchange gains/losses, provisions for doubtful debts, the concept of lower of cost and net realisable value are crucial to provide a true and fair view on the financial statements."(B)

But one person thought the value would be understated:

"I think the value is not true and fair, because historic cost understates fixed assets."(C)

People who do not want to give a definite answer to the question seem to understand the different situation between China and UK. To quote one respondent:

"We use western management accounting to view the joint venture. Differences between our view and the Chinese are somewhat revealing. Whilst we believe our view is on the whole 'true and fair', I would not claim to be right every time."(A)

One person stands neutral to the question, but expresses the following opinion:

"With the exception of foreign currency transactions, the measurement of profit (in the new regulation) is reasonable."

The same person makes a comment on the valuation issue:

"I don't know whether the value is true and fair or not. But changes in Chinese accounting regulations in hand will improve the situation."

It is interesting to note that there are some people who think the regulations can not provide a true and fair value, but at the same time think it can provide a true and fair profit of the joint venture. They tend to think it is necessary to see the different effects of accounting treatments on profit and value of the joint venture. To quote one respondent:

"Differences in accounting treatment for stock valuations, bad debts provisions, etc., should not materially affect reported profits. So profit should not be far away from true and fair. But historic cost understates fixed assets, which damages the true and fair view of the value of the joint venture."

Another person also viewed the measurement of profit and valuation of assets differently. He agreed with true and fair profit, but stands neutral about true and fair value. He supplies the following opinion which means disclosure can remedy the measurement problem:

"Profit measurement and reports subject to any major deviation from international standards are disclosed in the footnotes of Chinese joint venture financial reports, so that the profit will not be misleading."

This person's view of valuation was:

"When the asset is not marketable in the current Chinese context, different accounting methods in valuation of assets do not make any difference. When the market becomes mature, it does."

The only person who think the reported value and profit is true provides following reason:

"To the extent that profit does not reflect potential stock obsolescence or bad debts reported profit can be overstated. The impact can be assessed from the published accounts-stocks obsolete from the notes, fund transmission from specific reserve movement. Our joint venture has simple product portfolio and a simple customer-the foreign investor- so bad debt and stock obsolescence is not a serious problem. "

It is strange that, though few think Chinese financial statements can provide a true and fair view, most UK HQs still extensively use them. This perhaps reflects the fact that creating an additional information source is not easy, given the geographical and cultural diversity between HQs and its subsidiaries and joint ventures. These information sources may be costly or not timely, or may not be better than the original one. Even if the additional information is available, they can supplement the original accounting information, but cannot replace them, and eliminate the reliance of HQs on the original financial statements.

However, if it is true that Chinese financial statements are not true and fair, and at the same time that UK HQs have to rely on this information, this could be a serious problem. Based on the problematic information, UK companies may make biased judgments about the performance of the joint venture, and the value of the joint venture. Also, this may cause an unfair allocation of profit between the joint venture's partners.

These results provide evidence that diversity in measurement and disclosure affect business decisions of users of financial statements. The significance of the impact of diversity on various decisions is different. Some decisions may be seriously affected, but others

may be slightly affected, according to the nature of the decision, and how deeply and exclusively it depends on the information.

UK HQs are only one of the users of Chinese financial statements. The study does not attempt to extend the results to other foreign users. The difference between UK companies which have joint ventures in China and other users is obvious. UK companies have the advantage which other users do not have, so they are in a better position to understand accounting differences. But, given the complexity of the situation, it is doubtful that other naive users are able to adjust for accounting differences and cope with the problem.

This evidence may support the effort of harmonisation of accounting standards across countries for the benefit of foreign users. The next section discusses what the inappropriate accounting treatments are, which lead most UK companies to think that the financial reports are not true and fair. The following section discusses changes of accounting regulations, i.e. harmonisation, which UK companies would like to see.

3.4.6 Individual accounting treatments

What is wrong with the accounting regulations which lead to the perception of untrue and unfair financial statements? The study focuses on the main differences which may cause problems:

- 1) accounting treatment for stock, i.e. no concept of lower of cost and net realisable value for stock in China;
- 2) accounting treatment for fixed assets, i.e. no re-valuation of fixed assets in China;

3) accounting treatment for foreign exchanges, i.e. different treatment of gains and losses;

4) accounting treatment for intangible assets.

Assessment of the significance of accounting differences:

The study first highlighted some significant accounting differences used in joint ventures in valuing assets and liabilities between China and the UK, and asked the people surveyed to rank the relative importance of these different accounting methods (5 scales, 1 = not important, 5 very important). The relative importance of each method is judged on its total score. For example, one ranks "no concept of lower of cost or net realisable value for stock in China" 5, five rank it 4, three rank it 3, and one rank it 2. So the total score of it is:

$$1*5 + 5*4 + 3*3 + 1*2 = 36$$

Besides the major differences, the people surveyed were also invited to add any different treatment they think important. Table 3-8 summaries the results.

Table 3-8 Relative significance of accounting differences
between Chinese and UK accounting (n=10)

	score
i)no concept of lower of cost or net realisable value for stock in China	36
ii)no re-valuation of fixed assets in China	30
iii)no provisions for possible losses(e.g bad debts)	36
iv)different treatment of foreign currency transactions	37
Other(respondent additions)	
v) capitalisation of start up cost including interest.	5

It was expected that no concept of lower of cost or net realisable value in China would be the most serious problem. However, it turns out to be that the respondents are marginally more uncomfortable with the different treatment of foreign currency transactions. The main difference is that Chinese regulations allow a joint venture to recognise only realised gains and losses, while the UK standard permits a recognition of unrealised losses in the current profit and loss account. Most joint ventures are involved heavily in foreign currency transactions. The accounting treatment of foreign currencies may be more important than that of stock. The respondents pay equal attention to the problem of no concept of lower of cost and net realisable value and no provisions for possible losses (e.g. bad debts) in China. No re-valuation of fixed assets is the least important difference among those listed.

The study now continues with a discussion of detailed accounting treatments. It lists each accounting treatment, and after giving a brief description, the UK companies surveyed were asked to answer the question of whether the accounting regulations are appropriate for their joint ventures. The following is a brief description of individual accounting treatments in joint venture accounting regulations (1985 version):

Accounting for stocks

Generally speaking, historical cost, using FIFO or the weighted average method for the determination of cost of sales, and the disclosure of net realisable value are the main features of the accounting regulations for stocks in Chinese joint venture accounting.

Accounting for fixed assets

Accounting regulations for fixed assets are featured normally by historical cost, non-revaluation, and straight-line depreciation in Chinese joint ventures.

Accounting for goodwill

The accounting regulation for purchased goodwill requires the use of historical cost which should be written off during its useful life, or 10 years, but not longer than the duration of the joint venture(it cannot be written off immediately against equity).

Accounting for patents and Know-how

Purchased patents and know-how are normally accounted for by historical cost which may be written off over its useful life or 10 years, but not longer than the life of the joint venture(Regulation).

Accounting for organisation expenses(start-up cost)

Organisation expenses(start-up costs) are normally accounted for by historical cost which should be written off in a period not less than 5 years.

Accounting for use of land

Accounting regulation for the right to use a site for the joint venture is that the right is treated as an intangible asset.

Accounting for extraordinary items

In the regulation, extraordinary items are defined as gains and losses on investment in other organisations, gains and losses on disposal of fixed assets, donation expenditures and receipts, bad debts and extraordinary damage. Prior year adjustments are excluded.

Accounting for foreign currency transactions

The principle in the accounting regulations for foreign currency transactions is that all foreign exchange gains and losses cannot be recognised in the current income statement until realisation.

Table 3-9 presents the respondents' answers to the questions.

Table 3-9 Appropriateness of individual
 accounting treatments of joint ventures
 (n=10)

Accounting for	It is appropriate for your joint venture?				
	strongly disagree	disagree	neutral/no opinion	agree	strongly agree
stock	0	1	2	6	0
fixed assets	0	2	1	7	0
goodwill	0	1	6	3	0
patents	0	1	7	2	0
start cost	1	3	2	4	0
use of land	0	3	2	5	0
extra. items	0	6	2	2	0
foreign currency	1	7	0	2	0

Respondents' views are summarised as follows:

Accounting for stocks: Lower of cost and net realisable value is so overwhelmingly recognised in Western countries that it was expected that the Chinese regulation which does not allow the principle would cause the most serious problem. Surprisingly, most of the UK MNCs turn out to be satisfied with the accounting treatment for stocks(6 agree, 2 neutral and only one disagreed with the statement).

Accounting for fixed assets: Most British companies are satisfied with the accounting treatment for fixed assets. The Chinese accounting treatment for fixed assets is similar to UK standards, except for re-valuation, since joint ventures are allowed to use accelerated depreciation methods.

Accounting for goodwill: Most respondents have no opinion about whether the accounting treatment for goodwill is appropriate or not(6 no opinion). This is because very few joint ventures have goodwill. According to another survey(see chapter 5), among 86 joint ventures surveyed, only one reports an intangible asset of goodwill. Thus, the companies which have no goodwill are not in a position to comment on the accounting regulation for goodwill.

Accounting for patents and know-how: As with goodwill, most respondents are not sure about the appropriateness of the accounting treatment for purchased patents and know-how(7 no opinion).

Accounting for organisation expenses and use of land: Organisation expenses(i.e. start-up costs) are the main intangible assets of a joint venture(see chapter 5). Accounting treatment for it is quite simple. Organisation expenses must be capitalised and should be written off in a period not less than 5 years. The results are inconclusive with 4 satis-

fied(i.e.agree), 3 unsatisfied and 1 very unsatisfied. UK companies appear also divided as to the appropriateness of the accounting treatment for the use of land.

Accounting for extraordinary items: Most respondents are unhappy with this treatment. 6 are unsatisfied and only 2 are satisfied.

Accounting for foreign currency transactions: This seems the most unsatisfactory method. 8 companies disagree or strongly disagree that the treatments are appropriate for their joint ventures. When asked to comment on it, one respondent said: "The treatments are too conservative for gains, not conservative enough for losses."

In sum, accounting treatments for foreign currency and extraordinary items are perceived by UK MNCs to be the most problematic methods. Accounting for start up costs and use of land may also cause problems. Accounting for stocks and fixed assets seem appropriate to most joint ventures.

3.4.7 How UK MNCs deal with the accounting problem

Since most UK companies are aware that Chinese joint venture accounting cannot provide a true and fair view of the financial position and results, but at the same time, they still use them, they must be able to cope with the accounting differences in order to avoid making wrong decisions based on the original information. It is interesting to find out how UK MNCs deal with these problems. Basically, there are two approaches: UK companies establish separate financial reporting systems, or help the joint venture to design an accounting system which uses as many as possible UK standards. The results are summarised in Table 3-10, 3-11.

Table 3-10

UK MNCs' separate financial reporting systems

(n=10)

Question: Do you have your own financial reporting system for the joint venture, in which some different accounting methods and policies may be used from that used by the joint venture?

Yes 6

No 4

Table 3-11

The purposes of establishing UK MNCs' own and separate financial reporting system

Purposes

answer

Yes

No

(1) For assessment of joint

venture's performance

6

0

(2) For determination of joint

venture's value

2

3

(3) For determination of value

of equity share

3

3

(4) For allocation of profit

between partners

2

3

Most UK MNCs solve the problem by establishing a separate financial reporting system using British standards(table 3-10). The primary purpose of the system is to assess the performance of the joint venture. There is a consensus among all the companies which have their own reporting system that the system is for the assessment of the joint venture's performance. But they are evenly divided as to the necessity and utility of the separate reports for the determination of value and allocation of profit of the joint ventures(Table 3-11).

Rather than creating additional information sources or restating the original financial statements, other companies are using the alternative approach. They have no intention to establish a separate reporting system, but try to solve the problem by designing an accounting system for the joint venture which uses as many as possible UK standards with the consensus of Chinese partners. For example, the senior accountant in Company A is actually involved in the designing of the accounting system for the joint venture. Under the framework of the joint venture accounting regulation, many UK standards are introduced to the system. Thus UK companies are familiarised with the joint venture system and in this way the system would not raise serious problems for decision-making. These companies are more adept at dealing with accounting diversity in the original accounting data. This can be more effective, and more timely in coping with the problem than to restate the financial statements using UK standards every time.

The second approach may be preferable for it is less costly than establishing additional financial information sources, or restating original reports. Once an accounting system is created which can satisfy both partners by mutual effort and cooperation, this can eliminate the costs of restating original accounting data or of additional information sources. Thus the problem of accounting diversity can be solved within the framework of local regulations. But this depends on how flexible the regulations are, and how seriously a joint venture's business transactions and situation is affected by accounting diversity.

But whenever possible, UK companies should try to take the advantage of the flexibility of local accounting regulations, and, with the cooperation of Chinese partners, to design a suitable accounting system. This can considerably reduce the cost of restatement or of additional information sources.

The companies which have their own financial statements were further asked what different accounting methods are used in these reports. Company A lists the following accounting data and methods:

- 1) accounting year dates;
- 2) stock valuation;
- 3) taxation calculation;
- 4) different treatment of financial cost.

Another company(B) mentions:

Using the replacement cost of fixed assets which determines depreciation rates;

Company C mentions:

Different treatment of three funds: depreciation fund, overhaul fund and workers welfare fund, i.e. treat them as expenses rather than reserves.

Company D:

- 1) Inventories and receivables are valued by UK accounting standards;
- 2) Extraordinary profits and losses are valued by UK accounting standards;
- 3) Foreign currency transactions are valued by UK accounting standards.

Company E:

- 1) Different classification of assets and expenditure;
- 2) Different treatment of foreign exchange gains and losses.

Company F:

- 1) Introduce provision for tax;
- 2) Adjust timing for dividends.

It should be noted that most UK companies work closely with their Chinese partners on accounting policy and preparation of financial statements. For example, no UK company said it alone prepares the financial statements of the joint venture. Only one company said that the detailed accounting policies were decided by the UK partner. In the majority of joint ventures, British and Chinese partners are jointly involved in the preparation of financial statements and accounting affairs. Similarly, in these joint ventures, accounting policies are decided by both partners (Table 3-12). And few UK companies report disputes over accounting issues with Chinese partners (Table 3-13).

If yes, the company was asked to describe which accounting issues the dispute involved. The only company which has had a dispute over accounting issues describes the issue involving valuation of further investment. Additional investment should be valued on the basis of international accounting norms. In the words of the respondent:

"Possibility of further investment was considered and discussed with Chinese partners. We think that the invested assets should be accounted for on the basis of internationally recognised standards rather than the current Chinese standards."

Table 3-12 Decision power of accounting policies
in joint ventures (n=9)

	by Chinese partner	by UK partner	jointly
How are accounting policies decided in joint ventures?	3	1	5
How are financial statements prepared in joint ventures?	3	0	6

Table 3-13 Agreement and disputes over accounting issues
between UK MNCs and Chinese partners (n=9)

	Yes	No
Was there any detailed agreement as regards accounting issues between you and the Chinese partner?	4	5
Have you had any disputes over accounting issues with your Chinese partner?	1	8

3.4.8 Changes in accounting regulations considered necessary

The study now goes on to discuss how to solve accounting differences and the changes in accounting regulations which the UK companies think necessary. Table 3-14 and Table 3-15 summarise the answers.

The following is a discussion of these answers:

(1) Generally speaking, are there significant differences between Chinese local accounting systems and U.K. systems, both in disclosure and valuation? Most respondents agree that significant differences exist between Chinese and British accounting. However, despite the fact that there are so many fundamental and conceptual differences in objectives and principles between the two, there are still some people who do not believe that Chinese and British accounting are significantly different. These results are rather surprising, though only minority respondents hold this opinion(table 3-14).

(2) Would the accounting differences affect decisions to create a joint venture in a foreign country? Most respondents do not agree, and only one thinks it would(table 3-14).

Table 3-14 Views on accounting differences and suggestions of UK MNCs (n=10)

	strongly disagree	disagree	neutral/no opinion	agree	strongly agree
Major differences exist?	0	3	0	7	0
Differences affect decisions?	1	5	2	2	0
Differences should be removed?	0	2	2	3	3
Problems were solved by current regulation?	0	4	6	0	0
Separate regulation is good?	0	2	3	5	0
Allow concept of lower of cost & value?	0	0	3	6	1
Allow revaluation?	0	0	4	6	0

Table 3-15 Reasons for the introduction of concept of lower of cost and net realisable value (n=10)

	Yes	No
(1) It is a common accounting practice in the West.	6	0
(2) It gives a truer and fairer view of value of the business.	7	0
(3) Book value is too far away from the economic reality of stock in the joint venture.	4	2

Those who do not believe accounting differences will affect initial investment decisions tend to emphasise the real economic and financial meaning of accounting numbers. One of them makes the following comment on the issue:

"When you make such decisions, you need to consider the effects of accounting differences on published accounts, but financial implications are more important."

Another one who stands neutral to the question assesses the accounting differences in relation to the objectives of foreign and local partners. The importance of accounting differences should be viewed in the context of achievement of the basic goals of both partners. In his words:

"The Chinese partner's objectives (e.g. achievement of plan volume; foreign exchange earnings, etc.) are conveyed in Chinese accounting rules, ours (e.g. market share, profitability) are in western terms and if the above accounting differences reinforce or go against convergence of objectives, they are important. But so far, no problem."

The only person who thinks the differences can influence decisions believes that accounting numbers are the input of variables of business decision models. To quote the words:

"Accounting difference between China and UK will affect our decision in the sense of that, it has an impact on the viability study of the joint venture."

(3) Should these accounting differences be removed in order to establish a better business cooperation between joint venture partners? Most people investigated think it should, but 2 persons disagree and 2 stand neutral. This number should be regarded as significant(table 3-14).

(4) Have the current Chinese joint venture accounting regulations(Ministry of Finance, China, 1985) solved the major accounting problems in relation to joint venture business? No one thinks it has(table 3-14). This result is rather surprising. There are perceived

significant accounting differences between China and the West, and the Chinese government thought the differences were an obstacle for foreign investment. But changing accounting regulations for all local firms is costly and has serious economic consequences. Especially, it would change taxable profit. As an alternative solution to the dilemma, the Chinese government issued different accounting rules which only apply to joint ventures. The joint venture accounting regulation introduced some Western practices (e.g. accelerated depreciation methods) which are supposed to appeal to Western investors. Unfortunately, no UK companies think this effort is successful. The reason seems to be that some major differences as mentioned above still exist.

(5) Chinese joint ventures follow accounting regulations which are separate from local regulations. Is this a good way to solve accounting problems in joint ventures? Since joint ventures follow different accounting rules which allow them to enjoy a higher degree of flexibility, most UK companies think this is a good way to solve the problems (table 3-14).

(6) Should joint ventures be allowed to adopt the principle of lower of cost and net realisable value? and

(7) Should the revaluation of fixed assets be allowed in the joint venture whenever necessary?

Not surprisingly, no one objects to the idea of introducing two important UK standards: the principle of lower of cost and net realisable value and revaluation of fixed assets (table 3-14), though at the same time most of them are satisfied with the current accounting regulation for stocks and fixed assets. Because the principle of lower of cost and net realisable value is so important, the reason for introducing it is further discussed. The main reason is that they think the principle can give a truer and fairer view of the value of a joint venture (table 3-15).

With regard to accounting for fixed assets, some people surveyed think that the most important improvement which should be made, besides revaluation, is to allow a more realistic estimate of the useful lives of fixed assets. In fact, the joint venture regulations allow a much shorter useful life than for local firms. But this still does not satisfy some foreign partners.

3.4.9 How UK companies account for investment in China in consolidated accounts

Three basic approaches have been developed for the group company to account for its interest in an associated firm: cost method, equity method and proportionate method. A participating interest in an associated firm is recorded at cost in the group accounts by the cost method, and the number is reduced by the received dividends of the firm. The equity method records the investment at cost plus earnings not distributed. The proportionate method fully disclose the value of revenue, expenses, assets and liabilities in the consolidated financial reports.

The cost method is only appropriate in the case when the investment is highly risky, and there is considerable uncertainty that the investment may not be returned. The equity method is the most popular one, but the proportionate method is also desirable, and became accepted in an international accounting standard(IASC 1991).

In the sample of MNCs in this study, 3 UK companies which have joint ventures in China are using the cost method to account for the investment in consolidated reports, 4 are using the equity method, and one is treating it as a trade investment. Only one is using the proposed proportionate method(Table 3-16).

Quite a number of UK companies(33%) are using the cost method and this would appear to signal their fear that the risk of investment in China is beyond the normal level. This is consistent with the fact that Chinese-UK(MNC) joint ventures have a lower level of foreign participation, though most UK MNCs think their joint ventures are successful(Table 3-17).

The implication of the results is that many UK companies involved in Chinese business still think that the Chinese environment for foreign investment is not stable.

Table 3-16 Methods used by UK MNCs to account for its investment in China (n=9)

	cost method	equity method	proportionate method	other method
How did you account for your investment in China in consolidated financial report?	3	4	1	1*

* trade investment

Table 3-17 Assessment of business of joint venture and investment environment in China (n=10)

	strongly disagree	disagree	neutral/no opinion	agree	strongly agree
Your jv is successful?	0	0	2	7	1
JV agreement should renew?	0	1	3	3	3
China is a good environment for investment?	0	0	6	3	1

3.5 SUMMARY AND CONCLUSIONS

This aspect of the research has focused on the relationship between accounting diversity and four main business decisions of UK MNCs about joint ventures: initial investment; assessment of performance; valuation of assets and liabilities; and allocation of profit. It found that, while accounting differences may not seriously affect the initial investment decision, substantial difficulties are encountered by MNCs in the sample in the other three decision-making areas, especially in evaluating the value of the joint venture and the determination of the interest of the MNCs in joint ventures.

UK HQs in the sample seem to be fully aware of the accounting differences, and recognise that Chinese joint venture accounting cannot provide a true and fair view of financial position and results of an enterprise. However, they are able to deal with the problem. There are two approaches available for them to cope with the differences: i.e. to establish a separate information source or to take advantage of the flexibility of local accounting regulation to design a desirable accounting system for the joint venture.

The most inappropriate accounting method in Chinese joint venture accounting regulation is the accounting treatment of foreign currencies, because it does not allow companies to make provision for possible losses on foreign exchange transactions, or allow recognition of unrealised losses in the current income statement. Accounting for extraordinary items and the use of land are also problematic. No UK MNC in the sample objects to the introduction of the concept of lower of cost and net realisable value for inventories, and the revaluation of fixed assets, into the joint venture accounting regulations.

The difficulty UK MNCs encounter may be similar for other foreign users. But other foreign users may not be in the same position as UK MNCs to cope with accounting diversity. In the next chapter, the economic consequences of international accounting standards will be discussed.

Chapter 4

ECONOMIC CONSEQUENCES OF INTERNATIONAL HARMONISATION OF ACCOUNTING STANDARDS - A THEORETICAL MODEL AND ITS APPLICATION

4.1 SYNOPSIS AND INTRODUCTION

In the international accounting literature, there has been a lack of explicit theory or framework for the harmonisation of accounting standards. A theoretical model is proposed here which may help to explain and predict the harmonisation of accounting standards across countries. The model considers both social and technical aspects of accounting changes, and takes into account the interests of both foreign users of financial statements and local groups. The theory proposed here emphasises the economic consequences of suggested harmonisation of accounting standards on local affected groups. The most important condition which must be met until a real harmonisation takes place is that the benefits of the harmonisation are perceived to exceed the unfavourable economic consequences. But equally important the benefits and costs should be fairly distributed among affected groups. Key variables which are included in the model are:

- 1) the extent to which foreign users (e.g. foreign investors) feel it difficult to use local financial statements;
- 2) the extent to which the needs of foreign users are recognised by local regulators and legislators of accounting standards and rules;

3) the extent to which local groups are willing to bear the direct costs of the proposed changes in accounting standard and rule;

4) the extent to which the local affected groups are willing to accept any unfavourable economic consequences of the proposed change of accounting standards and rules.

This model is then used to explain the process of international harmonisation of accounting standards in the case of Chinese joint ventures. The Chinese local accounting rules are significantly different from international norms and western accounting standards. But the differences have been harmonised (to some extent) in the Chinese joint venture accounting regulations (Chinese Joint Venture Accounting Regulations, 1985). The framework in the above model is used to analyse the progress of harmonisation. It identifies principal interest groups making a contribution to the process or being affected by it. Major benefits, costs and economic consequences of accounting changes are discussed. The main conclusion of the study is that the harmonisation of accounting standards is actually a political process. The harmonisation of accounting standards is in fact the harmonisation of interests of affected parties. Social, economic and cultural implications of accounting changes are perceived more important than the technical aspects of financial reporting. In particular, the interests of local groups versus foreign users play a key role in the process of accounting harmonisation. The implication of the study is that harmonisation will not take place if it is only for the benefit of foreign users. Only when local groups believe that it is for their own benefit, is it then possible for a plan of harmonisation of accounting standards to be carried out. In this sense, the theory may also be useful to explain why international accounting standards are introduced in some countries but not in other countries.

This chapter is organised as follows. The next section of this chapter is a literature review. The third section presents the proposed theoretical model of the harmonisation of accounting standards, and key variables of the model are described. The fourth section

applies the model to explain the harmonisation process in Chinese joint ventures. In particular, it discusses why local groups are willing to change accounting standards to accommodate foreign users of local financial statements and who bears the costs and unfavourable economic consequence of the change. It provides evidence that the harmonisation of accounting standards would have not taken place, had the key conditions described in the model not been met. Section 4.5 is a case study and section 4.6 concludes the chapter.

4.2 LITERATURE REVIEW: CONVENTIONAL WISDOM ABOUT HARMONISATION OF ACCOUNTING STANDARDS

4.2.1 Why we need harmonisation of accounting standards

This section begins with a critical review of the international accounting literature on harmonisation of accounting standards. There is a growing consensus among accounting researchers and professionals that accounting differences across national borders present problem for the internationalisation of capital markets and multinational business. As a result, there have been calls for increasing international harmonisation of measurement methods and reporting requirements in order to facilitate the globalisation of capital markets. Some international organisations such as the UN, EC and IASC have been actively devoted to the course of harmonisation.

Harmonisation is broadly defined here as the process of increasing the compatibility of accounting practices by setting bounds to their degree of variation. Harmonisation exists at the level of concepts, principles, regulations, standards and practices. This study is concerned with regulations, standards and practices which have the most immediate impact on company financial reports. It should be noted that regulations, standards and practices are not necessarily the same thing. Sometimes regulations or standards may not be followed by companies. On the other hand, regulations and standards do not neces-

sarily cover all accounting and reporting practices. For example, regulations and standards may have nothing to do with voluntary disclosures.

The main reason stated in the current international accounting literature for harmonisation is that this can provide comparable accounting information for international users of financial statements to make business decisions. The growing globalisation of securities markets has heightened the awareness of the fact that a great deal of variation in financial accounting and reporting practices across countries may create problems for foreign users of accounting information. The advantages of harmonisation are thought to include cost minimisation for both multinational corporations(MNCs) and users of financial statements, the removal of barriers to foreign listings, and the promotion of a freer flow of investment capital internationally(Meek and Gray 1992).

The analysis of companies across national boundaries has become very important for several reasons. Some of these reasons are related to the following:

- 1) Key capital markets are being integrated.
- 2) competitive pressures in many industries are increasing on a global basis, thus requiring the analysis of international competitors. Automotive, pharmaceuticals, and chemicals are some of the sectors facing increased global competition.
- 3) financial managers are building portfolios from a global list of securities.

As important as these reasons are, a consistent method should be used to analyse performance globally, and herein lies the role of accounting. Using well-established rules and practices, accounting can measure the performance of a corporation within a specific country or across a larger geographic region of several countries. Measuring performance within a particular country is not a problem if the country has established a body of

rules as to how the process should be taken. These rules collectively constitute the accounting principles and practices of that country. They are unique to that country and are a reflection of the social, economic and cultural environment from which they are derived. The problem, however, is that there will be as many principles and practices as there are countries or regions in the world. Consequently, an analyst faces the task of understanding the monumental diversity in reporting practices and the meaning of the financial data that are generated. The goal of harmonisation is to reduce or eliminate the existing diversity so that the performance of leading companies in a given industry can be compared on a worldwide basis.

Given that users in the financial community would like to compare a vast number of companies internationally, a complete restatement of each foreign company's accounts to the user's accounting conventions would be neither cost effective nor timely. Users in the investment community are particularly interested in the relative difference of the performance of companies in a global industry (Bavishi 1992). In this regard, Choi and Levich (1991) summarise the following benefits of harmonisation:

"The primary perceived benefit of harmonisation is that by standardisation of accounting rules, financial analysis of firms would be simplified. Rather than learning a myriad of accounting conventions in numerous countries, an analyst need learn only one. A single international accounting language would link the world-analogous to Esperanto, the artificial international language designed to make national languages obsolete. Harmonisation would increase the number of readers qualified to examine accounting statements from foreign countries. And it might increase the confidence that people had in their understanding of foreign companies. This in turn would encourage international investing and issuing activities. These capital flows would increase capital market efficiency, providing benefits to both investors and issuers in the markets."

Nobes (1989) holds the same point of view. He argues that, with the preparation and products of accounting information becoming increasingly international, multinational groups becoming more dominant and diversifying more widely geographically and the holding of shares across national boundaries by persons and institutions is becoming

increasingly common, the reasons that make national accounting standards desirable also apply internationally. These reasons of harmonisation include the desire to exclude the use of certain misleading practices and to narrow the range of acceptable alternatives so that accounting figures are more comparable between countries. It is not only the various users who might benefit from harmonisation; the compilers and auditors of published financial statements also stand to gain. Further, the differences in accounting are important not only in the context of published financial statements. Because a company's internal accounting system is often heavily influenced by the need to report to shareholders, to governments or to revenue authorities, international differences are also important internally. Such differences lead to problems of performance measurement and investment appraisal within multinational groups.

In summary, the following groups might gain most from harmonisation of financial reporting:

- 1) Investors, investment analysts and stock exchanges: to enable international comparisons for investment decisions.
- 2) Creditors: (for similar reasons to 1).
- 3) Multinational companies: as compilers, investors, appraisers of products or staff, and as staff circulators.
- 4) Multinational accounting firms: as auditors and advisers of companies operating in several countries.
- 5) Governments: as tax collectors and controllers of multinationals.

4.2.2 Problems about harmonisation of accounting standards

However, there is a fundamental argument against harmonisation. That is, to the extent that international differences in accounting practices result from underlying economic, legal, social, cultural and other environmental factors, e.g. legal system, prevalent providers of finance, the influence of taxation, the strength of the accounting profession (see Mueller 1967; Zeff 1971; Gray 1988), harmonisation may not be justified. Different accounting systems have grown up to serve the different needs of different users; this might suggest that existing accounting practice is the "appropriate" form for its habitat and should not be changed merely to simplify the work of multinational companies or other foreign users. Many accounting differences are difficult to remove. They have grown up over time because of differences in users, legal systems and so on. Thus, the differences are structural rather than cosmetic, and require revolutionary action to remove them.

Another problem is that professional bodies are strong in some countries but weak in others. Thus, it is impossible for professional bodies directly to achieve international harmonisation. This means that, although the professional bodies may be able to make some progress in those countries where they are powerful and influential (e.g. in Anglo-Dutch countries), government intervention would be necessary for a wider harmonisation. Thus we need to take into account the obstacle of nationalism. Local governments, accountants and companies may be unwilling to accept compromises which involve changing accounting practices towards those of other countries. This compromise may be regarded as a loss of national sovereignty (Nobes 1989).

4.2.3 How much we have achieved in harmonising accounting standards

Although there is now an awareness of the significance of the international pressures operating on accounting, the practices of accounting still have an equivocal relationship

to them. It is difficult to assess how much we have achieved now towards the goal of harmonisation. It is true that several international organisations have made progress toward the goal of eliminating diversity. The International Accounting Standards Committee (IASC), European Community(EC), Organisation for Economic Cooperation and Development (OECD), United Nations(UN), and International Federation of Accountants(IFAC) have recommended various accounting and auditing standards that have been adopted wholly or partially by individual companies or countries as a supplement to their own country's standards.

However, it is obvious that diversity of accounting standards and practices is still existing in many parts of the world. There is not much evidence that financial reports are more comparable now than 20 years ago. For example, Tonkin(1989) assessed the quality of reporting in the annual reports of 200 of the world's largest MNCs, domiciled in 28 countries. The survey concluded that reporting practices show very little improvement over the 1980s and that variability remains high and in some cases has even increased. Another recent survey found widely differing approaches used in international airline industry in such important areas as the way airline fleets are financed and accounted for; how aircraft are depreciated and to what residual value; accounting for foreign exchange losses and gains, and levels of disclosure in income statements for depreciation and finance costs (KPMG Peat Marwick 1992).

Other empirical tests and surveys come to contrasting or opposite conclusions (Nair and Frank 1981, Evans and Taylor 1982, Gray, Campbell and Shaw 1984, McKinnon and Janell 1984, Doupnik and Taylor 1985, Nobes 1987, van der Tas 1988). For instance, Nair and Frank(1981) concluded that "the period of the IASC's existence has coincided with a growing harmonisation of accounting standards"(p.77), while the results of some other surveys suggested that the IASC had had very little impact on the accounting practices of the countries surveyed, or had not succeeded in changing existing standards or setting new standards (Evans and Taylor 1982, McKinnon and Janell 1984).

The progress towards harmonisation even in the context of the European Community has been incredibly slow. Rutteman(1989) notes, "a survey of published accounts today shows less conformity with the Fourth Directive accounting principles and rules than there was before it was even introduced into the United Kingdom". As Archer and McLeay(1989) illustrate in their detailed and intriguing study of financial reporting by European Companies listed on more than one capital market, disclosures remain diverse even amongst this, the most multinational set of enterprises, not least with respect to the listing requirements themselves, issues of both textual and currency translation, and the forms of audit pronouncements. On the latter point, noting the increasingly multinational nature of audit firms, Archer and McLeay nevertheless note the absence of standardisation even in areas where the firms might conceivably have been able to influence matters themselves. Equally, Gray and Roberts(1989) illustrate the diversity of response of British multinational companies in the extent to which they voluntarily modify their disclosures to provide greater insight into the impact that multinational trading has on their operations and financial performance.

4.2.4 Why there is not much progress in harmonisation

There are many reasons for the slow progress of accounting harmonisation. All the factors discussed in section 4.2.2 may account for the slow progress. For instance, some legal and economic conditions may not be ready for change which in many cases are essential for accounting changes. Since accounting is rooted in its legal and economic environment, it is impossible for accounting to change without a change in basic environmental factors which are influential on the development of accounting systems. For example, in some countries, accounting numbers are the basis of taxation. The changes in accounting standards which may affect taxation will be considered in the context of collection of tax. Before a suitable environment is created, it is unlikely that harmonisation will occur.

Another reason may be that there is no explicit policy to push harmonisation. It is naive to believe that only the publication of so called "international accounting standards" will be enough to lead to harmonisation. Some policy is needed by international organisations to facilitate the acceptance of the standards by individual countries. Such a policy should be based on a theory which can be used to explain motivations, needs, and conditions of harmonisation. Because no such theory exists, people do not fully understand relevant factors which affect harmonisation. For example, many people believe that accounting differences will lead to harmonisation. But, it is not necessary. There are two types of accounting differences: one that may affect decisions and one that may not. For example, different accounting methods are allowed for use in the UK for the valuation of stock and fixed assets which are not perceived as a problem for users. Only those which cause problems for foreign users may be taken into consideration for change. Another misunderstanding is that the needs for harmonisation focus narrowly on foreign users, neglecting the needs of local users and effects of accounting changes on local affected groups. Harmonisation of accounting standards means change of local standards in favour of international standards. The change not only affects foreign users, but local groups as well. The change may seriously affect the interests of particular local groups. Because of the lack of a framework for harmonisation, a feasible policy which can be used to facilitate harmonisation has not been formulated.

4.3 TOWARDS A THEORY OF HARMONISATION OF ACCOUNTING STANDARDS

Greater attention need to be devoted to the social, political, and economic forces that influence the development of harmonisation of accounting standards and practices. An important implication is that accounting harmonisation imposes benefits on some groups to the detriment of others. By studying particular cases of the process, researchers and policy makers can gain important insights into how economic and political conflicts

between interest groups affect the harmonisation process.

Accounting researchers have used four conceptual approaches to characterise the role of the social, political, economic and cultural forces on the accounting standard setting process. The study focuses on two, the economic consequences and social conflict approaches, to build a theoretical model to show how these forces influence the development of accounting harmonisation.

4.3.1 Four approaches

1) Economic consequences approach

Advocates of this approach believe that accounting reports affect the decision-making behaviour of preparers and users of such reports as well as impacting the distribution of income and wealth in society (Zeff, 1978, p.56). Setting or changing an accounting standard will have economic consequences and result in wealth transfers. That is the main reason why social groups are in favour or against a particular standard. For example, Watts and Zimmerman (1978) maintain that corporate managers' arguments in support of specific accounting standards are subterfuges. They theorise that corporate managers decide which accounting alternative is in their self-interest and then construct a public interest argument that rationalises the desirability of the preferred alternative.

2) Interest conflict approach

Closely related to the economic consequences and self-interest approach is the interest conflict view of accounting policy. The conflict approach recognises that accounting is a social and political activity that is influenced by the context in which it occurs. Thus, "the study of accounting should recognise power and conflict in society, and consequently, should focus on the effects of accounting reports on the distribution of income, wealth

and power in society" (Cooper & Sherer 1984). In describing a political economy approach to accounting, Cooper and Sherer argue that:

"Instead of assuming a basic harmony of interests in society which permits an unproblematic view of the social value of accounting reports, a political economy of accounting would treat value as essentially contested, with accounting reports operating in specific interests (e.g. of elites or classes)." (Cooper & Sherer 1984).

Further, advocates of the conflict approach maintain that financial statements, which are supposed to provide information about an enterprise's "efficiency", neglect the state of the social-political foundations underlying the market forces (Tinker 1980). Accordingly, they assert that accounting numbers must be interpreted as an outcome of the social and political conflicts between the various interest groups in society rather than as a measure of economic efficiency (Tinker 1980; Tinker et al., 1982).

Because of economic consequences and interest conflict, it is believed that undesirable consequences of accounting changes should be avoided. For example, legislators may mandate disclosure because they feel that they can better protect the interests of investors from unfair disclosure practices, and market failure theories may represent sincere attempts by theorists to make society more reflective of ethical principles (Kaplan and Ruland 1991).

3) Technical approach

In contrast with the above two approaches to accounting policy, there is a third approach referred to as the technical approach. This approach emphasises that accounting information should faithfully represent economic reality. Advocates of this approach maintain that financial reporting issues ought to be regarded as technical issues, to be resolved by appeal to a "technical framework" (Gaa, 1988, p.147). Solomons describes the technical

framework as cartographic financial map making, and that accounting should confine itself to accurately measuring and reporting the monetary values associated with market transactions (Solomons,1986,p.92).

Thus, representational faithfulness is regarded as "crucial to accounting's ability to present a picture of 'economic reality' in an enterprises's financial statements"(Solomons, 1986, p.96). The primary concern should be the relevance and reliability of the information provided to external users, and not whether the standard attains a predetermined result or induces a particular mode of behaviour (FASB 1980). In this regard, at least theoretically, a neutral choice between accounting alternatives should be free from bias toward a predetermined result. Accounting should reflect, objectively, the economic content of the transaction without regard to the ultimate social implications (Dyckman 1988,p.23).

In sum, there are two aspects of accounting, social and technical aspects. Accounting can be viewed as a means which records business transactions and measures economic wealth. So, accounting in nature is not for the interests of a particular group in society. The ultimate objective of accounting is to reflect truly and fairly economic reality. But unfortunately, the process of recording and measuring relies on a set of techniques and standards. The application of these techniques and standards are subject to subjective judgment. In this regard, a particular interest group would support the standards which can best serve its interest even at the expense of that of other group or even at the expense of truthfulness and fairness.

4) Cultural approach

In contrast with the economic and technical approach, finally, another rather new approach has emerged in the accounting literature which introduces cultural variables into the model of accounting development (Gray 1988). The approach suggests that the selec-

tion of accounting standards may be affected by cultural factors. For example, the preference of some accounting policy (e.g. conservative measurement methods) may be related to the social value or attitude of a particular society. Thus, a society with a high value of conservatism may lead to an accounting system characterised by conservative measurement.

4.3.2 Key variables of the model of harmonisation

This study looks at both social and technical aspects of development of harmonisation. Though there is criticism to the technical approach, particularly because it provides little insight in explaining the role political and social forces have on the development of accounting standards and practices (Pushkin and Pariser 1991), the technical problems of international standards should be taken into account. This is because international standards may not be better than local ones to provide a true and fair view, for local standards developed from its unique environment. For example, although the proportionate method is a recognised option in international standards (IASB 1991), 8 out of 9 the UK MNCs investigated in this study did not use it to account for their investment in China. It is hard to believe that to adopt this standard will have unfavourable economic consequence to UK MNCs. The reason may be that it is inappropriate in the case of investment in China which is perceived to be highly risky.

Cultural influences on the harmonisation of accounting standards cannot be ignored. For example, cultural influences can occur in two circumstances. First, a society with conservative values may be more likely to accept conservative international accounting standards. In another case, a change in the social attitude of people is essential for the change of accounting values or attitudes.

However, greater emphasis is focused on the economic and social aspects of harmonisation of accounting standards. It is more often than not that international standards can not

be introduced into local accounting systems, because there are serious economic consequences, or the change is in conflict with the interests of local affected groups. For instance, Choi and Levich(1991) point out that the tax effect may be one of the perceived political costs of harmonisation of accounting standards.

A theory to describe the harmonisation of accounting should include both external and internal factors, it is important to distinguish the effects of external and internal factors. Harmonisation is motivated by the fact that accounting differences may negatively affect the globalisation of capital markets. But whether harmonisation actually takes place depends on the interaction of certain external and internal conditions. Accounting policy-makers should consider these conditions in order for harmonisation to take place. These conditions are summarised here:

1) to what extent a country or a region moves towards the international capital market;

There is no reason to change if a country is restricted to its own market. The ultimate force which causes change is the economic force, the globalisation of capital markets and the international business activity of multinational corporations. Though globalisation of capital markets is growing in the world, the development level is quite different from country to country, from region to region. For example, the single market programme makes EC countries economically and financially join together. North American, Asian and Pacific countries are moving quickly towards regional economic and trading groups. In other areas, for example, Latin America and Africa, it seems that the development of globalisation is less quick than that of Europe, North America, and Asian and Pacific areas.

Thus, it is argued here that the harmonisation of accounting is a function of the general level of economic and globalisation development. This is because the more globalisation, the more need and pressure to remove obstacles to accounting differences. Therefore, it is

hypothesised that harmonisation is more likely to take place in a country or region with a high level of economic development and globalisation.

2) to what extent do foreign users have difficulty in using local financial statements;

There are a lot of accounting differences around the world. But not all accounting differences cause problems. Users of financial statements have been long used to multiple accounting choices. With the variety of business transactions, if a company is only allowed to use a single accounting method, it is doubtful that true and fair financial reports can be produced. Even in the UK, different companies may use different accounting methods unrestricted by standards, as long as the use of them will not damage the true and fair view of financial reports. For the same reason, international differences which are not perceived relevant to decision-making will not be taken into account for harmonisation. Therefore, it is impossible, and not necessary to remove all accounting differences across countries. But significant differences need to be harmonised. How significant an accounting difference is depends on the extent to which users feel it difficult to use financial statements. In another words, the significance depends on whether the diversity among national accounting and disclosure practices and regulations affects the business decisions of major users and preparers of financial statements. If a difference has serious capital market effects, such a problem needs to be solved by the harmonisation of accounting standards.

3) to what extent are the needs of foreign users recognised by local regulators and legislators of accounting;

Is it enough for harmonisation to take place when accounting differences seriously affect the decision of foreign users? Not necessary. Harmonisation involves both sides of the issue, foreign users and local interest groups. So far we only look at the side of foreign users. But foreign users can not directly make accounting changes. The introduction of

international standards often involves the change of local law and taxation. So, the needs of change must be fully recognised by the local authorities. However, accounting issues may not attract immediate attention. It is not necessary that local regulators will accept the point. There are so many factors affecting international investment and business, e.g. marketing, taxation, financing, transfer pricing, labour market, etc., which may be given priority for attention. The point is how important are accounting differences compared with other issues which are relevant to internationalisation of the capital market. In many cases, local authorities may not put accounting issues on their immediate agenda.

4) to what extent are the local groups willing to bear the cost of changes in accounting standards; and

5) to what extent are the local groups willing to bear the unfavourable economic consequences of the change in accounting standards.

The question from the political economics of harmonisation is that, given the fact that the direct benefit of it is for foreign users, the direct cost of the change is borne by local groups, and local groups may also even have to bear some unfavourable or undesirable economic consequences, then why are local groups willing to see the change take place? If the decision is made on a cost-benefit base, and even if the benefit is perceived beyond cost, three things must be made clear: 1, What is the benefit from the changes to local groups (not only to foreign users)? 2, Who bears the cost of the change of standard? Those who benefit from the change may not necessarily bear the cost. 3, Are there any unfavourable economic consequences from the change of standard? Who will be affected by the change? The last point is important because if the unfavourably affected party is influential, they may oppose it and make change difficult or impossible to achieve.

The harmonisation of accounting standards is expected to generate positive cash flows. But it is difficult to calculate the cash flows. Even there is a positive cash flow from

harmonisation, there may be an uneven or unfair distribution of the cash flows and costs incurred among related parties.

In sum, harmonisation means changes in local standards and practices, that is, local regulators and companies give up their standards and practices in favour of international norms or other country's standards. The changes do not occur costlessly (Choi and Levich, 1991). And the change will normally generate economic consequences. Harmonisation of accounting will not take place until local people realise that it is in their own interests that they need the changes.

In general, given the external constraints on harmonisation process, such as international investment climate, national law and other legal and political requirements, the conditions discussed above which must be met in order for harmonisation to take place can be expressed in the following simplified model.

The first condition which must be met is:

$$B_T > C_T \quad (3.1)$$

where

B_T = total benefit of harmonisation

C_T = total cost of harmonisation.

The perceived benefit of harmonisation which is frequently mentioned is the simplification of financial analysis of firms across the world, and comparability of financial statements of multinational companies. Whilst the benefit of harmonisation is rather simple and straightforward, the cost incurred is not. The total cost in the model should include

the direct cost and unfavourable economic consequences from the proposed change of accounting standards. An example of direct cost is the administrative expenses for the change, e.g. the cost of publication of the proposal, the discussion of the new standards, and the cost of changing company accounting system from one to another. Unfavourable economic consequences can occur when there is a tax effect, or political costs from the introduction of new accounting standards.

The total benefit and cost can be divided into two parts: the one for local parties the one for foreign parties. An analysis of effect of harmonisation on both local and foreign parties in terms of benefit and cost is essential for the model.

Thus the second condition is:

$$B_L > DC_L + UEC_L \quad (3.2)$$

where

B_L = benefit of harmonisation for local parties

DC_L = direct costs of harmonisation for local parties

UEC_L = unfavourable economic consequences for local parties.

The third condition is:

$$B_F > DC_F + UEC_F \quad (3.3)$$

where

B_F = benefit of harmonisation for foreign parties

DC_F = direct costs of harmonisation for foreign parties

UEC_F = unfavorable economic consequences for foreign parties.

If both condition II and III are met, then condition I will be met simultaneously. This is because

$$B_T = B_L + B_F$$

$$C_T = DC_L + UEC_L + DC_F + UEC_F \quad (3.3)$$

Then

$$B_L > DC_L + UEC_L \quad (3.2)$$

and

$$B_F > DC_F + UEC_F \quad (3.3)$$

will lead to

$$(B_L + B_F) > (DC_L + UEC_L + DC_F + UEC_F) \quad (3.4)$$

that is

$$B_T > C_T \quad (3.1)$$

But when condition I is met, it is not necessary that both conditions II and III would be met. Let NB be the net benefit of harmonisation:

$$NB_T = B_T - C_T \quad (3.5)$$

$$NB_L = B_L - (DC_L + UEC_L) \quad (3.6)$$

$$NB_F = B_F - (DC_F + UEC_F) \quad (3.7)$$

$$NB_T = NB_L + NB_F \quad (3.8)$$

It is obvious that NB_T could be positive, even if one of the two value NB_L and NB_F is negative, as long as the absolute value of the positive one is greater than that of the negative one.

It should be noted that the specific benefits and costs and the effects on local and foreign parties will vary from country to country and from case to case. Change in one standard will impose different costs and benefits on different parties than will change of another.

The rest of the chapter is devoted to illustrating the model using the case of Chinese joint ventures. The Chinese case is chosen for the following reasons: 1, there are significant differences between Chinese accounting and western accounting; 2, there are perceived difficulties of foreign users in respect of Chinese financial statements; 3, harmonisation

of accounting regulations and practices has taken place. The discussion of the case focuses on the perceived cost and economic consequences of accounting changes in joint venture accounting regulations.

4.4 APPLICATION OF THE THEORETICAL MODEL- THE CASE OF CHINESE JOINT VENTURES

4.4.1 Evidence of harmonisation

There is evidence that the harmonisation of accounting in Chinese joint ventures has taken place at both the regulation and practice level. Chapter 3 presented a detailed discussion of Chinese joint venture accounting regulations. The main changes in accounting regulation and requirements are summarised here:

The objectives of joint venture accounting are modified from macroeconomic control to presentation of a fair view of enterprise business;

For the valuation of stock, net realisable value is allowed to be disclosed in annual reports, though the concept of lower of cost and market value is not permitted to be used for the measurement and valuation of official earnings and assets and liabilities;

For the valuation of fixed assets, accelerated depreciation is allowed in special cases.

The presentation and format of the balance sheet is different from that of local one.

In addition to the traditional financial report, balance sheet and income statement, the statement of changes of financial positions is required.

These changes are not insignificant. Rather they are fundamental and conceptual. The impact on profit of the new regulations is evident. Taken overall, these changes will have a significant impact on reported income. It is clear that many international or western accounting standards have been introduced into Chinese joint venture accounting regulations, while the regulations retain Chinese characteristics. There is a strong evidence of harmonisation of accounting at the regulation and standard level.

With the different accounting regulations, not surprisingly, Chinese joint venture accounting practices are different from local firms, and in fact, much closer to international or western practices. Chapter 5 provides evidence which shows that, in practice, joint venture accounting is a mixture of Chinese and western practices. Table 4-1 shows the difference between local and joint venture accounting. As there is no information about accounting practices in local firms, the comparison is based on joint venture accounting practices (sample size=86, see chapter 5) and local firm accounting regulations.

The differences are obvious. For example, while no local firm is allowed to revalue stock and disclose net realisable value of stock, 88.5% of Chinese joint ventures revalue stock and 25.6% disclose the net realisable value of stock in their annual financial statements (1991). Accelerated depreciation of fixed assets and provision for losses on stocks have never been seen in local accounting practices. In the sample, 14% of joint ventures are using accelerated methods, and 24.4% are making provisions for losses on stocks (table 4-1). Therefore, it is safe to say that harmonisation is taking place at the practice level.

Table 4-1 Accounting methods used in
Chinese joint ventures and local firms

accounting method used	joint venture (n=86)	local firm (regulation)
1. accelerated depreciation method	14%	not allowed
2. useful house life estimated		
minimum:	10 years	40 years
maximum:	50 years	no information
3. useful machine life		
minimum:	5 years	14 years
maximum:	30 years	35 years
4. electronics equipment life		
minimum:	3 years	no information
maximum:	15 years	no information
5. revaluation of stock:	88.5%	not allowed unless ownership is changed
6. net realisable price disclosed	25.6%	never
7. provision for losses for stocks	24.4%	not allowed
8. not capitalise R & D	50.0%	must till project fails

4.4.2 Conditions which have been met for harmonisation

That harmonisation took place in Chinese joint ventures did not happen merely by chance. In fact, all the conditions mentioned in the model are met in the case of Chinese joint ventures.

1) General level of economic development and globalisation of the Chinese economy.

In the last decade, the world witnessed the great changes in the Chinese economy from isolation to globalisation. Chapter 2 gives a full discussion of the recent economic reforms and its influence on modern Chinese accounting. The economic development and increasing globalisation are crucial for the change in accounting regulations and practices. Without these change, any proceeding change in accounting is impossible. It is the change in economic structure and foreign investment and trade that highlight the accounting differences between Chinese local accounting and international accounting practices.

2) Difficulty of foreign investors

The first pressure for change in accounting came from foreign investors. They were concerned that accounting standards were so different from those they were familiar with that these standards may not correctly account for their investment or help them to assess the performance of foreign invested enterprises in China. The differences may also affect the profitability of enterprises, because accounting income should, in the case of Chinese firms, be the basis of taxation.

Chapter 3 illustrated the problems of UK MNCs in using Chinese financial statements. It should be noted that, these financial statements are prepared under the Chinese joint

venture accounting regulations, i.e. the harmonised regulations. Before the regulation was issued in 1985, a joint venture needed to use the accounting regulations applicable to local firms which are even more different from international norms or Western standards.

3) Changes in attitude of local regulators

Despite a lot of complaints about local accounting standards by many foreign investors, Chinese accounting regulators did not recognise the difficulties of foreign users and realise the need for change until 1985, 7 years after the open door policy was announced and the first joint venture was created in China.

But foreign investment eventually made Chinese regulators understand that changes are necessary. The attitude of the Chinese people towards western accounting practices has gradually changed. Some western principles and concepts, e.g. conservatism, lower of cost and value, accelerated depreciation method were no longer criticised. People in China realised that if foreign investment is essential and crucial for the modernisation of the Chinese economy, accounting differences should not be an obstacle. A comparable financial statement is important for foreign investors to assess the performance of joint ventures. And taxation should be on a fair base of profit. Meanwhile local accounting regulation was criticised as it leads to an unrealistic and overstated current profit. There were growing doubts among the Chinese academics and regulators that the Chinese accounting principles and regulations, which were shaped in the 1950s under the strong influence of the Russian model, were able to provide a true and fair view of financial position and results of an enterprise. As a matter of fact, a fundamental reform of the accounting system had been called for so as to accommodate economic reform and a more market-oriented economic system. All these changes in attitude are important to create a climate suitable for fundamental change in accounting regulations and practices.

4) Cost of the Change.

In order to carry out a new accounting policy, a new branch, Office of Accounting for Firms with Foreign Investment was established in the Department of Administration of Accounting Affairs under the leadership of the Ministry of Finance of the Central Government. The Department is the highest level of regulators of accounting in China. The Office deals exclusively with accounting issues for joint ventures.

At last, in 1985, a new regulation was published by the Ministry of Finance. Before the formal regulation was issued, a draft of it had been circulated to some academics for discussion. Also, joint ventures were allowed to use some new accounting methods according to the draft regulation. The joint venture can enjoy a privilege to use some different standards, e.g. accelerated depreciation method for fixed assets, which would allow them to charge more expenses in the current accounting period. Also they are permitted to disclose losses on stocks. Even provisions for possible losses on stocks are allowed, though only from profit after tax (see Chapter 2 for a full discussion of the change). It is a partial acceptance of the principle of lower of cost and net realisable value, though this principle used to be criticised and has never been formally and officially accepted in China up to now.

The establishment of a special organisation to deal with joint venture accounting, the discussion of the draft, and the trial run of the draft regulation, all of these actions for the changes of accounting regulations cause expenses and costs. Since the Chinese government thought that the change was necessary, they were willing to bear all the costs incurred.

5) Economic consequences of the changes in accounting

The changes are significant and fundamental. It is difficult to find examples in other countries with such a dramatic change. Perhaps Russia and Eastern Europe is undergoing a similar change. The result of the change is that current profit is calculated to be lower than that if local regulation was applied. Also assets are valued lower as well.

The most obvious economic consequences of the new accounting regulation is that, because income for tax purposes is based on the accounting income of reported financial statements, the lower accounting earnings lead to a lower tax obligation of an enterprise, and the Chinese government collects much less tax under the new accounting regulation.

It should be noted that the unfavourable economic consequences were fully recognised by the Chinese government and sufficiently discussed and debated before the enforcement of the new regulation. Again, they were willing to sacrifice the tax income in return for foreign investment.

6) Benefit of the change in accounting

The first benefit of the change is that the reported earnings of joint venture are more comparable as to international norms. Therefore foreign users of joint venture financial reports are able to analyse the financial information on a comparable base. Another advantage the foreign investor can enjoy is that lower reported income leads to a reduced income tax obligation.

While the foreign parties receive the direct and immediate benefit, what the local parties acquire are rather a long-term benefit. If the purpose of changing accounting regulation is to attract more foreign investment, this goal has been achieved. Since the publication of

the new regulation, foreign investment has been increasing continuously. China benefits the influx of foreign investment with advanced technology and management skills. Table 4-2 summarises the main costs, benefits and economic consequences of the change in accounting regulations.

It is difficult to isolate accounting effects from others on foreign investment, because many other things have coincidentally happened since 1985 in China. Neither is this study attempting to calculate the whole costs and benefits of the change and harmonisation of accounting in the case of Chinese joint ventures. The Chinese government did not calculate the actual cost and benefits from the change before the new accounting regulation was approved. It is technically impossible to mathematically accurately calculate the whole costs and benefits. Although it emphasises the principle of harmonisation, i.e. that the benefit must exceed cost to local groups, it is often than not, that costs and benefits are valued on a subjective base as in the case of Chinese joint ventures.

However, it is clear that the local groups bear all the direct costs and unfavourable economic consequences, while foreign investors get most of the direct benefits. And some of the gains foreigners acquire are the losses of local groups (e.g. tax). But, in the long run, if there are more foreign joint ventures created, the total tax income of the government will increase, though tax from individual firms is reduced. Also China can benefit from the modernisation of local technology, management skills and other outcomes of foreign investment, if the change in accounting can help encourage joint ventures. That is the main motivation of local groups for the harmonisation of accounting standards.

Table 4-2 Costs, benefits and economic consequences of harmonisation of accounting regulations and practices

	Direct costs & economic consequences from the changes of accounting regulations	direct benefits
for local regulator	1,drafting and discussion of documents; 2,trial running of draft regulation(ED)	
for local partner	1,change of accounting system according to new regulations; 2,more difficult to analyse financial data generated by new accounting methods	1,less tax obligation; 2,better profitability
for local bank	more difficult to analyse financial data generated by new accounting methods	
for foreign investors (MNCs)		1,easier to do feasible study of investment;2,easier to assess performance of jvs and valuate value of jvs; 3, easier to analyse financial data; 4, have less tax obligation 5, better profitability
for Chinese government	reduced tax income	more foreign investment, better for its macro-economic policy

4.5 A CASE STUDY

With regard to the economic consequences of harmonisation, a case study of the effect of accounting changes on the tax obligation is provided. During the investigation of Chinese joint venture accounting practices(see chapter 5), several firms were asked to send financial reports to the author. But the author only received a set of original financial statements and other financial data from one of the joint ventures investigated - Shanghai United Limited, and got the permission to use it for research purpose. These financial statements (balance sheet, income statement, etc.) were prepared by the firm using joint venture accounting rules. The author readjusted the book profit by using accounting rules for local firms. This case illustrates the potentially dramatic effect of different accounting principles in particular circumstances.

This is a manufacturing Chinese-Hong Kong joint venture created in 1988. At the end of 1990, the balance sheet shows that capital investment of the joint venture was RMB Yuan 3,600,000, 50% from the Chinese participant and 50% from the foreign participant. Total investment was RMB Yuan 7,652,266.31. The business life of the joint venture is ten years. The following tables(table 4-3 to 4-5) are the main financial statements of the joint venture in the year of 1990(the currency used in these financial statements is Chinese currency-RMB Yuan).

Table 4-3 Case study material:

Balance Sheet

31/12/1990

Name of Enterprise: Shanghai United Limited

Assets

Liabilities & Capital

Current assets	4 918 569.72	Current liabilities	4 054 806.92
Long term investment		Long term liabilities	
Fixed assets			
cost	3 721 734.22	Capital	3 600 000.00
accumulated depreciation	1 057 951.08	Including:	
net value	2 663 783.14	Chinese participant	1 800 000.00
		Foreign participant	1 800 000.00
Construction in progress	6 300.00	Current year profit	308 807.18
Intangible assets	45 399.80	Retained earnings	- 335 861.44
	-----		-----
	-----		-----
Total assets	7 627 752.66	Total liabilities & capital	7 627 752.66

Table 4-4 Case study material:Income Statement

1990

Sales of Products	5 475 397.73
Less: sales tax	144 147.20
cost of sales	4 424 454.00

Gross Profit on Sales	906 796.53
Less: Selling expenses	55 887.03
general and	
administrative	561 401.82
expenses	-----

Profit on Sales	289 505.68
Add: profit from	
other operations	13 051.50

Operating Profit	302 557.18
Add: non-operating income	6 550.00
Less: non-operating expenses	300.00

Total Profit	308 807.18
Note: Export sale:	
in foreign currency(\$HK)	420 000.00
converted into RMB	25 401.60
in foreign currency(\$US)	5 845.00

Table 4-5 Case study material:
Statement of Profit Distribution
1990

Items	This year	Last year
Total profit	308 807.18	-156 495.33
Less: income tax	-----	-----
	-----	-----
Total profit	308 807.18	-156 495.33
Less:		
Staff and workers'		
bonus & welfare fund		
Reserve fund		
Enterprise expansion fund		
Add:		
Retained earnings at		
beginning of year	-335 861.44	-179 366.11
	-----	-----
	-----	-----
Balance of profit available	- 27 054.26	-335 861.44
for distribution		
Less: Dividends declared		
including: Chinese participant		
Foreign participant		
	-----	-----
	-----	-----
Retained earnings at	- 27 054.26	-335 861.44
end of year		

The income statement reports a current operating profit of RMB 302,557.18 (before extraordinary items) or 308,807.18 (after extraordinary items). The firm suffered losses in previous years. Yet, after the first profit-making year of 1990, the joint venture still had a loss of RMB - 27,054.26(after extraordinary items).

The company discloses the main accounting policies used for the financial statements:

straight-line depreciation method of fixed assets;

useful life of fixed assets:

20 years for buildings and premises; 10 years for machines;
5 years for electronic equipment, means of transportation.

residual value of fixed assets: 10% of cost.

organisation cost: amortised in 5 years;

FIFO for the valuation of stocks.

The company does not disclose how to treat interest.

The company does not have R & D.

The joint venture is using accounting methods in accordance with the Chinese joint venture regulations to calculate profit. The accounting method used in this joint venture which is different from that of local firms is accounting for fixed assets. The depreciation policy of fixed assets has the most significant impact on the current profit. The

company is allowed to use an annual depreciation rate of 4.5%, 9%, and 18% of the historical cost for the main categories of fixed assets i.e. building and premises, machines and equipment, and means of transportation respectively. The rate is decided by the estimated useful life and residual value of fixed assets. For example, according to the tax regulations(1991), the minimum buildings' useful life should be no less than 20 years so that a 5% annual rate would apply. After deducting the residual value of 10% of historical cost, the actual annual depreciation rate for buildings was 4.5%(note: because the firm only has a ten year contract, it may even be allowed to estimate a minimum building's life of ten years).

However, if the joint venture was a local firm without foreign investment, the annual depreciation rate should have been no more than 2.5% for buildings, 5% for machines, and 10% for means of transportation. The depreciation and profit of the joint venture from 1988 to 1990 are readjusted by the author using local rules(table 4-6):

Table 4-6 Readjustment of depreciation charges
 using different depreciation rates
 (For the year ended Dec.31,1988)

	historic cost	JV's rate	JV's depreciation	local rate	local depreciation
premises & buildings	1 308 034.93	4.5%	58 861.56	2.5%	25 950.87
machines & equipment	1 693 125.67	9%	152 381.31	5%	84 656.28
means of transportation	140 371.08	18%	25 266.84	10%	14 037.11
new machine	403 445.76				
	-----		-----		-----
	3 544 977.44		236 509.71		124 644.26

The difference in depreciation charges if local rules applied in year 1988 is:

$$236,509.71 - 124,644.26 = +111,865.45.$$

Not all of these different charges affect the current profit and loss account. Part of them affect next year's earnings through stocks of goods in process and finished goods. The amount which affects next year's earnings is calculated as follows:

As a first step, the amount of the whole difference in depreciation charges should be divided into two parts: cost of production and administrative expenses. The latter is directly charged in the current income statement. The depreciation for administrative purpose was 19080.25 which accounted for 8.07% of the total depreciation charge of 236 509.71:

$$19080.25/236\ 509.71 = 8.07\%$$

This means 8.07% of the difference should be administrative expenses, which are wholly period expense:

$$111,865.45 * 8.07\% = 9,027.54(\text{administrative expenses})$$

The remaining amount is attributed to cost of production:

$$111,865.45 - 9027.54 = 102,837.91 \text{ (cost of production)}$$

The amount of 102,834.91 should further be divided into two parts: which is included in cost of goods sold and which is in stock cost. The latter shall affect next years earnings. The company had a cost of net stock of goods in process and finished goods of RMB

227,760.93 which was 9.4% of the total cost of production. Then:

$102,837.91 * 9.4\% = 9,666.76$ (in stock, affecting next year' income)

$102,837.91 - 9,666.76 = 93,171.15$ (affecting current profit)

In sum, the total amount affecting this year's profit was:

$9,027.54 + 93,171.15 = 102,198.69$

This was the difference of the two profits using different accounting rules. Because the company reported a loss in 1988 as RMB 179,366.11(before non-operating income and expenses, i.e. before extraordinary items), it is adjusted as a loss: (before extraordinary items; only profits or losses before extraordinary items are readjusted here, because extraordinary items are not affected by different accounting rules in this case):

$- 179,366.11 + 102,198.69 = - 77,167.42$ (adjusted loss)

The loss is reduced by: $102,198.69 / (-179,366.11) = - 56.98\%$

The same procedure is applied for the adjustment of profit in 1989 and 1990. For the year of 1989, the company used the same accounting policy for depreciation, and reported a loss of RMB 155,749.30 (before extraordinary items) or 156,495.33(after extraordinary items). The depreciation charge adjustment is shown in Table 4-7.

Table 4-7 Readjustment of depreciation charges
using different depreciation rates
(For the year ended Dec.31,1989)

	historic cost	JV's rate	JV's depreciation	local rate	local depreciation
premises & buildings	1 308 034.93	4.5%	58 861.56	2.5%	32 700.87
machines & equipment	2 096 571.43	9%	188.691.48	5%	104 828.57
means of transportation	140 371.08	18%	25 266.84	10%	14 037.11
new house	30 000.00				
new machine	119 021.86				
	-----		-----		-----
	3 693,999.30		272,819.88		151,566.55

Difference: $272,819.88 - 151,566.55 = 121,253.33$

Percentage of depreciation charges for administrative purpose:

$$23,646.00 / 272,819.88 = 8.67\%$$

$$121,253.33 * 8.67\% = 10,509.34(\text{directly affect current income statement})$$

$$121,253.33 - 10,509.34 = 110,743.99(\text{cost of production})$$

The company did not have any stock of finished goods, but had cost of net stock of goods in process at the end of the year RMB 829,509.99, which accounted for 30.10% of total cost of production:

$$829,509.99 / 2,755,449.34 = 30.10\%$$

$$30.10\% * 110,743.99 = 33,338.75(\text{in stock, affecting next year income})$$

$$110,743.99 - 33,338.75 = 77,405.24(\text{affecting this year income})$$

The whole profit was adjusted as:

$$77,405.24 + 10,509.34 + 9,666.76(\text{from last year's adjustment}) = 97,581.34$$

The result of this year was reported as a loss of 155,749.30, then, the loss is adjusted as:

$$- 155,749.30 + 97,581.34 = - 58,167.96$$

The loss is reduced by: $97,581.34 / 155,749.30 = 62.65\%$

The depreciation charges in 1990 is adjusted as follows(table 4-8):

Table 4-8 Readjustment of depreciation charges
using different depreciation rates
(For the year ended Dec.31,1990)

	historic cost	JV's rate	JV's depreciation	local rate	local depreciation
premises & buildings	1 338 034.93	4.5%	60 211.57	2.5%	33 450.87
machines & equipment	2 215 593.29	9%	199 403.40	5%	110 779.66
means of transportation	140 371.08	18%	25 266.84	10%	14 037.11
new machine	27 734.92				
	-----		-----		-----
	3 721 734.22		284 881.81		158 267.64

$$\text{difference} = 284\,881.81 - 158,267.64 = 126,614.17$$

Percentage of depreciation charges for administrative purpose:

$$23,646 / 284,881.81 = 8.30\%$$

$$126,614.17 * 8.30\% = 10,509.34(\text{directly affecting this year income})$$

$$126,614.17 - 10,509.34 = 116,104.83$$

Cost of stock of finished goods and goods in process at end of year: $179,053.57 + 162,927.16 = 341,980.73$, which accounted for 8.68% of the total production cost of this year:

$$341,980.73 / 3,939,348.58 = 8.68\%$$

$$116,104.83 * 8.68\% = 10,077.90 (\text{in stock, affecting next year income})$$

$$116,104.83 - 10,077.90 = 106,026.93 (\text{affecting this year income})$$

The whole number is:

$$10,509.34 + 106,026.93 + 33,338.75(\text{from last year's adjustment}) = 149,875.02$$

This year profit was adjusted as:

$$302,557.18 + 149,875.02 = 452,432.20$$

Thus, this year profit was increased by: $149,875.02 / 302,557.18 = 49.54\%$

Accumulated profit(before extraordinary items) of the three years (1988, 1989 and 1990) should have been:

$$(- 77,167.42) + (- 58,167.96) + 452,432.20 = 317,096.82$$

But the company reported a cumulative total loss of -32,558.26 (before extraordinary items), the difference is:

$$317,096.82 + 32,558.26 = 349,655.08$$

That means local profit is as much as 3.50 times as joint venture profit.

Table 4-9 summaries the adjustment of profit in 1988, 1989 and 1990.

This case study provides an example of how different accounting treatments affect current profit. In this joint venture, depreciation of fixed assets is a material item in the reconciliation of earnings under joint venture and local accounting regulations. It could alone reduce the reported losses in 1988 and 1989 by 56.98% and 62.65% respectively; and increase profit in 1990 by 49.54%. There are other different accounting treatments between local firms and joint ventures, e.g. treatment of R & D, but this joint venture does not have R & D expenses. Otherwise the company could have reported a further lower profit(or more losses).

Table 4-9 Readjustment of profit(1988,1989 and 1990)
(before extraordinary items)

	under JV's rule	under local rule	difference
1988	- 179,366.11	- 77,167.42	102,198.69
1989	- 155,749.33	- 58,167.96	97,581.37
1990	302,557.18	452,432.20	149,875.02
	-----	-----	-----
total profit	- 32,558.26	317,096.82	349,655.08

Loss is reduced or profit increased by: 56.98%(88);
62.65%(89) and 49.54%(90).

If the company is not on a tax holiday and not entitled to other tax concessions, the normal tax rate is 30% plus 3% local income tax. Therefore, the effect of the different income on taxation is that(not taking into account extraordinary items):

$$317,096.82 * 33\% = 104,641.95$$

This would be the tax obligation of the joint venture in 1990.

According to Chinese income tax law, the joint venture can normally enjoy two years full and three years half tax holidays from the first year of making a profit. The effect of the different income measures on taxation is that, if using local rules, the company would turn from losing money to making a profit in 1990. Then this would have been the first year of the tax holiday.

4.6 SUMMARY AND CONCLUSIONS

In this chapter, a framework for analysing the impact of economic factors on the development of harmonisation of accounting standards and reporting practices has been proposed. The model identifies the main influential factors involved in international harmonisation: the general level of globalisation, the difficulties for foreign users caused by accounting differences, the cost and economic consequences of accounting changes for interested groups, particularly for local groups.

Following this analysis, the case of Chinese joint ventures is discussed as an empirical study of the relationship between these economic factors and harmonisation. It provides evidence that foreign investors get most of the direct benefits from changes in accounting regulations, while local groups bear most of the direct costs and unfavourable economic

consequences. But the host country benefits from the long-run strategic advantage of encouraging foreign investment. Based on this consideration, local groups and regulators are willing to see a real change in accounting take place.

The tax effect may be the most obvious one of the economic consequences caused by the harmonisation of accounting standards. However, economic consequences may not be restricted to taxation. In different countries and on different occasions, there would be other economic consequences. The favourable or unfavourable effect on the interests of a particular party may also vary depending on circumstances.

The chapter does not attempt to assess the entire quantitative impact of these different measurement of profit on taxation or other interest groups. There is no doubt that such an assessment is complex and difficult in view of the fact that some differences in accounting principles are indeterminate in terms of their bias towards increasing or reducing measures of profit. Further, because of lack of published data, a case study approach was necessarily adopted. So that a test of statistical significance is not feasible.

This discussion is proposed here as a first step towards a theory of economic influence on harmonisation of accounting standards. It is fully recognised that the ideas advanced are exploratory and subject to more empirical testing and verification. In interpreting the results of empirical research relating to economic factors, the influence of any other social and cultural factors need to be taken into account.

Next chapter, chapter 5, is a study of accounting choice in Chinese joint ventures, and an assessment of foreign influence on accounting measurement practices.

CHAPTER 5

FOREIGN INFLUENCE ON ACCOUNTING MEASUREMENT PRACTICES - A STUDY OF ACCOUNTING CHOICE IN CHINESE JOINT VENTURES

5.1.SYNOPSIS AND INTRODUCTION

This chapter investigates whether accounting measurement practices appear differently between joint ventures with different foreign backgrounds. The study focuses on the major foreign partners in Chinese joint ventures: US, Japan, Hong Kong and UK investors. Rather than testing individual accounting method choices separately, the study attempts to make an overall assessment of the accounting practices of Chinese joint ventures. For this purpose, a point-system is designed to measure the extent to which a joint venture uses income-decreasing or conservative accounting measurement methods for each joint venture taken from a random sample. Then comparisons of the conservative measurement scale are made between different joint venture groups using univariate and multivariate analyses. The findings support the hypothesis that there are significant differences in accounting choices between joint ventures with different foreign backgrounds. In particular, UK and US joint ventures are using more income-decreasing or conservative accounting methods than HK and Japanese joint ventures are. When the joint ventures tested are further grouped according to their continental backgrounds, significant differences are also found: accounting measurement of Asian joint ventures is less conservative than those of American and European joint ventures. The evidence is generally consistent with the theory of cultural influence on the development of accounting systems internationally.

As to the specific reason for the accounting difference between joint venture groups, some competing hypotheses are examined to see whether they have the predictive power

for the difference: income tax considerations, firm size, political consideration and investor's confidence. The results seem to be mostly consistent with the confidence hypothesis, assuming that accounting tools may be used to deal with uncertainty and business risk. Investors from nearby areas such as Hong Kong and Japan are more familiar with the investment environment than those from America and Europe. The latter then may meet more uncertainty and investment risk. This situation may drive them to choose a more cautious and conservative measurement policy to report their financial position and operational results.

In addition to the portfolio analysis of individual accounting method choices, the study also performs separate tests on the individual accounting treatment for depreciation of fixed assets, provision for loss on stocks, capitalisation of R & D, and inventory valuation method. Systematic measurement patterns are not found across those tests. This result suggests that firms do not make separate, unrelated decisions on individual accounting policies. Rather managers may be concerned with how the combination of methods affects earnings instead of the effect of just one particular accounting method.

5.2 PREVIOUS STUDIES ON ACCOUNTING CHOICE

5.2.1 Three alternative perspectives on accounting method choice

Empirical relation between firm characteristics and unconstrained accounting choices have been well documented.

There are three alternative perspectives on accounting method choice research: the opportunistic behaviour, efficient contracting, and information perspectives. While much of the empirical work on accounting method choice is based on the opportunistic behaviour perspective, some recent studies (e.g. Malmquist 1990; Mian and Smith 1990) attempt to view accounting method choice as a means of improving the monitoring

capabilities of contracts which rely on accounting numbers.

Efficient contracting was the general premise underlying some of the early work on the economic consequences of accounting method choice. This work examined the incentives to choose among accounting methods because of the explicit and implicit contracts that relied on accounting numbers. The efficient contracting perspective with respect to accounting choice implies that accounting methods, like the form of organisation chosen or the form of contracts written, will be selected to minimise agency costs amongst the various parties to the firm. For example, Watts(1977) makes predictions about the likelihood that a company will present financial statements and about the content of those financial statements based on minimising the agency costs between managers, shareholders, and bondholders.

The notion that accounting method choice and the form of financial statements could be driven by opportunistic behaviour was also visible in the early work in this field. for example, Watts and Zimmerman(1978) take the view that managers lobby for accounting standards so as to maximise their own utility, where a manager's utility is affected by the firm's stock price and the manager's compensation. From this perspective and some additional assumptions come hypotheses such as: managers will tend to choose more income-increasing techniques the greater the firm's leverage in an effort to reduce the extent to which accounting -based debt covenants are binding, or managers choose income-increasing techniques to increase their bonuses if their compensation is directly tied to accounting earnings. These hypotheses arise not from maximisation of firm value but from a transfer of wealth between bondholders, shareholders, and management which increases managements's utility because of their holdings of stock and stock options and because of their bonus compensation plans.

Another rationale for accounting choice is the information perspective discussed in Holthausen and Leftwich(1983). If managers have a comparative advantage in providing

information about their firms, we would expect them to be compensated in part on the basis of their ability to provide information about the future cash flows of the firm. Thus, the information perspective suggests that accounting methods are chosen to reveal managers' expectations about the future cash flows of the firm. But the information perspective has not been tested.

These three explanations for accounting technique choice are not mutually exclusive. All may be partial explanations of observed accounting choices and lobbying behaviour in the standard setting process. In looking at the literature in retrospect, it appears that more of the published research has been predicated on the opportunistic behaviour of managers rather than from an efficient contracting perspective. Malmquist(1990) and Mian and Smith (1990) both take an efficient contracting view of the world. Malmquist(1990) provide empirical results that are generally consistent with the efficient contracting model and are inconsistent with the alternative hypothesis, opportunistic behaviour by managers. The evidence suggests that the choice between full cost and successful efforts accounting in the oil and gas industry is governed by the need to efficiently monitor the contracts among the economic agents of the firm. Mian and Smith (1990) provide a positive analysis of a firm's decision to report the operations of a financial subsidiary on a consolidated versus an unconsolidated basis. The evidence suggests that the firm is more likely to choose consolidated reporting the greater the operating, financial, and informational interdependencies between parent and subsidiary. The hypothesis(FASB 94) that firms use unconsolidated financial subsidiaries to understate the fixed claims on their balance sheets is not supported.

The accounting literature, which arose from a literature on efficient contracting as a means of dealing with the conflicts of interest among agents, has nearly abandoned the view that accounting choice is based on efficiency considerations in favour of hypotheses based on opportunistic behaviour.

5.2.2 Conservatism of accounting choice

Many accounting choices for valuation and measurement are between those which increase current income and those which decrease current income. For example, the accelerated depreciation method is an income-decreasing one, while FIFO is regarded an income-increasing method. The selection of income-decreasing methods are often related to the concept of conservatism which systematically encourages fully estimating possible expenses and losses, but discourage recognising any doubtful revenue or gains.

The concept of conservatism is very influential, and widely recognised in Western countries. Some studies are devoted to test how the concept of conservatism affects accounting choices. For example, Skinner(1988) discusses the role of conservatism in determining the accounting lives of fixed assets. There is evidence that accounting lives of fixed assets were underestimated in the United Kingdom and Australia (Skinner 1982; Kirkman and Nobes 1977; Peasnell 1977;) and probably as well in the United States (Skinner 1988). Skinner(1988) rules out inflation as a factor and assessed taxation matters as accounting for, at most, under one-third of the discrepancy between economic and accounting lives of the fixed assets. One other factor is a major possibility, namely, the accounting principle(or concept) of conservatism(or prudence). Conservatism is one of the most strongly entrenched accounting principles. Sterling(1967) argued that it is the fundamental principle of valuation in traditional accounting, and that it is the premise from which the historic cost and realisation rules are derived.

Conservatism represents the accountant's reaction to uncertainty. Assuming that, as in network analysis, uncertainty is typically handled by formulating pessimistic, optimistic, and most likely forecasts, one form of conservatism is the adoption of the pessimistic forecasts. As a consequence, losses are anticipated, but gains are recognised only when realised. In deciding when realisation occurs, a reasonable degree of certainty is required. Conservatism, therefore, involves a pessimistic tendency to underestimate future benefits

and to overestimate future costs. Another form of conservatism is that the forecasts themselves are biased (Hendriksen 1982).

Conservatism could conceivably account for all the underestimation of asset lives if the uncertainty relating to the prediction of their lives is great enough, namely, if optimistic estimates usually prove to be, on average, their actual lives, and the pessimistic estimates are usually, on average, half the optimistic figures. One question is whether there are any factors in addition to conservatism that can account for the understatement. Another question is whether there is any evidence implicating conservatism as a causal factor.

The best evidence relating to conservatism includes, probably, some nonaccounting examples. Conservative estimates and forecast have been found in other studies(e.g. Ascher 1978; Zarnowitz 1967; Cyert and March 1963; Ashton 1984). Ashton(1984) reports an example of conservatism in predicting revenue. He found an "executives' systematic underprediction bias" in the consensus forecasts of advertising revenue by the executives of a magazine. The managers' predictions were low relative not only to actual revenue but also to the predictions generated by a regression model based on data used by the managers in making their forecasts. In none of these cases could either inflation or taxation lives have had an influence. These cases also raise the possibility that conservatism is not confined to accountants but is a basic human characteristic.

An accounting example of conservatism is the study by McDonald designed primarily to examine the supposed objectivity of historic cost data. McDonald(1968) conducted a survey among two groups of CPAs, involving depreciation on a hypothetical fleet of motor cars. The members of one group, the "net realisable value" group, were asked to estimate values of the fleet at the end of each of four years and were given ample information about used car prices. Those in the other group, the "present practice" group, were asked to choose a depreciation method, an economic life(in years or mileage) and a residual value for the fleet. Except in the first year, the cumulative depreciation charges

were significantly higher for the present practice group than for the net realisable value group. Inflation cannot explain even part of the differences, and tax lives could account for no more than part of the difference (the evidence of McDonald as to the relationship of accounting book value and market values).

Skinner (1988) gathers some additional empirical evidence. A questionnaire survey was conducted among chartered accountants employed in industrial and commercial companies in Melbourne. The results show that conservatism is the main factor explaining the underestimation of fixed asset lives. Conservative bias takes two forms: bias in estimating future life, and, where the estimate comprises a range of values, choice of a life toward the lower end of the range.

5.2.3 Portfolios of accounting procedures

Most accounting choice studies attempt to explain the choice of a single accounting method (e.g., the use of accelerated or straight-line depreciation; FIFO or LIFO) instead of the choice of combinations of accounting methods. Focusing on a single accounting method reduces the power of the tests since managers are concerned with how the combination of methods affects earnings instead of the effect on just one particular accounting method Zmijewski and Hagerman (1981).

Zmijewski and Hagerman (1981) investigate firms' choices of a portfolio of four accounting procedures (using bonus plan, debt/equity, and size hypotheses): inventory procedures, depreciation, Investment tax credit, the amortisation period for past service pension costs.

Zmijewski and Hagerman assume that FIFO, straight-line depreciation, flowthrough treatment of the investment credit, and amortisation periods of more than 30 years for past pension costs increase earnings. Others are assumed to decrease earnings. These

definitions undoubtedly introduce some errors; for example, LIFO could increase the present value of earnings for electronics firms whose inventory prices are falling. However, for the majority of firms, the classifications are likely to be correct.

Given two choices for each of the four procedures, there are 16 portfolios that firms can use. To test the effects of political costs and contracting costs on the choice of a portfolio, the effects of the 16 portfolios on the present values of earnings must be determined. Zmijewski and Hagerman assume that the relative effect on earnings of a given portfolio is the same for all firms. Further, they make three different assumptions about the relative effect of each of the four particular procedures to assess the earnings effects of different portfolios.

1) All four procedures have the same impact on reported earnings (i.e., the earnings increasing procedure for depreciation has the same effect on reported earnings as the earnings increasing procedure of the investment tax credit). This assumption reduces the 16 portfolios to five different effects on reported earnings. The extreme earnings decreasing and increasing portfolios(1 and 16) are coded as "1" and "5". All portfolios with one earnings increasing procedure are coded as strategy "2". Portfolios with two earnings increasing procedures are coded as "3" and so forth.

2) The effects of pension and investment tax credit procedures on earnings are assumed to be half the effects of the depreciation and inventory procedures. Among the 16 portfolios, this assumption produces seven different effects on earnings. For example, strategies labelled as "2" have either a pension or investment credit earnings increasing procedure. If a firm has earnings increasing procedures for both pension and investment credit or an earnings increasing procedure for either depreciation or inventory, they are coded as strategy "3" and so forth.

3) The effects of pension and tax credit procedures on earnings are less than one-half the effects of the depreciation and inventory methods. Among the 16 portfolios, the assumption produces nine different earnings effects.

Zmijewski and Hagerman rank the 16 portfolios by their earnings effects under the three different assumptions. They explain which earnings effect is chosen using the relative political and contracting costs of the particular firm. For example, they hypothesise that the higher the political costs of a given firm, the less likely the firm is to choose a portfolio of accounting procedures that increases reported earnings.

Ideally, people would estimate the manager's contracting and political process benefits from particular procedure portfolios (or form a single procedure) and predict the manager's choice on the basis of those benefits. However, it is difficult to specify the relative magnitude of these benefits. Consequently, studies explaining accounting procedure variations use separate independent variables as surrogates for the offsetting incentives and test the direction of the variables' choice effects. Four variables are used to proxy for political costs: size, risk, capital intensity, concentration.

The variables' effect on the managers' choice of a procedure portfolio is estimated using N-Probit analysis. Probit analysis is a statistical procedure, similar to regression analysis, to estimate the linear relation between the independent and dependent variables when the dependent variable takes the values of 1 and 0. N-Probit allows the dependent variable to take multiple (N) discrete values.

The equation estimated by Zmijewski and Hagerman is:

$$\begin{aligned} \text{STRATEGY}(i) = & C_0 + C_1 \text{PLAN}(i) + C_2 \text{RATIO}(i) + C_3 \text{BETA}(i) + C_4 \text{SIZE}(i) \\ & + C_5 \text{INTENSITY}(i) + C_6 \text{DEBT}(i) \quad i = 1, \dots, 300 \text{ firms} \end{aligned}$$

where

PLAN(i) = 1 if firm i has an earnings - based compensation plan in 1975; 0 if not.

RATIO(i) = eight-firm concentration ratio for firm i's industry for 1975

BETA(i) = beta of firm i's stock, estimated using CRSP data

SIZE(i) = total assets of firm i in 1975

INTENSITY(i) = capital intensity of firm i (gross fixed assets/sales)

DEBT(i) = total debt/total assets of firm i in 1975

The predicted sign of each coefficient is noted below each coefficient of equation.

Under the first assumption about the earnings effect of the four procedures (all procedures have an equal effect on earnings), the dependent variable, **STRATEGY(i)**, takes the value 1-5 depending on the relative earnings effect of the particular portfolio. Five is the value for the portfolio that yields the maximum earnings. Under the other assumptions, **STRATEGY(i)** takes values between 1 and 7 and 1 and 9.

In summary, Zmijewski and Hagerman's results provide strong evidence that the manager's choice of a portfolio of accounting procedures varies with the presence of an earnings-based compensation plan, the firm's debt/equity ratio, the firm's size, and the concentration ratio in its industry. The three simple hypotheses are consistent with the evidence.

5.2.4 Important explanatory variables

Christie(1990) uses an exact chi-square test, an asymptotic normal test, and a Bayesian procedure to evaluate the ability of contracting and size theories to explain the data. One conclusion is that at least six variables common to more than one study that investigate contracting and size hypotheses have significant explanatory power. These variables are managerial compensation, leverage, size, risk, and constraints on interest coverage and dividends.

This study extends previous research to address the issue of accounting choice in the context of international joint ventures. This chapter examines the relation between managers' accounting method choice and some unique joint venture characteristics. The test is designed to see whether such variables as foreign equity, total investment, and foreign background have explanatory power.

5.3 DATA AND METHODOLOGY

The study focuses on the unique characteristics of a joint venture and investigates the association between these features and joint venture accounting choice. This information is obtained from a questionnaire including the essential factual data about the name of the joint venture, total investment, local and foreign partner, duration of business, percentage of foreign equity, and the main accounting methods a joint venture used for profit measurement purpose in 1991. The reason to use the method of a questionnaire survey is that Chinese joint ventures and local firms never publish financial accounts and disclose accounting policies they use, so that the only way to know this is by a questionnaire survey. However, Chinese firms are not used to questionnaire surveys. Consequently, a low response rate is expected. Accordingly, a large number of joint ventures were selected for the study.

Previous studies show that there are some other variables which are related to accounting choice, e.g. debt covenant, management compensation, and so on. Because the main concern of this study is whether some unique joint venture characteristics are associated with accounting choice, other common variables which are frequently used in previous studies are not included. Moreover, the inclusion of such information may damage the collection of other essential data. This is because financial data of a firm is regarded as business secret in China. For example, a Chinese firm is particularly reluctant to reveal the information about its profit, costs, debt, and so on. Thus inclusion of these questions in the questionnaire would further reduce the response rate (a copy of the questionnaire is provided in Appendix 5-8).

As the first study on Chinese joint venture accounting, it is necessary to know the overall picture of the situation. A random sampling technique has been used. Up to the end of 1991, there were altogether more than 20,000 equity joint ventures in China. Most joint ventures are located in coastal areas and cities, e.g. Shengzeng, Xiamen, Shanghai, Tianjing and so on. The joint ventures selected for the test are from two coastal cities, Xiamen and Shanghai and an inner province Anhui. Xiamen is in the South-East China coast, which attracted the earliest foreign investment. Shanghai is the largest and the most industrialised city in China. Joint ventures from the inner province of Anhui is used to represent those which are located in areas other than coastal areas. Finally, the data of three China-UK joint ventures obtained from their UK parent companies are also included in the final version of sample. Altogether there were 340 joint ventures selected for the test. 86 replies (including three from UK parent companies) have been received. The response rate is $86/340=25\%$ (table 5-1).

Table 5-1 Response rate-accounting method investigation

	number of jvs selected	number of copies of questionnaire received	response rate
Shanghai	200	66	33%
Anhui	100	15	15%
Xiamen	40	2	5%
others (from UK parent companies)		3	

Total	340	86	25%

Table 5-2

Sample and Population-accounting method investigation

	Average Total investment of a joint venture (\$0,000)	Average Foreign equity of a joint venture (%)	Average duration of a jv (years)
Sample (n=86)	922.86	45.02	17.54
Population (n=1037)	257.87	41.43	14.76

A common problem associated with mail surveys, particularly in the case of a low response rate, is that of potential non-response bias(see e.g.Benke and Street 1992). Various techniques have been suggested in the psychometric literature (e.g.Kanuk and Berenson 1975; Hawkins 1975) to measure the extent of non-response bias. In the current study, potential non-response bias was tested through the 'wave analysis' technique, the responses of individuals received after a certain cut-off date were compared to those received before that date. That is, the mean value of score(see definition of score later in this section), investment and percentage of foreign equity of the earlier response group were compared to those of a later response group, and none indicated a difference at the 0.05 level (see Appendix 5-1). There is no reason to believe that response and non-response joint ventures would be different in their accounting choice. The main reason for the low response rate is simply that mailed questionnaire surveys are not popular in China. Most Chinese joint ventures are unfamiliar with this research approach. Thus, there was no evidence to conclude that non-response bias imposes a serious constraint on the validity of the findings.

While information about the entire population of joint ventures in China is not available, the average total investment, foreign equity and duration of a joint venture has been computed for a larger sample of 1037 joint ventures. Table 5-2 shows that the sample of 86 could be representative of the population in terms of foreign equity and duration. But the average investment of the sample is considerably higher.

The following accounting methods have been selected:

Accounting treatment for depreciation,

Accounting treatment for stock,

Accounting treatment for R and D expenses,

Accounting treatment for intangible assets.

The reason to include these methods is that a joint venture can choose among these profit measurement methods in the framework of Chinese joint venture accounting regulations. For example, it can use the accelerated method or straight-line method; it can also capitalise R & D expenses or not. Some other methods with no flexibility are not included. For example, provision for bad debts are not allowed by Chinese joint venture accounting regulations, therefore this has not been selected.

Different accounting treatments for a certain item may have different effects on the measurement of current income. For instance, an accelerated depreciation method will charge more expenses in the current profit and loss account than the straight-line method, and report a lower current income. When prices are rising, LIFO will charge more expenses than weighted average method, and the weighted average method will charge more than FIFO.

Accounting treatment which will charge more expenses (or recognise less revenue) is usually called a conservative method, or income decreasing method. Others may be called income increasing methods.

In order to evaluate the overall impact of accounting practices for different categories of joint ventures, a point-system has been designed. To test the effects of foreign influence on the choice of accounting method, the impact of the accounting method choice on the present values of earnings must be determined. The first assumption made in the study is that the relative effect on earnings of a given choice is the same for all firms.

Similar to previous study (Zmijewski and Hagerman 1981), two further assumptions are made:

Assumption I

The effects of some accounting methods are assumed to be half the effects of other methods on the current measure of earnings (e.g. shorter period for amortisation of intangible assets have half the effect on earnings of the accelerated depreciation method).

Assumption II

All of the accounting choices have an equivalent effect on current earnings (e.g. the earnings increasing method for depreciation has the same effect on earnings as the earnings increasing method for the intangible assets), except for accounting methods for inventories. This is because there are three methods available, i.e. LIFO, weighted average, and FIFO for inventories. Their relative importance on earnings must be discriminated by three values(1,0.5,0).

A joint venture using a particular conservative method will be assigned one or a half point, based on the assumptions of relative effect of each of the accounting choices firms can use. For example, the accelerated depreciation method or making provision for possible losses on stocks will be assigned a point. A joint venture using the accelerated depreciation method, and also making provision for losses on stocks will be given 2 points. Every joint venture will have a score of points. The more a joint venture uses conservative methods, the more points it gets. Thus the score is an indicator of the level of conservatism in income measurement. Therefore, the score of a joint venture can be used to evaluate its overall accounting behaviour. A comparison will be made between different categories of joint ventures based on their scores. In other words, the score is the dependent variable in this study.

Table 5-3 shows details of the point-system. Note that the three methods, LIFO, weighted average, and FIFO are assigned three values(1, 0.5 and 0) in both assumptions.

Table 5-3 Point-system

Accounting choices -----	Assumption I Point -----	Assumption II Point -----
Use accelerated depreciation method	1	1
Use straight-line method	0	0
Not capitalise R & D expenses	1	1
capitalise R & D expenses	0	0
LIFO	1	1
Weighted average	0.5	0.5
FIFO	0	0
other method for stock	0	0
Make provisions for loss on stocks	1	1
No provisions	0	0
Depreciation period less than regulation ₁	0.5	1
Normal depreciation period	0	0
Residual value estimated less than regulation ₂	0.5	1
Normal residual value	0	0
Amortisation period for intangible assets less than regulation ₃	0.5	1
Normal amortisation period for intangible assets	0	0

¹ Normal depreciation period according to the regulation:
 Buildings and houses: 20 years (minimum)
 Machines: 10 years (minimum)
 Electronics equipment: 5 years (minimum).

² Normal residual value should be as 10% of historic cost of the fixed asset according to the regulation.

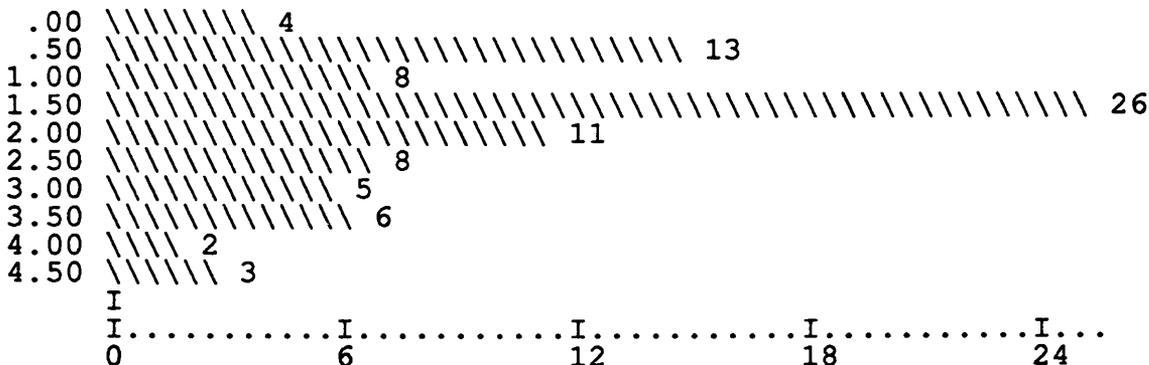
³ Amortisation period for purchased goodwill and patent should be in a period no less than 10 years; for organisation cost should be no less than 5 years.

Table 5-4, 5-5 show the frequencies of the total score the joint ventures have been awarded. The maximum score a joint venture has achieved is 5.5, the minimum is 0, and the mean score is 1.88 under assumption I. Under assumption II the mean score is 2.31, minimum is 0, and maximum is 6.50. Table 5-6 to table 5-10 present the total scores of joint ventures with different foreign country backgrounds under assumption I. For each group, a test of normality is performed. The scores of joint ventures with different foreign country backgrounds under assumption II are provided in Appendix 5-2.

While previous studies discussed individual accounting methods used, this study focuses on an assessment of the portfolio of accounting choice decisions by joint ventures. The advantage of this approach is that the overall accounting behaviour of joint ventures may be examined. However, a particular difficulty is how to assess the relative importance of accounting choice. Ideally it can be achieved by looking at the exact effect of a particular accounting method on profit measurement. But this is impossible, because Chinese joint ventures never publish their financial accounts. So the measurement of conservatism of accounting choice in the point system is rather subjective and arbitrary. However, given the information available, it is hoped that some insight into the impact of accounting policy choices can be expected. The tests are performed on both assumptions.

Table 5-4 Scores of joint ventures(whole sample,n=86)
(assumption I)

Score	Frequency	Percent
.00	4	4.7
.50	13	15.1
1.00	8	9.3
1.50	26	30.2
2.00	11	12.8
2.50	8	9.3
3.00	5	5.8
3.50	6	7.0
4.00	2	2.3
4.50	3	3.5
-----	-----	-----
TOTAL	86	100.0



Mean	1.881	Median	1.500	Std Dev	1.209
Range	4.500	Minimum	0.000	Maximum	4.500
Skewness ^a	0.644	S E Skew ^b	0.260		
Kurtosis ^c	-0.028	S E Kurt ^d	0.514		

Test of normality of dependent variable score(n=86)

	Statistic	df	Significance
K-S (Lilliefors)	.1932	86	.0000*

* Hypothesis of normality is rejected.

^a Skewness is a measure of how lop-sided the data are-i.e. a tendency for more data to occur towards the lower or upper end of the range rather than being evenly distributed or balanced equally on either side of the mid-point of the range. In a normal distribution, data should be balanced equally on either side of the middle-point of the range.

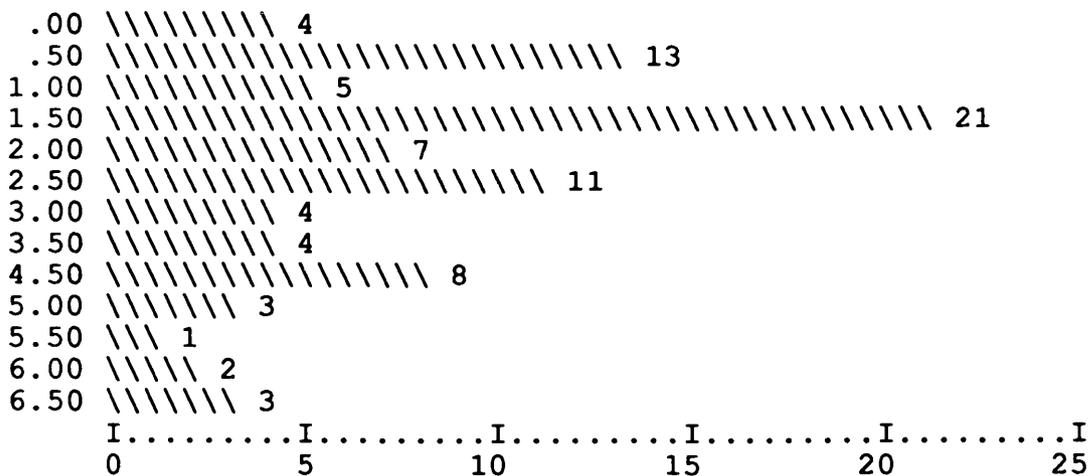
^b S E Skewness, the standard error of the skewness, is a measure of the confidence we can have that the skewness of this sample is a true representation of the skewness of a larger theoretical population.

^c Kurtosis indicates the extent to which the data frequencies peak around the middle value or are flat across the range of values.

^d S E Kurt, the standard error of the Kurtosis, is a measure of the confidence we can have that the kurtosis of this sample is a true representation of the kurtosis of a larger theoretical population.

Table 5-5 Scores of joint ventures (whole sample, n=86)
(assumption II)

Score	Frequency	Percent
.00	4	4.7
.50	13	15.1
1.00	5	5.8
1.50	21	24.4
2.00	7	8.1
2.50	11	12.8
3.00	4	4.7
3.50	4	4.7
4.50	8	9.3
5.00	3	3.5
5.50	1	1.2
6.00	2	2.3
6.50	3	3.5
Total	86	100.0

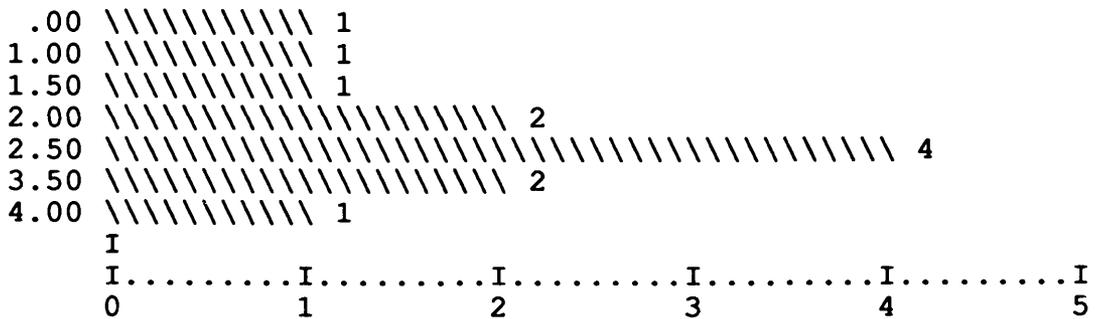


Mean	2.308	Median	1.750	Std dev	1.698
Range	6.500	Minimum	0.000	Maximum	6.500
Skewness	0.877	S E Skew	0.260		
Kurtosis	-0.028	S E Kurt	0.514		

Table 5-6 Scores of US-China joint ventures
(n=12)
(assumption I)

Value	Frequency	Percent	Valid Percent	Cum Percent
.00	1	8.3	8.3	8.3
1.00	1	8.3	8.3	16.7
1.50	1	8.3	8.3	25.0
2.00	2	16.7	16.7	41.7
2.50	4	33.3	33.3	75.0
3.50	2	16.7	16.7	91.7
4.00	1	8.3	8.3	100.0

TOTAL	12	100.0	100.0	



Mean	2.292	Std Err	.323	Median	2.500
Mode	2.500	Std Dev	1.117	Variance	1.248
Kurtosis	.373	S E Kurt	1.232	Skewness	-.484
S E Skew	.637	Range	4.000	Minimum	.000
Maximum	4.000				

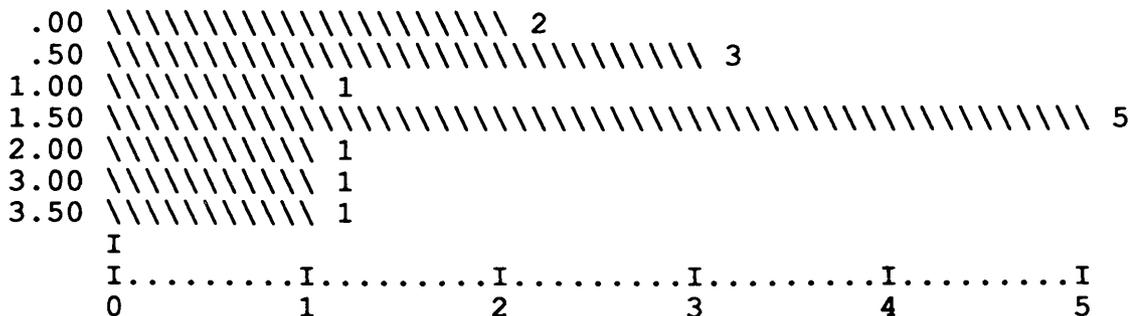
Test of normality of dependent variable score
(US group, n=12)

	Statistic	df	Significance
Shapiro-Wilks	.9518	12	.6173*
K-S (Lilliefors)	.1760	12	> .2000

* Hypothesis of normality is not rejected.

Table 5-7 Scores of Japan-China joint ventures
(n=14)
(assumption I)

Value	Frequency	Percent	Valid Percent	Cum Percent
.00	2	14.3	14.3	14.3
.50	3	21.4	21.4	35.7
1.00	1	7.1	7.1	42.9
1.50	5	35.7	35.7	78.6
2.00	1	7.1	7.1	85.7
3.00	1	7.1	7.1	92.9
3.50	1	7.1	7.1	100.0
<hr/>				
TOTAL	14	100.0	100.0	



Mean	1.321	Std Err	.275	Median	1.500
Mode	1.500	Std Dev	1.030	Variance	1.062
Kurtosis	.301	S E Kurt	1.154	Skewness	.746
S E Skew	.597	Range	3.500	Minimum	.000
Maximum	3.500				

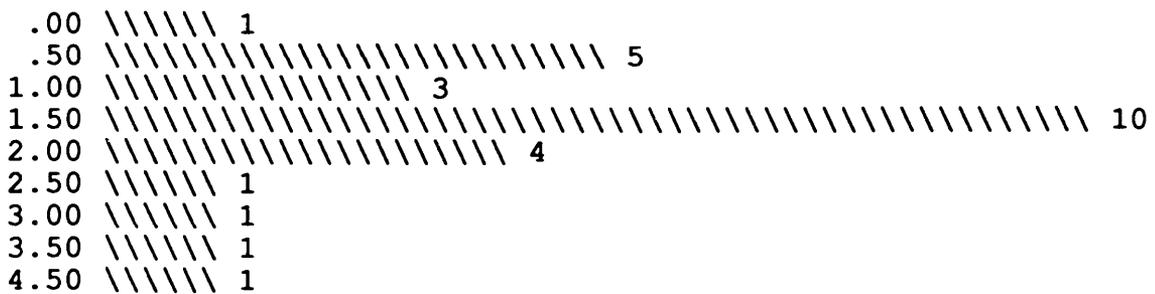
Test of normality of dependent variable score
(Japan group, n=14)

	Statistic	df	Significance
Shapiro-Wilks	.9094	14	.2106*
K-S (Lilliefors)	.2169	14	.0730

* Hypothesis of normality is not rejected.

Table 5-8 Scores of HK-China joint ventures
(n=27)
(assumption I)

Value	Frequency	Percent	Valid Percent	Cum Percent
.00	1	3.7	3.7	3.7
.50	5	18.5	18.5	22.2
1.00	3	11.1	11.1	33.3
1.50	10	37.0	37.0	70.4
2.00	4	14.8	14.8	85.2
2.50	1	3.7	3.7	88.9
3.00	1	3.7	3.7	92.6
3.50	1	3.7	3.7	96.3
4.50	1	3.7	3.7	100.0
TOTAL	27	100.0	100.0	



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Mean	1.556	Std Err	.189	Median	1.500
Mode	1.500	Std Dev	.984	Variance	.968
Kurtosis	2.160	S E Kurt	.872	Skewness	1.174
S E Skew	.448	Range	4.500	Minimum	.000
Maximum	4.500				

Test of normality of dependent variable score
(Hong Kong group, n=27)

	Statistic	df	Significance
Shapiro-Wilks	.8924	27	< .0100*
K-S (Lilliefors)	.2262	27	.0010

* Hypothesis of normality is rejected.

Table 5-9 Scores of UK-China joint ventures
(n=8)
(assumption I)

Value	Frequency	Percent	Valid Percent	Cum Percent
1.00	1	12.5	12.5	12.5
1.50	2	25.0	25.0	37.5
2.00	1	12.5	12.5	50.0
2.50	1	12.5	12.5	62.5
3.00	1	12.5	12.5	75.0
3.50	1	12.5	12.5	87.5
4.50	1	12.5	12.5	100.0
TOTAL	8	100.0	100.0	

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1.00 \\\\\\\\\\\\\\\\\\\ 1
1.50 \\\\\\\\\\\\\\\\\\\ 2
2.00 \\\\\\\\\\\\\\\\\\\ 1
2.50 \\\\\\\\\\\\\\\\\\\ 1
3.00 \\\\\\\\\\\\\\\\\\\ 1
3.50 \\\\\\\\\\\\\\\\\\\ 1
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Mean	2.438	Std Err	.417	Median	2.250
Mode	1.500	Std Dev	1.178	Variance	1.388
Kurtosis	-.396	S E Kurt	1.481	Skewness	.634
S E Skew	.752	Range	3.500	Minimum	1.000
Maximum	4.500				

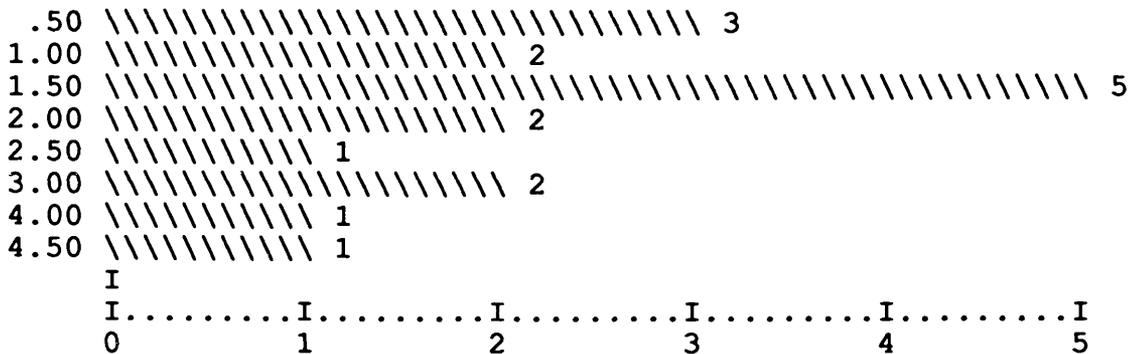
Test of normality of dependent variable score
(UK group, n=8)

	Statistic	df	Significance
Shapiro-Wilks	.9522	8	.7022*
K-S (Lilliefors)	.1619	8	> .2000

* Hypothesis of normality is not rejected.

Table 5-10 Scores of other joint ventures
(n=17)
(assumption I)

Value	Frequency	Percent	Valid Percent	Cum Percent
.50	3	17.6	17.6	17.6
1.00	2	11.8	11.8	29.4
1.50	5	29.4	29.4	58.8
2.00	2	11.8	11.8	70.6
2.50	1	5.9	5.9	76.5
3.00	2	11.8	11.8	88.2
4.00	1	5.9	5.9	94.1
4.50	1	5.9	5.9	100.0
TOTAL	17	100.0	100.0	



Mean	1.882	Std Err	.286	Median	1.500
Mode	1.500	Std Dev	1.180	Variance	1.392
Kurtosis	.228	S E Kurt	1.063	Skewness	.901
S E Skew	.550	Range	4.000	Minimum	.500
Maximum	4.500				

Test of normality of dependent variable score
(Other country group, n=17)

	Statistic	df	Significance
Shapiro-Wilks	.9035	17	.0819*
K-S (Lilliefors)	.2153	17	.0351

* Hypothesis of normality is rejected at less than ten percent significance level.

5.4 RESULTS

5.4.1 Descriptive statistics

The study focuses on the major foreign partners in Chinese joint ventures: US, Japan, Hong Kong and the UK. Further, country groupings are considered: the US and UK is similar in culture and regarded as one group, and Japan and Hong Kong is another group. The foreign partners are further assigned into continental groups: Asia, Europe and America. The purpose of the test is to examine whether there is a difference in accounting patterns between the joint ventures with different foreign partners. In other words, the study is concerned with whether different foreign partners have different influences on Chinese joint venture accounting choices. Descriptive statistics about these joint ventures are presented in table 5-11.

More than thirty percent of foreign investors come from Hong Kong which accounts for the largest group in the sample. Next in number is Japan. US and UK are the third and fourth largest investors. The rest of the foreign partners come from Thailand, Germany, Singapore, Italy, Canada, and so on. But 8 joint ventures did not specified its foreign partners(table 5-11).

Table 5-11 Descriptive statistics of Chinese joint ventures
(whole sample, n=86)

Major foreign partners			Investment level (\$0,000)			Duration level (years)		
Number	%		Number	%		Number	%	
HK	27	31.4	\$000-100	24	27.9	1-9(yr)	1	1.2
Japan	14	16.3	\$100-250	19	22.1	10-19	54	62.8
US	12	14.0	\$250-1000	26	30.2	20-29	20	23.3
UK	8	9.3	\$1000+	14	16.3	30+	11	12.8
other	17							
	8*	9.3		3**	3.5			
	--	----		--	----		--	----
	86	100.0		86	100.0		86	100.0

Foreign equity

	Number	%
0-20%	0	0.0
21%-49%	38	44.2
50%	30	34.9
51%-75%	17	19.8
75%+	1	1.2
	--	----
	86	100.0

* 8 joint ventures did not specify their foreign partners.

** 3 joint ventures omitted the number of total investment.

	Mean	Std dev	Median	Minimum	Maximum
Investment (\$0,000)	922.86	2114.193	250.00	5.00	15290.00
Foreign equity(%)	45.02	14.11	50.00	25.00	97.00
Duration (years)	17.54	9.54	15.00	9.00	50.00

Table 5-12 presents the descriptive statistics for the joint ventures with major foreign countries. Organisation costs (also called start-up costs) is the main intangible asset in Chinese joint ventures, so that the ratio of organisation costs to total investment is also presented.

Chinese joint ventures with different foreign backgrounds are similar in terms of foreign equity (table 5-12). But there is a significant difference in duration of business ($F=7.6816$, $p=0.0000$). The difference in firm size (total investment is a proxy of firm size) between these groups is also not statistically significant ($F=0.8661$, $p=0.4888$). In spite of this, Hong Kong and Japanese joint ventures seem relatively smaller than other joint ventures. For example, the mean investment (\$4.76 million) of Hong Kong joint ventures is only approximately one-fourth of that (\$16.72 million) of US joint ventures. Similarly, joint ventures with Asian countries have a lower investment level than those with European and American companies. However, Hong Kong and Japanese joint ventures account for nearly fifty percent of the sample. This may suggest an advantage in terms of local knowledge and culture on the part of nearby countries.

5.4.2 Univariate analyses

The study concerns whether there are different patterns in choosing accounting methods between joint ventures with different country backgrounds and continental backgrounds. First a test is carried out to see whether there is an accounting difference between joint ventures with different foreign country backgrounds, e.g. the difference between US-Chinese and Japanese-Chinese joint ventures. Then another two tests are conducted to see whether there are any accounting differences between joint ventures with different country group backgrounds and continental backgrounds.

Table 5-12 Descriptive statistics of joint ventures
with different foreign country backgrounds

	Number	Investment (10thousand)		Foreign Equity(%)		Duration (years)		Orgaratio*	
		Mean	S.Dev	Mean	S.Dev	Mean	StdDev	Mean	StdDev
US	12	1672	4306	41.8	15.0	15.42	6.56	0.0143	0.0216
Japan	14	521	659	43.9	13.0	16.64	5.94	0.0545	0.0865
HK	27	476	1231	41.9	16.9	13.30	4.12	0.0279	0.0289
UK	8	1007	594	46.8	8.8	30.57	13.75	0.0261	0.0300
Others	25	1133	1810	48.8	9.8	20.00	10.61	0.0299	0.0561
		F=0.8661		F=0.7976		F=7.6816		F=0.7097	
		p=0.4888		p=0.5306		p=0.0000		p=0.5901	

Entire									
Popu- lation	86	864	2048	44.2	13.9	17.29	8.99	0.0315	0.0495

*ratio of organisation costs to total investment

5.4.2.1 Individual country test

The first test is to examine whether the average scores of the four major foreign investor groups, i.e. investors from US, UK, Japan and Hong Kong are different.

The technique used here is the analysis of variance (ANOVA) procedure for determining whether or not the means of more than two populations are equal. With regard to the statistical method, there are two alternatives available, parametric and non-parametric. The parametric F-test is a powerful test, but, it is only appropriate on the following assumptions:

- 1) The sample must be independent random samples.
- 2) The random dependent variable of interest for each population has a normal probability distribution. In this study, this assumption would require that the random variable of interest, score, be normally distributed for each of the country groups under study.
- 3) The variance associated with the random variable must be the same for each population. In this study, this assumption would require that the variance of scores be the same for countries in each of the country groups (Anderson et al 1990,pp435 and Groebner and Shannon 1989, pp510).

Alternatively, some nonparametric tests are available. Generally speaking, if the necessary probability distribution assumptions for the population are appropriate, parametric methods provide a more powerful or more discerning statistical procedure than non-parametric tests (Anderson et al 1990,pp728; and Siegel and Castellan 1988,pp36). But in many cases where a nonparametric method as well as a parametric method can be applied, the nonparametric method is almost as good or almost as powerful as the para-

metric method(Anderson et al 1990,pp728). And in some cases, where the assumptions required by parametric methods are inappropriate, only nonparametric methods are available.

There is evidence that the required assumptions for parametric methods may be violated. It is observed that the dependent variable score is not normally distributed (see table 5-4 to 5-10). Accordingly, the nonparametric method is performed here (However, the results of F-test are also presented in an Appendix 5-3 which are similar to the results from the nonparametric test). The non-parametric method used in this study is the Kruskal-Wallis one-way analysis of variance by ranks. The Kruskal-Wallis one-way ANOVA is regarded as an extremely useful test for deciding whether k independent samples are from different populations (Siegel and Castellan 1988). This test provides a chi-square value from which a significance level may be assessed. If the value of chi-square is large enough, the null hypothesis that the samples come from populations with equal means is then rejected(Groebner and Shannon 1989, pp713).

The following hypothesis is tested:

Ho: There is no difference in accounting choices between joint ventures with different foreign backgrounds.

Alternative: There is a difference in accounting choices between joint ventures with different foreign backgrounds.

There have been some studies to address relative conservatism in accounting measurement between different countries. For example, Weetman and Gray (1991) found evidence that UK GAAP are significantly less conservative than US GAAP in terms of the impact on profits. It would be interesting to see whether the difference between UK and US GAAP would affect the accounting measurement of their joint ventures in China. If

US GAAP are more conservative, it is expected that US joint venture would get higher score than UK joint ventures. On the other hand, Hong Kong is a British colony, and using similar accounting standards, so it is expected that no significant differences between HK and UK joint ventures will be found. The results are presented in table 5-13.

In order to examine the sensitivity of the effect assumption, the test is carried out under assumption I that some methods have only half as much the effect on income as others, and under assumption II of equal effect as well. The results from both assumption are similar. Under both assumptions, Table 5-13 and 5-14 shows that UK joint ventures have the highest average score 2.4375 and 3.4375, next, US joint ventures 2.2917 and 2.9167, while Hong Kong and Japanese joint venture get the lowest scores, 1.5556 , 1.8889 and 1.3214, 1.7857, respectively.

The score a joint venture gets indicates the extent to which it uses income-decreasing accounting methods or conservative methods. The score can thus be used to represent a conservatism scale. Under both assumptions, the average score of Hong Kong joint ventures and Japanese joint ventures are lower than the score for the entire population, 1.7885. In contrast, the average scores of US and UK joint ventures are much higher than the average for the population.

Table 5-13 Kruskal-Wallis test of mean(average) scores of joint ventures with different foreign country backgrounds (assumption I)

For Entire Population: Average score = 1.7885

	Mean	Std Dev	Cases
For Entire Population	1.7885	1.1152	78
1.00 US	2.2917	1.1172	12
2.00 Japan	1.3214	1.0304	14
3.00 Hong Kong	1.5556	0.9838	27
4.00 UK	2.4375	1.1783	8
5.00 Other foreign partner	1.8824	1.1796	17

$$x^2=9.7136 \quad p=0.0455$$

Table 5-14 Kruskal-Wallis test of mean scores of joint ventures with different foreign country backgrounds (under assumption II)

For Entire Population: Average score = 2.3462

	Mean	Std Dev	Cases
For Entire Population	2.3462	1.7270	78
1.00 US	2.9167	1.5349	12
2.00 Japan	1.7857	1.5281	14
3.00 Hong Kong	1.8889	1.5275	27
4.00 UK	3.4375	2.0605	8
5.00 Other foreign partner	2.6176	1.9083	17

$$x^2=8.7421 \quad p=0.0679$$

Table 5-13, under assumption I, shows that at a less than five percent significance level ($\chi^2=9.7136$ $p=0.0455$), the hypothesis of no difference is rejected in favour of the alternative that there are differences in average score between different groups¹.

The result under assumption II(table 5-14) is similar, though at a little bit weaker significance level. This suggests that accounting choice between joint ventures with different foreign backgrounds may follow a different pattern. Japan and Hong Kong joint venture accounting measurement practices are less conservative than US and UK joint ventures.

In order to examine the differences in scores between individual country backgrounds, another non-parametric test for score differences of country background are carried out. The non-parametric test used here is Mann-Whitney test.

¹ The interpretation of the results from a nonparametric test such as Kruskal-Wallis one-way ANOVA used here and Mann-Whitney test used latter in this study need further discussion. The Kruskal-Wallis one-way ANOVA is considered similar to the parametric F-test and Mann-Whitney test is considered similar to the parametric t-test, except that the former does not require any assumptions about the form of the probability distribution from which the measurements come. But the interpretation of results is somewhat different. The nonparametric test is used to determine whether or not two or more populations are identical. Parametric statistical tests, such as the F and t test, test the equality of two or more population means. When we reject the hypothesis that the means are equal, we conclude that the populations differ only in their means. When we reject the hypothesis that the populations are identical using the Kruskal-Wallis and Mann-Whitney test, we cannot state how they differ. The populations could have different means, different variances, and/or different forms. Nonetheless, if we believe that the populations are the same in very way except for the means, a rejection of H_0 using the nonparametric method implies that the means differ. Quite a number of authors interpret the results in this way(e.g. Groebner and Shannon 1989, pp714). This interpretation is also seen in accounting literature(e.g. Cushing and LeClere 1992, Gaver et al 1992). In this study, the rejection of the null hypothesis that the populations are identical indicates that not all the average scores of each country group are equal.

The hypotheses for the Mann-Whitney test are as follows:

Ho: The two populations are identical

Ha: The two populations are not identical

When the sample size is less than 30, a U-statistic is given. Otherwise a Z-statistic is given. On most occasions, the significance level of the two are very close. All the tests are repeated under both the two basic assumptions. Table 5-15 summarises the results.

While no differences were found between the UK and US, and between the Japan and Hong Kong joint ventures, in all other cases there are significant difference between the UK and HK, UK and Japan, US and Japan(table 5-15). These results give rise to some questions. For example, since US accounting is thought to be more conservative than UK accounting(Weetman and Gray 1991), why do UK and US joint ventures get similar scores? On the other hand, if Hong Kong and the UK are using similar accounting standards, why are there significant differences between HK and UK joint ventures?

Table 5-15 Mann-Whitney tests for mean scores of joint ventures with different foreign country backgrounds

Panel A. Hong Kong vs UK

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
Hong Kong	1.5556	0.9838	1.8889	1.5275
UK	2.4375	1.1783	3.4375	2.0605
UK > HK	Z=1.95	p=0.025	Z=1.93	p=0.026

Panel B. Japan vs UK

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
Japan	1.3214	1.0304	1.7857	1.5281
UK	2.4375	1.1783	3.4375	2.0605
UK > Japan	U=26.0	p=0.021	U=28.0	p=0.030

Panel C. US vs UK

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
US	2.2917	1.1172	2.9167	1.5349
UK	2.4375	1.1783	3.4375	2.0605
US not = UK	U=47.5	p=0.970 (two tailed test)	U=42.0	p=0.678 (two tailed test)

Panel D. Japan vs US

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
US	2.2917	1.1172	2.9167	1.5349
Japan	1.3214	1.0304	1.7857	1.5281
US > Japan	U=41.0	p=0.014	U=49.5	p=0.038

Panel E. Japan vs Hong Kong

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
Japan	1.3214	1.0304	1.7857	1.5281
Hong Kong	1.5556	0.9838	1.8889	1.5275
HK not= Japan	Z=0.82	p=0.411 (two tailed test)	Z=0.25	p=0.801 (two tailed test)

One possible reason for the difference may be firm size. Previous studies suggest that larger firms tend to use more conservative methods than smaller firms. Firm size is used as a proxy for political costs. As shown in table 5-12, HK and Japanese joint ventures are relatively smaller than UK and US joint ventures. When the results show that more conservative methods are used in UK and US joint ventures, it seems that it is consistent with the firm size hypothesis. But, the difference in firm size between UK,US and HK,Japanese joint ventures are not statistically significant(table 5-12). Moreover, at this stage, large foreign investments in joint ventures are particularly encouraged by the Chinese government. There is no evidence that large joint ventures will suffer more political costs than small joint ventures at least in the present situation. Finally, in following multivariate analyses, firm size(i.e. total investment) is included. After controlling for this factor, the result is the same.

One explanation has to do with tax considerations. Generally speaking, income-decreasing accounting methods will reduce income tax obligations. So managers of firms tend to use income-decreasing methods to avoid more income tax. Particularly, for foreign investors who perceive a high uncertainty and risk with investment in Chinese joint ventures, they would try to get tax benefits at the early stage rather than later. This income tax consideration can be related to accounting methods. An income-decreasing accounting method may help a joint venture get an earlier tax benefit. Thus UK and US investors may tend to prefer an earlier tax benefit, because they perceive a higher uncertainty and risk with their investment than HK and Japanese investors do.

Therefore, the most likely explanation for the difference in accounting measurement patterns between the two groups may be due to confidence about investment in China. Because Japan and Hong Kong are geographically near China, and investors from there are more familiar with the Chinese situation, they are likely to be more confident than

those from America and Europe, who are relatively unfamiliar with the investment environment of China. UK and US investors may perceive more uncertainty and risk than HK and Japanese investors. This can also explain the situation of HK and UK joint venture accounting. Although accounting standards are similar in HK and the UK, the accounting difference between HK and UK joint ventures may reflect the fact that UK investors are more cautious, and less confident than HK investors.

Other possible factors such as debt covenants, management compensation schemes are very difficult to observe. They are not included in this study. It is not likely that foreign background would be a proxy for these omitted variables.

Yet, another factor which might be relevant to accounting choice is political consideration by nearby countries. This consideration is also related to geographical location and culture. Nearby countries and regions such as Japan, particularly Hong Kong, have a stronger desire to keep and develop a friendly relationship with China. There is evidence that this consideration affects their economic, business and financial policies involved with China. These policies may sacrifice short-term economic interest for long-term political and economic benefit. Does it affect their decision of accounting choice? It might be. If accounting policy involves tax cash flow between Chinese tax authority and their joint venture, they may tend to use accounting policy which would create higher tax obligation in return to benefit a long-term rapport with Chinese authority. It seems that the findings from this study are consistent with this hypothesis. It is an interesting area and direction for further research which will explore the relationship between this sort of political consideration and accounting choice.

5.4.2.2 Country grouping test

This conclusion was further confirmed by another test in which UK and US joint ventures are grouped as one category which is compared with the group combining Japan

and Hong Kong joint ventures together. Table 5-16 shows descriptive statistics for these two groups.

Again, HK and Japanese joint ventures are smaller than US and UK groups, but the difference is not significant($F=1.5108, p=0.2277$). Foreign equity of the two groups is very close(US & UK, 43.8%; HK & Japan, 42.6%). But duration of business is significantly different($p=0.01$).

Table 5-16 Descriptive statistics of joint ventures
with different foreign country group backgrounds
(n= 78)

	Investment (10thousand)		Foreign Equity(%)		Orga-ratio		Duration (years)	
	Mean	S.Dev	Mean	S.Dev	Mean	StdDev	Mean	StdDev
US & UK (n=20)	1406	3312	43.8	12.9	0.0197	0.0251	21.00	12.07
Japan & HK (n=41)	492	1057	42.6	15.5	0.0368	0.0545	14.44	5.01
Others (n=17)	1132	1810	48.8	9.8	0.0299	0.0561	20.00	10.61
	F=1.5108		F=1.2172		F=0.4750		F=4.9070	
	p=0.2277		p=0.3018		p=0.6252		p=0.0100	

The Kruskal-Wallis test is carried out to examine the mean scores of these groups. The null hypothesis is that these groups come from the same population. A Mann-Whitney test is then performed to compare the mean scores as between the US and UK group and HK and Japan group. All the tests are repeated under both assumption I and II. Table 5-17 and 5-18 presents the results.

The Kruskal-Wallis test in table 5-17 rejects the null hypothesis that these groups come from a single population at about the one percent significance level. A one-tailed Mann-Whitney test in table 5-18 shows that the mean score of the US and UK group is much higher than that of HK and Japan($p < 0.01$), which further confirms that accounting measurement is more conservative in US and UK joint ventures than HK and Japanese joint ventures.

Table 5-17 Kruskal-Wallis test of mean scores of joint ventures with different foreign country group backgrounds (n=78)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
For Entire Population (n=78)	1.7885	1.1152	2.3462	1.7270
US and UK (n=20)	2.3500	1.1133	3.1250	1.7311
Japan & HK (n=41)	1.4756	0.9934	1.8537	1.5093
Others (n=17)	1.8824	1.1796	2.6176	1.9083
	$\chi^2=8.9435$ p=0.0114		$\chi^2=8.4907$ p=0.0143	

 Table 5-18 Mann-Whitney test for mean scores of joint ventures with different foreign country group backgrounds

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
US & UK (n=20)	2.3500	1.1133	3.1250	1.7311
Japan & HK (n=41)	1.4756	0.9934	1.8537	1.5093
US&UK>Japan&HK	Z=3.0385, p=0.0012		Z=2.846, p=0.0044	

5.4.2.3 Continental grouping test

In order to test the robustness of the results of the study, the same tests are repeated on joint venture groups with different continental backgrounds (i.e. America[US, Canada], Europe[UK, Italy, Germany] and Asia[HK, Japan, Singapore, Thailand etc.]). These tests further compare the mean scores of joint ventures with foreign partners from different continents. Descriptive statistics are shown in table 5-19.

As seen in table 5-19, Asian joint ventures are smaller than the other two groups, the European and American groups, though the difference is still not significant($F=1.7472, p=0.1823$). Foreign equity of the three groups are not statistically different($p=0.2907$). But the duration of business is again significantly different($p=0.0000$) between these groups.

The Kruskal-Wallis one-way ANOVA and Mann-Whitney tests are performed to examine whether there are significant differences in mean scores between these groups. All tests are under both assumptions I and II. The results are summarised in table 5-20 to table 5-23.

From table 5-20 there are significant differences found between continental groupings under both assumptions($p<0.05$). Further tests(table 5-21 to 5-23) suggest that American and Asian groups, and European and Asian groups are different, though the null hypothesis that there is no difference between the Asian and European groupings is rejected only at a marginal significance level under assumption II ($p=0.0958$). No difference was found between European and American joint ventures at any conventional significance level($p=0.3644$, and $p=0.5502$).

Table 5-19 Descriptive statistics of
 joint ventures with different continental backgrounds
 (n=78)

	Investment (10thousand)		Foreign Equity(%)		Orga-ratio		Duration (years)	
	Mean	S.Dev	Mean	S.Dev	Mean	StdDev	Mean	StdDev
Asia (n=51)	555	1123	43.9	14.4	0.0373	0.0562	15.14	5.69
Europe (n=14)	1267	1614	48.8	9.5	0.0219	0.0239	27.23	14.39
America (n=13)	1625	4126	40.5	15.1	0.0143	0.0216	15.77	6.41
	F=1.7427		F=1.2560		F=0.7389		F=12.4904	
	p=0.1823		p=0.2907		p=0.4837		p= 0.0000	

Table 5-20 Kruskal-Wallis test of mean scores
of joint ventures with different continental backgrounds
(n=78)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
America (n=13)	2.4231	1.1699	3.1923	1.7741
Asia (n=51)	1.5490	1.0259	2.0000	1.5684
Europe (n=14)	2.0714	1.1579	2.8214	1.9671
	$\chi^2=8.0587$ p=0.0178		$\chi^2=6.3332$ p=0.0421	

Table 5-21 Mann-Whitney Test of mean scores
of joint ventures with different continental backgrounds
(America vs Asia)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
America (n=13)	2.4231	1.1699	3.1923	1.7741
Asia (n=51)	1.5490	1.0259	2.0000	1.5684
America>Asia	Z=2.6994, p=0.0035		Z=2.4531, p=0.0071	

Table 5-22 Mann-Whitney test of mean scores
of joint ventures with different continental backgrounds
(Asia vs Europe)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
Asia (n=51)	1.5490	1.0259	2.0000	1.5684
Europe (n=14)	2.0714	1.1579	2.8214	1.9671
Europe>Asia	Z=1.5777, p=0.0573		Z=1.3059, p=0.0958	

Table 5-23 Mann-Whitney test of mean scores
of joint ventures with different continental backgrounds
(America vs Europe)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
America (n=13)	2.4231	1.1699	3.1923	1.7741
Europe (n=14)	2.0714	1.1579	2.8214	1.9671
America not= Europe	U=72.5, p=0.3644 (2-tailed test)		U=78.5 p=0.5502 (2-tailed test)	

In sum, from the univariate analyses, across all the tests on different joint venture groups, the results are surprisingly similar. Joint ventures with foreign investors near China have a less conservative score than those with foreign partner far away from China. This suggests that HK, Japan, and other Asian foreign investors, though they may use different accounting methods at home, follow a similar accounting measurement pattern in Chinese joint ventures. This measurement pattern is less conservative than that of US, UK and other American and European partners, where conservatism levels may also be different (Weetman and Gray 1991). Assuming that to the extent to which a foreign partner can influence the accounting practices of joint ventures, a possible reason for the different patterns in accounting measurement between these joint venture groups is that foreign partners near China are more familiar with the Chinese investment environment, while investors from America and Europe are not. Thus these investors from far away countries are less confident, which may lead to a more cautious, more conservative accounting policy in their joint ventures. This result is also consistent with political consideration hypothesis.

5.4.3 Multivariate analyses

Multivariate analyses are used to examine the effects of different foreign backgrounds on the accounting choice simultaneously, after controlling for other determinants of the accounting choices. The dependent variable is the score of a joint venture which is used to measure its scale of conservative accounting measurement. The independent variables are foreign countries and a number of other relevant factors. Total investment is used as a measure of firm size. Firm size, proposed as a proxy for political visibility as well as other omitted variables, has been related to accounting choices in many previous studies (see Holthausen and Leftwich 1983). The political visibility hypothesis predicts that the larger the firm, the less likely are managers to choose income increasing accounting methods. It is also important to include a measure of firm size because the US and UK joint ventures are relatively larger than HK and Japanese joint ventures in this sample.

The coefficient of total investment is expected to be positive, if the political hypothesis is true.

Another independent variable is foreign equity. Foreign influence on management style including accounting policy of joint venture may be related to its equity. Since this variable has never been tested in previous studies, and there is not a significant difference in foreign equity between the main joint venture groups to be tested, it is difficult to anticipate the sign of the coefficient of foreign equity.

The accounting treatment for intangible assets is an important part of this study. The most important part of intangible assets in Chinese joint ventures is organisation costs(also called start up costs), while only one joint venture has purchased goodwill, and a few joint ventures have other intangible assets such as purchased patents and know-how. So the ratio of organisation costs to total investment is used as an independent variable. The sign of the coefficient of this variable is expected to be negative, for to amortise a larger amount of organisation costs would need a longer period. The coefficients of UK,US, EUROPE, AMERICA are expected to be positive, while that of HK, JAPAN, ASIA are expected to be negative³.

³ The multiple regression model is used under the following assumptions:

1. The relationship between the dependent and independent variables is linear.
 2. The residuals(errors) are independent.
 3. The variance of the residuals is constant over the range of the independent variables.
 4. The residuals are normally distributed(Groebner and Shannon 1989).
- These assumptions have been examined, and no evidence was found that these assumptions were seriously violated.
A test of colinearity between variables of the multiregression models was also carried out. The result, which is presented in Appendix 5-4, did not suggest that such a problem existed.

The following multiregression models are estimated:

$$\text{Score} = a + b_1 \text{INVEST} + b_2 \text{FOREIGNE} + b_3 \text{ORGRATIO} + b_4 \text{US} + b_5 \text{JAPAN} + b_6 \text{HK} + b_7 \text{UK}$$

$$\text{Score} = a + b_1 \text{INVEST} + b_2 \text{FOREIGNE} + b_3 \text{ORGRATIO} + b_4 \text{USUK} + b_5 \text{JAHK}$$

$$\text{Score} = a + b_1 \text{INVEST} + b_2 \text{FOREIGNE} + b_3 \text{ORGRATIO} + b_4 \text{ASIA} + b_5 \text{EUROPE}$$

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

UK: dummy variable, UK=1=joint venture with UK company, otherwise UK=0;

US: dummy variable, US=1=joint venture with US company;

Japan: dummy variable, Japan=1=joint venture with Japanese company;

HK: dummy variable, HK=1=joint venture with HK company;

Asia: dummy variable, Asia=1=joint venture with Asian company;

America: dummy variable, America=1=joint venture with American company;

Europe: dummy variable, Europe=1=joint venture with European company;

USUK: dummy variable, USUK=1=joint venture with US or UK company;

JAHK: dummy variable, JAHK=1=joint venture with Japanese or HK company.

First, test is carried out under assumption I(table 5-24, 5-25).

Table 5-24 Multivariate analysis: joint ventures with different foreign country backgrounds (assumption I)

Dependent variable = score

Independent variables (predicted sign)	Equation (t statistics)				
	1	2	3	4	5
Constant	2.4140 (2.903)***	1.6914 (3.034)***	2.8901 (4.374)****	1.7777 (3.053)***	2.7594 (3.812)*
INVEST(+)	-8.3108 (5) (0.511)	-1.2701 (5) (0.087)	-1.2407 (4) (0.820)	-9.3960 (6) (0.064)	-1.01 (4) (0.626)
FOREIGNE(-)	-0.0044 (0.370)	-1.0378 (0.009)	-0.0064 (0.556)	-9.7364 (4) (0.086)	-0.0061 (0.531)
ORGRATIO(-)	-6.1953 (1.735)*	-6.2881 (1.828)*	-6.5622 (1.889)*	-5.8290 (1.637)	-6.2957 (1.770)*
UK(+)	0.5459 (0.853)	0.9927 (1.929)*		0.9297 (1.752)*	0.3100 (0.548)
US(+)	0.5110 (0.804)	0.9929 (2.069)**		0.9414 (1.911)*	
Japan(-)	-0.6711 (1.147)		-1.0166 (2.225)**	-0.2459 (0.572)	-0.9224 (1.875)*
HK(-)	-0.5803 (1.070)		-0.9467 (2.487)**		-0.8567 (2.050)**
adj.R ²	0.13	0.14	0.15	0.13	0.14
F	1.9430	2.4589	2.6016	2.0682	2.1791
Significance	0.0902	0.0498	0.0401	0.0801	0.0665

*=p<0.10; **=p<0.05; ***=p<0.01; ****=p<0.001

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

UK: dummy variable, UK=1=joint venture with UK company, other wise UK=0;

US: dummy variable, US=1=joint venture with US company;

Japan: dummy variable, Japan=1=joint venture with Japanese company;

HK: dummy variable, HK=1=joint venture with HK company;

Table 5-25 Multivariate analysis: joint ventures with different foreign country group, and continental backgrounds (assumption I)

Dependent variable = score

Independent variables (predicted sign)	Equation (t statistics)			
	1	2	3	4
Constant	2.4220 (2.995)***	1.6914 (3.073)***	2.8935 (4.436)****	2.8302 (3.803)****
INVEST(+)	-8.6706(5) ^a (0.565)	-1.2709(5) (0.090)	-1.2775(4) (0.865)	-9.8399(5) (0.629)
FOREIGNE(?)	-0.0043 (0.377)	-1.0351 (0.009)	-0.0063 (0.556)	-4.3208 (0.383)
ORGRATIO(-)	-6.3454 (1.891)*	-6.2882 (1.863)*	-6.6906 (2.006)*	-6.1500 (1.798)*
JAHK(-)	-0.6133 (1.226)		-0.9704 (2.811)***	
USUK(+)	0.5227 (0.987)	0.9928 (2.698)**		
ASIA(-)				-0.9577 (2.064)**
EUROPE(+)				0.9894 (0.164)
adj.R ²	0.17	0.16	0.17	0.15
F	2.8544	3.1524	3.3270	2.5878
Significance	0.0273	0.0241	0.0192	0.0409

*=p<0.10; **=p<0.05; ***=p<0.01 ; ****=p<0.001

^a-8.6706(5) means -0.000085606.

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

USUK: dummy variable, USUK=1=joint venture with US or UK company;

JAHK: dummy variable, JAHK=1=joint venture with Japanese or HK company.

Asia: dummy variable, Asia=1=joint venture with Asian company;

America: dummy variable, America=1=joint venture with American company;

Europe: dummy variable, Europe=1=joint venture with European company;

All these models are significant at least a ten percent significance level. Across the different specifications, the coefficients on all the country background independent variables have the predicted signs: the coefficients of UK,US, EUROPE, AMERICA are consistently positive, while that of HK, JAPAN, ASIA are always negative. The t value of the coefficient on each of the country variables is significant at least in one equation. The results are consistent with univariate analyses. Both analyses provide evidence that there is a relation between country background and accounting choices. Accounting practices in joint ventures with UK, US and other European investors are more conservative than those with HK, Japanese and other Asian investors.

The sign of the coefficient on the total investment variable (INVEST) is negative across all specifications, but not at all significant. The coefficient on the intangible assets (ORGRATIO) is negative, as predicted, and significant at conventional levels in all but one model. The coefficient on foreign equity is not significant in each model.

Under assumption II, the results are similar (table 5-26). In order to test for robustness, in equation 5 of table 5-26, the dependent variable is transformed to LNSCORE, the nature log of the original dependent variable SCORE. Other tests on the transformed variables, LNSCORE and LNINVEST which is the natural log of the original independent variable INVEST are also performed. The results, presented in Appendix 5-5 to 5-7, are similar.

Table 5-26 Multivariate analysis: joint ventures with different foreign country group, and continental backgrounds (assumption II)

Dependent variable = score

Independent variables (predicted sign)

Equation (t statistics)

	1	2	3	4	5 ^a
Constant	3.8430 (2.926)***	3.8219 (2.992)***	2.3258 (2.642)**	4.1033 (4.025)****	1.3209 (2.209)**
INVEST(-)	-2.4816(4) (0.966)	-2.3193(4) (0.957)	-8.0412 (0.354)	-2.5643(4) (1.111)	-1.0344(4) (0.906)
FOREIGNE(?)	-0.0121 (0.370)	-0.0124 (0.686)	-0.0038 (0.215)	-0.1359 (0.771)	-0.0037 (0.444)
ORGRATIO(-)	-7.0522 (1.251)	-6.6827 (1.261)	-6.5656 (1.216)	-6.8887 (1.321)	-4.5650 (1.198)
UK(+)	0.3909 (0.387)				0.0286 (0.065)
US(+)	0.2185 (0.218)				0.0206 (0.046)
Japan(-)	-1.1740 (1.271)				-0.5584 (1.305)
HK(-)	-1.3178 (1.538) ^b				-0.6703 (1.790)*
USUK(+)		0.3119 (0.373)	1.2746 (2.165)**		
JAHK(-)		-1.2560 (1.590)		-1.4691 (2.723)***	
adj.R ²	0.05	0.10	0.06	0.12	0.04
F Significant	1.35 0.26	1.97 0.10	1.76 0.16	2.48 0.06	1.23 0.31

*=p<0.10; **=p<0.05; ***=p<0.01; ****=p<0.001

^a Dependent variable is transformed to Ln score, the natural log of original dependent variable score.

^b Significant at approximately 0.10 level.

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

UK: dummy variable, UK=1=UK-China joint venture, otherwise UK=0;

US: dummy variable, US=1=joint venture with US company;

Japan: dummy variable, Japan=1=joint venture with Japanese company;

HK: dummy variable, HK=1=joint venture with HK company;

USUK: dummy variable, USUK=1=joint venture with US or UK company;

JAHK: dummy variable, JAHK=1=joint venture with Japanese or HK company.

The results from assumption II are consistent with that from assumption I, though some models are not significant. The important evidence is that in all of the 14 equations, the coefficients of the foreign background variables have systematically the predicted signs. It is extremely unlikely that this has happened only by chance.

However, there is room for improvement of the specification of the model. Because of financial restrictions, it has not been possible to obtain data about, e.g. debt/assets ratio, management compensation programme which might be relevant to accounting choice in the study. The relatively low adj.R²(between 0.13-0.17, table 5-24 and 5-25, under assumption I) may reflect the omission of these variables. Further research on the subject need to focus on these factors and other joint venture specific variables as well, such as the decision power pattern of joint management as between local and foreign partners. This may affect the influence of foreign partners on accounting policy in joint venture.

But the omission of these variables may not seriously affect the conclusion that across all the different specifications and models the results are highly consistent with each other.

5.4.4 Individual accounting methods.

The choice by management of individual accounting methods is also separately tested. The same independent variables are used, but the dependent variable now is the choice of the individual method. For example, the dependent variable equals one if FIFO is chosen and equals zero if otherwise. Similarly, the dependent variable equals one if the accelerated depreciation method is chosen and equals zero if otherwise. The other two methods tested are provision for loss on stocks and capitalisation of R & D. The dependent variable equals one if a joint venture makes provision for loss on stocks, and equals zero if otherwise. Similarly, when a joint venture capitalises R & D, the dependent variable equals one and equals zero if otherwise. The descriptive statistics are provided in table 5-27.

Table 5-27 Descriptive statistics of accounting choices by joint ventures with different foreign country backgrounds

1 provision for loss on stocks

	US	Japan	HK	UK	Other	
no provision	6 ^a 54.5 ^b	9 81.8	19 73.1	4 57.1	16 94.1	54 75.0
provision for	5 45.5	2 18.2	7 26.9	3 42.9	1 5.9	18 25.0
Total	11 15.3	11 15.3	26 36.1	7 9.7	17 23.6	72 100.0

Chi-Square	Value	DF	Significance
Pearson	7.28276	4	.12168
Likelihood Ratio	7.93027	4	.09417

Number of Missing Observations: 14

2 Accelerated depreciation of fixed assets

	US	Japan	HK	UK	Other	
no accelerated	9 81.8	11 78.6	22 84.6	7 87.5	16 100.0	65 86.7
accelerated	2 18.2	3 21.4	4 15.4	1 12.5		10 13.3
Column Total	11 14.7	14 18.7	26 34.7	8 10.7	16 21.3	75 100.0

Chi-Square	Value	DF	Significance
Pearson	3.57875	4	.46601
Likelihood Ratio	5.56875	4	.23375

Number of Missing Observations: 11

3 Inventory method choice

	US	Japan	HK	UK	Other	Row Total
NOT FIFO	10 90.9	9 81.8	22 81.5	5 62.5	15 88.2	61 82.4
FIFO	1 9.1	2 18.2	5 18.5	3 37.5	2 11.8	13 17.6
Column Total	11 14.9	11 14.9	27 36.5	8 10.8	17 23.0	74 100.0

Chi-Square	Value	DF	Significance
Pearson	3.15565	4	.53212
Likelihood Ratio	2.87817	4	.57842

Number of Missing Observations: 12

4 Capitalisation of R & D

	US	Japan	HK	UK	Other	Row Total
NOT CAPITALISE R & D	10 90.9	6 75.0	20 87.0	8 100.0	14 82.4	58 86.6
CAPITALISE R & D	1 9.1	2 25.0	3	17.6	3 13.4	9 14.4
Column Total	11 16.4	8 11.9	23 34.3	8 11.9	17 25.4	67 100.0

Chi-Square	Value	DF	Significance
Pearson	2.60285	4	.62632
Likelihood Ratio	3.51228	4	.47601

Number of Missing Observations: 19

- a First line is number;
b Second line is percentage.

In table 5-27, only in the choice of provision for loss on stocks, is the null hypothesis rejected at a marginal significance level ($p=0.12$ for the Pearson chi-square, and $p=0.09$ for the Likelihood Ratio), which suggests that the accounting choice of provision for loss on stocks is not independent from foreign background. In respect of other accounting choices, the null hypothesis of independence fails to be rejected, which means that accounting choice is not related to foreign background. If individual accounting choice is not statistically significantly associated with foreign background, but a package or a portfolio of accounting procedures is, this result may suggest that firms make an overall accounting decisions based on the optimal impact of a set of accounting methods on income rather than make separate and unrelated accounting decisions and deal with the impact of individual accounting methods.

A logistic analysis is used to examine the effects of foreign partners on the individual choice simultaneously. Other relevant factors used in above model are also considered in this model.

The logistic regression model estimated is:

Prob.

$$\begin{aligned} (\text{accounting method}) = & A + B_1\text{US} + B_2\text{UK} + B_3\text{HK} + B_4\text{JAPAN} \\ & + B_5\text{INVEST} + B_6\text{FOREIGNE} + B_7\text{ORARATIO} \end{aligned}$$

The results are presented in table 5-28.

Table 5-28 Individual accounting choice test:
A logistic regression model

Model I

Prob. (capitalisation of R&D)
 $= A + B_1US + B_2UK + B_3HK + B_4JAPAN$
 $+ B_5INVEST + B_6FOREIGNE + B_7ORARATIO$

Variable	B	S.E.	Wald	df	Sig
US	-.5933	1.7603	.1136	1	.7361
JAPAN	-.0010	1.5563	.0000	1	.9995
HK	-1.1229	1.6329	.4729	1	.4917
UK	-8.1923	43.1194	.0361	1	.8493
ORGRATIO	2.3638	8.4199	.0788	1	.7789
FOREIGNE	-.0808	.0491	2.7058	1	.1000
INVEST	-.0003	.0006	.2717	1	.6022
Constant	2.7674	2.8661	.9323	1	.3343

Chi-Square	df	Significance	% Correctly Predicted
6.418	7	.4918	82.05%

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

UK: dummy variable, UK=1=joint venture with UK company,
otherwise UK=0;

US: dummy variable, US=1=joint venture with US company;

Japan: dummy variable, Japan=1=joint venture with Japanese
company;

HK: dummy variable, HK=1=joint venture with HK company;

Model II

Prob. (accelerated depreciation)

$$= A + B_1US + B_2UK + B_3HK + B_4JAPAN + B_5INVEST + B_6FOREIGNE + B_7ORARATIO$$

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig
US	14.2511	49.2334	.0838	1	.7722
JAPAN	13.3744	49.1618	.0740	1	.7856
HK	14.9445	49.2350	.0921	1	.7615
UK	4.6289	86.1355	.0029	1	.9571
ORGRATIO	3.0644	13.3586	.0526	1	.8186
FOREIGNE	.0183	.0305	.3615	1	.5477
INVEST	.0014	.0010	2.0734	1	.1499
Constant	-17.5641	49.3198	.1268	1	.7217

Chi-Square	df	Significance	% Correctly Predicted
7.419	7	.3866	90.70%

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

UK: dummy variable, UK=1=joint venture with UK company, otherwise UK=0;

US: dummy variable, US=1=joint venture with US company;

Japan: dummy variable, Japan=1=joint venture with Japanese company;

HK: dummy variable, HK=1=joint venture with HK company;

Model III

Prob. (provision for loss on stock)

$$= A + B_1US + B_2UK + B_3HK + B_4JAPAN + B_5INVEST + B_6FOREIGNE + B_7ORARATIO$$

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig
US	9.6796	35.4474	.0746	1	.7848
JAPAN	7.6597	35.4531	.0467	1	.8289
HK	8.1598	35.4421	.0530	1	.8179
UK	8.9157	35.4480	.0633	1	.8014
ORGRATIO	-35.1954	20.4657	2.9575	1	.0855
FOREIGNE	-.0094	.0273	.1198	1	.7292
INVEST	-.0002	.0008	.0540	1	.8162
Constant	-7.8745	35.4772	.0493	1	.8243

Chi-Square	df	Significance	% Correctly Predicted
13.829	7	.0543	76.19%

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

UK: dummy variable, UK=1=joint venture with UK company, otherwise UK=0;

US: dummy variable, US=1=joint venture with US company;

Japan: dummy variable, Japan=1=joint venture with Japanese company;

HK: dummy variable, HK=1=joint venture with HK company;

Model IV

Prob. (FIFO)

$$= A + B_1US + B_2UK + B_3HK + B_4JAPAN + B_5INVEST + B_6FOREIGNE + B_7ORARATIO$$

----- Variables in the Equation -----

Variable	B	S.E.	Wald	df	Sig
US	-7.1787	40.4941	.0314	1	.8593
UK	.6173	1.6226	.1447	1	.7036
JAPAN	-.6144	1.7669	.1209	1	.7280
HK	.6667	1.3870	.2310	1	.6308
ORGRATIO	10.4388	8.4928	1.5108	1	.2190
FOREIGNE	.0106	.0312	.1159	1	.7335
INVEST	-9.4E-05	.0006	.0293	1	.8641
Constant	-2.6796	2.2276	1.4470	1	.2290

Chi-Square	df	Significance	% Correctly Predicted
4.633	7	.7046	81.40%

Variable definitions:

Dependent variable: SCORE

Independent variable:

INVEST = Total Investment

FOREIGNE= percentage of foreign equity

ORGRATIO= start cost/total investment

UK: dummy variable, UK=1=joint venture with UK company, otherwise UK=0;

US: dummy variable, US=1=joint venture with US company;

Japan: dummy variable, Japan=1=joint venture with Japanese company;

HK: dummy variable, HK=1=joint venture with HK company;

From table 5-28, among the four models, only the one for provision for loss on stock is significant($p=0.054$). However, all of these models have some predictive power. They correctly predicted the accounting choice made by joint ventures from 76.19 percent to 90.70 percent.

In spite of this, the sign of the coefficient of foreign background is difficult to explain. From models I to III, the signs of the coefficients of foreign partners are the same, which suggests that no different accounting patterns between these accounting groups exist. In model IV, coefficients on variables of UK and HK have the opposite sign to that of US and Japan, which is inconsistent with the underlying hypothesis that accounting choices are different between Asian and European groups. Another problem is that none of the coefficients of foreign partners is significantly different from zero in all the models.

The results from logistic regression tests further confirm that firms select a package of accounting methods to achieve the optimal reported net income over time. Accordingly the decisions for each accounting policy may not be independent(Zmijewski and Hagerman 1981). If this is true, a separate test on individual accounting choice may provide misleading results.

5.5 SUMMARY AND CONCLUSIONS

This research has endeavoured to extend the literature that attempts to explain managers' accounting method choices. The international joint venture is an interesting setting to analyse managers' accounting decisions influenced by foreign investment because this influence is observable in joint venture firms. This study contributes to the body of research on factors influencing managers' accounting method choices in a number of ways. For example, it examines both the overall set of accounting policies used and individual accounting methods. The comparison of the two tests provides some new evidence in respect of the portfolio hypothesis of accounting procedures.

The evidence provided in this study is generally consistent with the hypothesis that there is a significant difference in accounting measurement patterns as between different joint venture groups, *ceteris paribus*. More specifically, the Asian joint venture group is less conservative than the European and American joint venture groups. However, the political cost hypothesis (related to firm size) fails to explain such a difference. A possible explanation is that nearby foreign investors are more confident, in contrast to other investors who are less familiar with the local environment and so tend to make a cautious decision on accounting policy to report current earnings. The underlying assumption for these explanations is that foreign partners influence joint venture accounting to a similar extent. Future study in this area should therefore include more joint venture specific variables such as management decision-power sharing mechanisms between local and foreign partners. Influence of other political consideration relating to geographical location of foreign countries on accounting choice is another interesting research area.

In the next chapter, the issue of interaction between culture and accounting is discussed, and some empirical evidence of cultural influence on accounting is provided.

CHAPTER 6

EMPIRICAL EVIDENCE ON THE INTERACTION BETWEEN CULTURE AND ACCOUNTING

6.1 SYNOPSIS AND INTRODUCTION

This chapter investigates the interaction between cultural factors and accounting practices and systems. In particular, the study is concerned with how the accounting background affects people's judgment. The hypothesis is that people from different accounting subcultures may have different judgments as to whether a accounting standard can provide a true and fair view of financial position and result.

The research tests the attitudes of British and Chinese people towards Chinese joint venture accounting regulations in terms of whether these regulations can result in true and fair financial statements. The subjects joining this experiment were selected from people who are in accounting practice, research, and teaching in China and in Britain. Subjects in Britain were selected from the Big-Six partners, accountants from other accounting firms, and financial managers from large UK companies which have joint ventures in China. Subjects in China were accountants in accounting firms, accounting teachers in universities, and accountants in joint ventures and other companies. After being given a brief description of the main accounting standards in Chinese joint ventures in a mailed questionnaire, subjects in the two groups are asked whether they think each standard is suitable. They are also asked as to whether some new accounting standards should be introduced in the joint ventures. Finally, they were invited to offer an overall assessment based on their knowledge as to whether, taken as a whole, the regulations can provide a true and fair view of the profit, and the value of assets and liabilities of a joint venture.

The findings are generally consistent with the hypothesis. Contrasting views were found between the two groups of subjects from the UK and China. For instance, few respondents in the UK group think that Chinese joint venture accounting can provide a true and fair view about the value of a joint venture's assets and liabilities, while most Chinese subjects do. They also have different views on some particular accounting standards.

The different attitudes towards the same accounting regulations come from the different accounting subcultures. Accounting values in the two subcultures are different(see chapter 2). The accounting subculture affects people's judgment on whether a true and fair view is provided. Without some standards in the joint venture accounting regulations which are regarded as essential(e.g. lower of cost and value) to the presentation of a true and fair view, the UK group tends to hold a negative view about accounting regulations. But Chinese accounting has been going on without such standards for several decades. This makes Chinese accountants think their accounting system is all right in the absence of these standards.

One limitation of the study is that it does not directly link accounting systems with societal culture. Accounting subculture may be a function of the whole culture in a society(Gray 1988). This study focuses on the relationship between the accounting subculture and accounting systems and regulations. A test of the direct relationship between societal culture and accounting may be more powerful. However, while some relevant characteristics of societal culture have been defined(Hofstede 1984,pp.83-84), and the linkage between these characteristics and accounting values have been theoretically proposed(Gray 1988), it may be difficult to find out variables to proxy for cultural characteristics. Further study in this area should look for variables which can be used to proxy cultural influences on accounting development.

6.2 CULTURE AND ACCOUNTING

The accounting literature has shown that accounting follows different patterns in different countries and areas (Mueller, 1967; Zeff, 1971; Nobes, 1983). In this context, the significance of cultural factors had not been fully appreciated until Gray (1988) proposed a framework which links culture with the development of accounting systems internationally.

Gray (1988) proposes four hypotheses on the relationship between defined cultural characteristics and the development of accounting systems, the regulation of the accounting profession and attitudes towards financial measurement and disclosure. Four accounting values, derived from a review of accounting literature and practice, are proposed first:

Professionalism versus Statutory Control - a preference for the exercise of individual professional judgment and the maintenance of professional self-regulation as opposed to compliance with prescriptive legal requirements and statutory control.

Uniformity versus Flexibility - a preference for the enforcement of uniform accounting practices between companies and for the consistent use of such practices over time as opposed to flexibility in accordance with the perceived circumstances of individual companies.

Conservatism versus Optimism - a preference for a cautious approach to measurement so as to cope with the uncertainty of future events as opposed to a more optimistic, laissez-faire, risk-taking approach.

Secrecy versus Transparency - a preference for confidentiality and the restriction of disclosure of information about the business only to those who are closely involved with its management and financing as opposed to a more transparent, open and publicly accountable approach.

The four accounting values are linked to four societal values(Hofstede, 1984,pp.83-4): individualism versus Collectivism, Large versus Small Power Distance, Strong versus Weak Uncertainty Avoidance, and Masculinity versus Femininity.

The following four hypotheses which link accounting values with societal values are proposed:

H1: The higher a country ranks in terms of individualism and the lower it ranks in terms of uncertainty avoidance and power distance then the more likely it is to rank highly in terms of professionalism.

H2: The higher a country ranks in terms of uncertainty avoidance and power distance and the lower it ranks in terms of individualism then the more likely it is to rank highly in terms of uniformity.

H3: The higher a country ranks in terms of uncertainty avoidance and the lower it ranks in terms of individualism and masculinity then the more likely it is to rank highly in terms of conservatism.

H4: The higher a country ranks in terms of uncertainty avoidance and power distance and the lower it ranks in terms of individualism and masculinity then the more likely it is to rank highly in terms of secrecy.

Cross-cultural behavioural study in accounting system is likely to provide some additional explanation to economic, legal, and political factors, of why differences in accounting standards and practices exist between countries. However, though empirical tests are called for(Gray 1988), there has been still a lack of empirical studies to test the relationship between cultural factors and accounting development since then.

Perera(1989) discusses the impact of culture on accounting by examining the standard-setting process of the International Accounting Standards Committee, and found that it has been strongly influenced by the Anglo-American accounting model. As a result, the Standards are likely to encounter additional problems of relevance in countries where different cultural environments from those found in Anglo-American countries exist.

McKinnon and Harrison(1985) and Battner(1991) discuss the relationship between Japanese accounting and culture. McKinnon and Harrison(1985) examine the impact of culture on the motivation for, and mode of involvement of , the corporations and the government in accounting policy determination in Japan. They found that the motivation for corporate and governmental involvement is driven by cultural environmental characteristics that differ substantially from those in Anglo-American nations.

Blattner(1991) attempts to explore some of the cultural factors in Japan and how they affect the Japanese financial accounting system and presents some evidence that the Japanese have adopted, adapted and created accounting practices to be more useful and more comfortable to their culture.

The characteristics that are distinctive to Japanese culture and that are related to business behaviour are described as the following:

The homogeneity of the Japanese culture. Japanese people were insulated from foreign influences for most of their history, and Japanese culture developed on isolated islands. The culture was unchallenged and unchanged for generations. Everyone knows exactly what the rules were.

A second characteristic is the Japanese devotion to status as defined within a strict social hierarchical structure. Everyone has a place and relates to everyone else as a superior, an

inferior, or an equal. A Japanese acts in a prescribed order determined by status. Rank is of prime concern in Japan in social interactions.

The third characteristic is the relationship of a Japanese person to his or her group. Individualism is a foreign concept. The group could be a family or a company. This collective consciousness pervades all personal actions and decisions. One must be loyal to his or her group, and the group will look after him or her.

The final characteristic is that the Japanese always adapt foreign and Western techniques and ideas, and change them to something distinctly Japanese.

These characteristics affect Japanese accounting profession and accounting practices in a number of ways. For example, since the Japanese take a high value for collectivism rather than individualism, the Japanese accounting profession play a quite different role than that of the Western accounting profession where individualism may be more appreciated than collectivism.

The influence of the hierarchy can be seen in the establishment of the Japanese accounting profession. The role of the CPA is a cultural import and, therefore, difficult to fit within the traditional structure. Therefore, the number of CPAs in Japan is very low and entry requirements are very stringent. If the international business community insists on CPAs, Japan will comply but will do so only to the minimum acceptable level.

On the other hand, most auditing work is done by so called statutory auditors. The viewpoint of the statutory auditor is diametrically opposed to that of the CPA. The statutory auditor's role is as an employee of the firm he audits. A statutory auditor who sees his duty as being accountable to some group of outsiders-the investors, for instance- will shortly be without a job. In Japan, the company belongs to the people who work for it, not those who own it.

Another instance of this group consciousness influence on Japanese accounting practice is in the use-or rather the nonuse- of consolidated statements. Consolidated statements historically have been very rare in Japan. This may be partially explained in that the principal and usual readers of the statements were banks that were powerful members of the family. The appearance of individual members(rather than a whole family) was of prime importance to the whole group and its leaders. Consolidated statements are required only for use by investors under the Securities Exchange Law.

Another impact of the devotion to status is reflected in the relative ranking of companies. Large companies have higher status than small companies. Company size is determined by sales volume. This means that there is some social mobility for companies if they can generate larger sales volumes, hence the emphasis on market share rather than profitability.

6.3 RESEARCH DESIGN

This study is an empirical test about the hypothesis that there is a relationship between accounting and culture. But a direct test is difficult to design, given the complexity of the mechanism of interaction between accounting and culture, though the accounting values and related societal values are identified(Gray 1988; Hofstede 1984). In particular, the problem comes from the identification and selection of variables which can be used to proxy for cultural factors such as individualism and masculinity. Such a model is difficult to specify.

In this regard, tests of relationship between culture and accounting could be divided into two steps. The first step is to link accounting systems with the accounting subculture. Then a further test is performed to link the accounting subculture with societal culture. Such a strategy of empirical tests may be easier to carry out. If substantial empirical

evidence is obtained to support the hypothesis that these two relationships exist, a relationship between culture and accounting is deemed to exist as well. Accounting systems may not directly be influenced by societal culture. The influence on accounting practices and systems by societal values and culture may be through the influence on the accounting subculture and accounting values.

This research tests the attitudes of British and Chinese people towards Chinese joint venture accounting regulations in terms of whether they reflect a true and fair view of financial position and result. Chinese accounting is different from British accounting. If the attitudes of British and Chinese people towards Chinese joint venture accounting regulations are also different, this is the evidence which supports the hypothesis of the interaction and relationship between accounting systems and people's accounting culture and values. If further studies in the area provide empirical results which are consistent with the hypothesis that accounting values are influenced by societal value or culture, a full picture of the relationship between: societal culture, accounting subculture, and accounting systems should be clear.

The study focuses on valuation and measurement, but other hypotheses such as professionalism, uniformity of accounting practices, secrecy of accounting information are not tested.

The subjects of this experiment are randomly selected people who are doing accounting practice, research, teaching work in China and in Britain. Subjects in Britain are selected from Big-Six partners, accountants from other accounting firms, financial managers from large UK companies which have joint ventures in China. Subjects in China are accountants in accounting firms, accounting teachers in universities, and accountants in joint ventures and other companies. Every subject was sent a mailed questionnaire. After being given a brief description of the main accounting standards in Chinese joint venture, they are asked whether they think each standard is suitable. They were also

asked whether a particular new accounting standard should be introduced in the joint ventures. For example, lower of cost and net realisable value is not allowed in current regulations, so subjects were asked whether they think it should be allowed. Finally, they were invited to offer an overall assessment based on their knowledge as to whether, taken as a whole, the regulations can provide a true and fair view of profits, and the value of assets and liabilities of a joint venture.

The reason to select Chinese and British people for the survey is that the two accounting subcultures (also societal culture) are obviously different(see chapter 2). So their judgment and views are expected to be different. These differences in views can be reasonably related to the differences in their accounting tradition and subculture. The participants in the test are accounting professionals, accounting teachers and researchers, and financial managers and accountants in companies. They are expected to be representative of the accounting view of the whole population of people engaged in accounting work in China and the UK. Partners in big international accounting firms, financial managers in large UK companies which have joint ventures in China are relatively knowledgeable with international accounting standards in general, and Chinese standards in particular. All together 150 copies of the questionnaire were sent. There were 53 respondents, 30 from China, and 23 from Britain (see table 6-1,6-2 for detailed response rates).

Each subject was supplied with a brief description of individual accounting treatments in the Joint Venture Accounting Regulations(1985) as follows:

1) Accounting for fixed assets

Accounting regulations for fixed assets are featured normally by historical cost, non-revaluation, and straight-line depreciation in Chinese joint ventures.

2) Accounting for patents and Know-how

Purchased patents and know-how are normally accounted for by historical cost which may be written off over its useful life or 10 years, but not longer than the life of the joint venture.

3) Accounting for goodwill

The accounting regulation for purchased goodwill requires the use of historical cost which should be written off during its useful life, or 10 years, but not longer than the duration of the joint venture(it cannot be written off immediately against equity).

4) Accounting for use of land

Accounting regulation for the right to use a site for the joint venture is that the right is treated as an intangible asset.

5) Accounting for organisation expenses(start-up costs)

Organisation expenses(start-up cost) are normally accounted for by historical cost which should be written off in no less than 5 years.

6) Accounting for foreign currency transactions

The principle in the accounting regulations for foreign currency transactions is that all foreign exchange gains and losses cannot be recognised in the current income statement until realisation.

7) Accounting for extraordinary items

In the regulation, extraordinary items are defined as gains and losses on investment in other organisations, gains and losses on disposal of fixed assets, donation expenditures and receipts, bad debts and extraordinary damage. Prior year adjustments are excluded.

After being given these descriptions, subjects were asked whether they agree with each accounting treatment. These are the first seven questions in the questionnaire.

Subjects were then invited to provide an overall assessment of the regulation:

Question 8:

Do you agree that Chinese joint venture accounting regulations for the measurement of profit can provide a true and fair profit for the joint venture? and

Question 9:

Do you agree that Chinese joint venture accounting regulations for the valuation of assets and liabilities can provide a true and fair value of the joint venture?

Question 10 and 11 are about two proposed accounting principles:

Question 10:

Do you agree that the principle of lower of cost and net realisable value should be introduced into the joint venture?

Question 11:

Do you agree that revaluation of fixed assets should be introduced into the joint venture?

The issue of economic consequences is also discussed:

Question 12:

Do you agree that, to choose different accounting methods for valuation and measurement(e.g. accelerated or straight line method) would affect the cash flow of the joint venture(e.g taxable profit)?(i.e. cash flow effect).

Question 13:

Do you agree that, to choose different accounting methods for valuation and measurement(e.g. accelerated or straight line method) for the joint venture would affect the interests of the partners in the joint venture, (e.g. affect the allocation of profit between partners of the joint venture.)?(i.e.wealth transfer effect).

A five point scale answer is available for each question:

- 1 strongly disagree**
- 2 disagree**
- 3 neutral/no opinion**
- 4 agree**
- 5 strongly agree**

6.4 EMPIRICAL RESULTS

6.4.1 Descriptive statistics

Table 6-1 and 6-2 gives the details of the respondents' occupations. Thirty of the subjects come from China, and twenty three come from Britain. Most of the subjects are from professional accounting firms in China and in Britain. They account for nearly half of the sample(45.3%, table 6-1). Some of them are partners from Big-Six firms. The next group is from company financial managers and accountants. The opinions of accounting academics are also pooled. They account for approximately one-fourth of the sample.

6.4.2 General assessment of the accounting regulations by the whole sample

Table 6-3 is the assessment of individual accounting treatments by the whole sample. More details of the assessment are available in the Appendix 6-1.

Accounting for fixed assets gets the highest percentage of approval by the whole sample(75.5%), and accounting for extraordinary items and foreign exchanges has the lowest(34% and 41.5% respectively). Less than fifty percent of the respondents agree or strongly agree with these two accounting methods. Except for accounting for foreign exchanges, no more than fifty percent of the respondents disagree or strongly disagree with all other accounting methods.

Table 6-1 Occupation of respondents

A. The Chinese and UK groups

	Number	Percent
company accountants	6	11.3
accounting teachers	13	24.5
professional accountants	10	18.9
not specified	1	1.9
	-----	-----
From China	30	56.6
partners in Big-6	7	13.2
accountants in other firms	7	13.2
company financial managers	9	17.0
	-----	-----
From Britain	23	43.4
Total	53	100.0

B. Whole sample (n=53)

	Number	Percent
professional accountants	24	45.3%
company financial managers and accountants	15	28.3%
university accounting teachers	13	24.5%
other	1	1.9%
	-----	-----
	53	100.0

Table 6-2 Response rates-accounting
attitudes investigation

	number of copies of questionnaire sent	number of copies received	Response rates
company accountant	30	6	20%
accounting teacher	30	13	43%
professional accountant	30	10	33%
not specified		1	
	----	----	-----
From China	90	30	33%
partners in Big-6	20	7	35%
accountant in other firms	20	7	35%
company financial manager	20	9	45%
	----	----	-----
From Britain	60	23	38%
Total	150	53	35%

Table 6-3 Assessment of individual accounting treatments
of joint ventures (whole sample, n=53)

accounting treatment	strongly agree and agree (%)	strongly disagree and disagree (%)	no opinion (%)
accounting for fixed assets	75.5	13.2	11.3
accounting for patent and know-how	60.4	13.2	26.4
accounting for goodwill	52.8	22.6	24.5
accounting for land fee	54.7	24.6	20.8
accounting for organisation costs	58.5	24.6	17.0
accounting for foreign exchanges	41.5	51.0	7.5
accounting for extra- ordinary items	34.0	41.5	24.5

Table 6-4 to 6-6 summaries views on other accounting issues by the whole sample.

Table 6-4 is an overall assessment of the joint venture accounting regulations. There are a few more people in the sample who agree or strongly agree with a true and fair profit than those who do not(32.1% vs 30.2%). However, those people who do not believe in a true and fair value are more than those people who do(35.9% vs 26.4%). It should be noted that more than one-third of the respondents chose neutral/no opinion to both questions(37.7%). This suggests a considerable degree of reservation about the accounting regulations among the respondents overall.

Table 6-5 provides the answers as to whether new accounting principles should be introduced to joint ventures. More people support the idea than those who do not, and more than fifty percent of respondents support the lower of cost and net realisable value concept(58.5%). But the support rate for revaluation is less than fifty percent(49.1%).

In respect to the concept of economic consequences of accounting changes(table 6-6), in this sample most people believe that accounting choice has economic consequences. Nearly 70% of respondents believe in a cash flow effect, while 56.6% of the respondents believe in a wealth transfer effect(table 6-6).

Table 6-4 Views on book profit and value
(whole sample, n=53)

Question 8: Do you agree that Chinese joint venture accounting regulations for the measurement of profit can provide a true and fair profit for the joint venture?

Question 9: Do you agree that Chinese joint venture accounting regulations for the valuation of assets and liabilities can provide a true and fair value of the joint venture?

	strongly agree and agree(%)	strongly disagree and disagree(%)	no opinion(%)
1 true and fair profit	32.1	30.2	37.7
2 true and fair value	26.4	35.9	37.7

Table 6-5 Views on introduction of new accounting principles(whole sample, n=53)

Question 10: Do you agree that the principle of lower of cost and net realisable value should be introduced into the joint venture?

Question 11: Do you agree that revaluation of fixed assets should be introduced into the joint venture?

	strongly agree and agree(%)	strongly disagree and disagree(%)	no opinion(%)
1.lower of cost and value	58.5	26.4	15.1
2.revaluation	49.1	24.5	26.4

Table 6-6 Views on economic consequences

(whole sample, n=53)

Question 12: Do you agree that to choose different accounting methods for valuation and measurement (e.g. accelerated or straight line method) would affect the cash flow of the joint venture (e.g. taxable profit)? (i.e. cash flow effect).

Question 13: Do you agree that to choose different accounting methods for valuation and measurement (e.g. accelerated or straight line method) for the joint venture would affect the interest of partners in the joint venture, (e.g. affect the allocation of profit between partners of the joint venture.)? (i.e. wealth transfer effect).

	strongly agree and agree (%)	strongly disagree and disagree (%)	no opinion (%)
1 cash flow effect	69.8	20.7	9.5
2 wealth transfer effect	56.6	30.2	13.2

6.4.3 Comparisons of opinions and ideas between Chinese and UK groups

Table 6-7 presents the opinions from Chinese and UK groups.

While the views of the two groups are close about accounting for patents, know-how and goodwill, they are different for all other methods(table 6-7). For example, eighty percent of Chinese respondents agree with accounting for the use of land, while only 21.7% in the UK group agree with it. Nearly seventy percent in the UK group disagree with accounting for foreign exchanges and 60.9% for extraordinary items, while only 26.7% and 23.3% Chinese respondents do so respectively.

For the overall assessment, 43.5% in the UK group vs 20%(13.3%+6.7%) in the Chinese group disagree or strongly disagree with the true and fair profit assumption. Further, more than 60% (4.3%+56.5%) in the UK group vs 16.7% in the Chinese group disagree or strongly disagree with the true and fair value assumption. These results suggest that more UK respondents tend not to believe that the Chinese regulations can provide a true and fair view of financial position and results.

Table 6-7 Views on individual accounting treatments and book profit and value (Chinese vs UK group)

Question: Do you agree with the accounting treatment for fixed assets?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	2 6.7%	26 86.7%		2 6.7%		30 56.6%
British group	1 4.3%	11 47.8%		5 21.7%	6 26.1%	23 43.4%
$x^2=13.00$ $p=0.0046$						

Question: Do you agree with the accounting treatment for patent and know-how?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group		20 66.7%		4 13.3%	6 20.0%	30 56.6%
British group		12 52.2%		3 13.0%	8 34.8%	23 43.4%
$x^2=1.53$ $p=0.4652$						

Question: Do you agree with the accounting treatment for goodwill?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group		16 53.3%		7 23.3%	7 23.3%	30 56.6%
British group	1 4.3%	11 47.8%		5 21.7%	6 26.1%	23 43.4%
$x^2=1.44$ $p=0.6970$						

Question: Do you agree with the accounting treatment for the use of land?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group		24 80.0%	1 3.3%	3 10.0%	2 6.7%	30 56.6%
British group		5 21.7%	2 8.7%	7 30.4%	9 39.1%	23 43.4%
$x^2=18.23$ $p=0.0004$						

Question: Do you agree with the accounting treatment for organisation costs?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group		22 73.3%		4 13.3%	4 13.3%	30 56.6%
British group		9 39.1%	2 8.7%	7 30.4%	5 21.7%	23 43.4%
$x^2=7.59$ $p=0.0553$						

(to be continued)

Table 6-7: (continued)

Question: Do you agree with the accounting treatment for foreign exchanges?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	17 56.7%	1	8 3.3%	26.7%	4 13.3%	30 56.6%
British group	5 21.7%	2	8.7%	16 69.6%		23 43.4%
$x^2=12.84$ $p=0.0050$						

Question: Do you agree with the accounting treatment for extraordinary items?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	13 43.3%	7	23.3%	10 33.3%	30 56.6%	
British group	5 21.7%	1	4.3%	14 60.9%	3 13.0%	23 43.4%
$x^2=9.91$ $p=0.0194$						

Question: Do you agree that the accounting treatments can provide a true and fair view of profit of a joint venture?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	11 36.7%	2	6.7%	4 13.3%	13 43.3%	30 56.6%
British group	6 26.1%			10 43.5%	7 30.4%	23 43.4%
$x^2=7.04$ $p=0.0706$						

Question: Do you agree that the accounting treatments can provide a true and fair view of value of a joint venture?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	11 36.7%	5	16.7%	5 16.7%	14 46.7%	30 56.6%
British group	3 13.0%	1	4.3%	13 56.5%	6 26.1%	23 43.4%
$x^2=11.60$ $p=0.0089$						

The chi-square(x^2) test presented in table 6-7 is a test of the null hypothesis that the two variables, national group and answer, are independent. Except for accounting for patents, and know-how, and goodwill, the probability for the test of the other methods is less than 0.10 or 0.05, and so the null hypothesis is rejected. These results support the view that the two groups respond differently.

However, because the sample size is relatively small, and the expected values in some cells of the tables is small as well, the x^2 result cannot be used alone to decide whether there is an association between the two variables. With regard to individual accounting methods, the small sample problem is dealt with in section 6.4.6, using the Mann-Whitney test to examine the attitude difference of the two groups.

Table 6-8 is about new accounting principles and the issue of economic consequences. The differences in opinion about the lower of cost and value principle is obvious. 46.7% in the Chinese group vs 0% in the UK group disagree with it. 82.6% in the UK group vs 40% in the Chinese group strongly agree and agree with it. For revaluation, while 40.0% in the Chinese group disagree with it, only one respondent(4.3%) in the UK group strongly disagrees with it. The two groups are also different in their views about the concept of economic consequence. The support for a cash flow effect is 73.3% in the Chinese group vs 34.8% in the UK group; the support for a wealth transfer effect is 90.0% in the Chinese group and 43.4% in the UK group (table 6-8).

Table 6-8 Views on introduction of new accounting principles and economic consequences (Chinese vs UK group)

Do you agree with introduction of the principle of lower of cost and net realisable value in Chinese joint ventures?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	1 3.3%	11 36.7%	0	14 46.7%	4 13.3%	30 56.6%
British group	8 34.8%	11 47.8%	0		4 17.4%	23 43.4%

$$x^2=18.85 \quad p=0.0003$$

Do you agree with introduction of the regulation of revaluation of fixed assets in Chinese joint ventures?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group		14 46.7%		12 40.0%	4 13.3%	30 56.6%
British group	1 4.3%	11 47.8%	1 4.3%		10 43.5%	23 43.4%

$$x^2=16.29 \quad p=0.0027$$

Do you agree with the concept of cash flow effect?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	22 73.3%		5 16.7%		3 10.0%	30 56.6%
British group		8 34.8%	1 4.3%	10 43.5%	4 17.4%	23 43.4%

$$x^2=42.63 \quad p=0.0000$$

Do you agree with the concept of wealth transfer effect?

	strongly agree	agree	strongly disagree	disagree	no opinion	Row total
Chinese group	27 90.0%		2 6.7%		1 3.3%	30 56.6%
British group	1 4.3%	9 39.1%	2 8.7%	7 30.4%	4 17.4%	23 43.4%

$$x^2=41.75 \quad p=0.0000$$

6.4.4 Univariate analysis

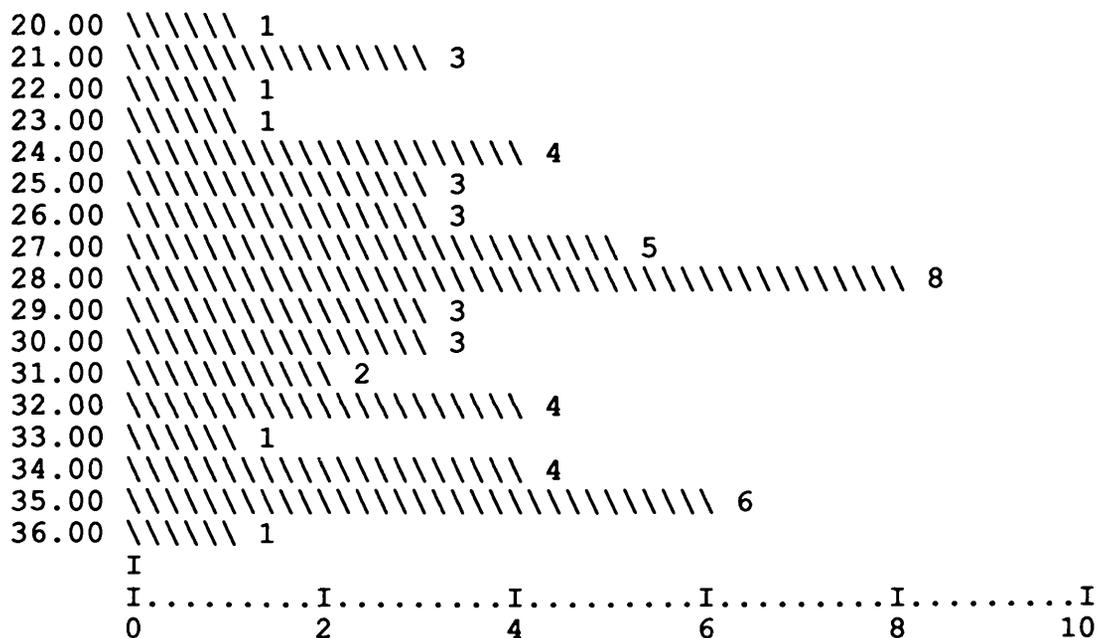
The 5 scale answer to each question is an indicator of individual approval about a particular accounting standard or accounting issue involved: number 1, strongly disagree with the accounting treatment(e.g. fixed assets, stock, etc.), is the lowest approving level; number 2, disagree, is higher than number 1, and so on, while 5 which is strongly agree, is the highest approving level. The number given by a subject reflects his or her view about the accounting standard or an accounting issue. So the number 1 to 5 can be used as an indicator of the extent to which a subject agrees with an accounting standard or issue. To extend this approach, the overall view of an individual about the whole regulations may be obtained from the accumulated score taken from the sum of individual answers. In another words, the sum answer number, the sum score is an overall assessment of the regulations by the individual subject. There are altogether 9 questions (excluding questions about introduction of principles, and economic consequences). If a subject has a score 9($1*9=9$), that means he or she does not agrees with the regulations at all; if a subject has a score 45($5*9=45$), he or she completely agrees with the regulations without any reservation. In this sample no one holds such an extreme view(table 6-9). In the following analyses, the score is the dependent variable.

Table 6-9 gives the descriptive statistics of the dependent variable score.

Table 6-9

Descriptive statistics of the dependent variable score

A. Distribution of dependent variable score(whole sample,n=53)



B. Descriptive statistics

	whole sample (n=53)	Chinese group (n=30)	UK group (n=23)
Mean	28.642	30.733	25.913
Std Dev	4.346	3.841	3.383
Median	28.000	31.500	26.000
Minimum	20.000	23.000	20.000
Maximum	36.000	36.000	32.000
Normality test:			
Shapiro-Wilks		0.9104*	0.9630
K-S(Lilliefors)	0.1058	0.1283	0.1007

*Hypothesis of normality is rejected.

This table shows that the minimum score is 20, maximum is 36. The average score is 28.642. There are altogether 9 questions. So the average approving level is $28.642/9 = 3.18$, which is something between neutral and agree level. Since score 3 is a neutral point, a score greater than 3 is a positive view, while a score less than 3 is a negative view. The average score 3.18 is a weakly positive attitude by the whole sample, taking an overall view of the accounting regulations.

Table 6-10 is a comparison of mean scores between the China and UK groups.

Table 6-10 indicates that the mean score of the Chinese group(30.73) is higher than that of the UK group(25.91). This is the sum score of 9 questions. So the Chinese group got an average score $3.41(30.73/9=3.41)$; and the UK group is $2.88(25.91/9=2.88)$. As discussed above, a score greater than 3 is a positive view, while less than 3 is negative view. Thus the result in table 3-10 suggests that, generally speaking, the Chinese group holds a positive view about the accounting regulations, while the UK group holds a negative one. But the significance of the difference needs to be tested.

Both non-parametric and parametric test are applied for univariate analysis. The result of Mann-Whitney test is reported in table 6-10, and the results of parametric tests are in Appendix 6-2. A paired t test is used to examine whether the average score of Chinese group is significantly higher than 3, the neutral point, and whether the average score of UK group is significantly lower than the neutral point. The results are also reported in table 6-10.

Table 6-10 Comparison of mean scores
(Chinese vs UK group)

	Mean	Std Dev	Cases
1 Chinese group	30.7333	3.8411	30
2 UK group	25.9130	3.3833	23
For Entire Population	28.6415	4.3461	53

A. Mann-Whitney test:

Corrected for Ties			
U	W	Z	2-tailed P
124.0	400.0	-3.9814	.0001

B. Paired t test:

Chinese group average score $30.7333/9=3.41$

UK group average score $25.9130/9=2.88$

Neutral point $27/9=3$

Chinese group $30.73 > 27 (3.41 > 3)$ $t=5.32$ $p=0.000$ (one-tail)

UK group $25.91 < 27 (2.88 < 3)$ $t=1.54$ $p=0.069$ (one-tail)

Table 6-11 Respondents with no opinion or neutral

	0	1	2	3	4	5	8	mean
China	3	5	8	7	5	2	0	2.40
(30)	10.0%	16.7%	26.7%	23.3%	16.7%	6.7%		
UK	0	5	5	6	2	3	2	3.13
(23)		21.7%	21.7%	26.1%	8.7%	13.0%	8.7%	

$Z=1.05$ $p=0.29$

The result in table 6-10 shows that the null hypothesis of no difference between the two groups is rejected at any conventional significance level($p=0.0001$). The result suggests that the approving level of the Chinese group is higher than that of the UK group with regard to the Chinese joint venture accounting regulations.

One potential problem in the test is that the Chinese respondents may be more familiar with the accounting regulations than the UK respondents, so that the results could be biased. However, this does not appear to be the case. Table 6-11 presents the respondents who choose the answer of neutral and no opinion. The first line is the number of questions to which a respondent says neutral or no opinion. The second and third line is the number of Chinese and UK respondents who say they have no opinion or are neutral to the questions. The first column means that there are three people in Chinese group who did not give a no-opinion answer to any of the questions. The second column means that in each group, there are five people who have no idea or are neutral only for one question. There are two respondents in UK group who have no idea or are neutral for as many as eight questions(total 13 questions including questions about introduction of new principles and economic consequences).

Though, on average, UK respondents give a few more no opinion/neutral answers than the Chinese respondents(mean score China=2.40, UK=3.13 which means that Chinese group give no opinion answers to 2.40 questions, and UK group to 3.13 questions on average), a Mann-Whitney test shows that the difference is not statistically significant($p=0.29$). This result suggests that, after being given the description of each accounting standard, each respondent in both groups has the same level of confidence to answer the questions.

6.4.5 Multivariate analyses

In this section the technique of multivariate analysis is used to seek further evidence of association between attitudes of people and their country backgrounds. The multivariate test also takes into account the views of accounting profession and academics. The following regression models are estimated:

$$\text{Score} = a + b_1\text{CHINA} + b_2\text{PROFESSION} + b_3 \text{ACADEMICS}.$$

$$\text{LnScore} = a + b_1\text{CHINA} + b_2\text{PROFESSION} + b_3 \text{ACADEMICS}.$$

$$\text{Score} = a + b_1\text{CHINA} + b_2 \text{ACADEMICS}.$$

where

Score = approve scale of a subject with the accounting regulation,

Lnscore = Ln form of score,

CHINA = if subject is from China, CHINA =1; if he or she is from Britain, CHINA = 0,

PROFESSION = if professional accountant, PROFESSION = 1; otherwise =0,

ACADEMICS = if academics, ACADEMICS =1; otherwise =0.

The coefficient on CHINA is expected to be positive.

Table 6-12 presents the results.

Table 6-12

Multiple regression model

Model 1:

$$\text{Score} = a + b_1\text{CHINA} + b_2\text{PROFESSION} + b_3 \text{ACADEMICS}$$

Variable	B	SE B	Beta	T	Sig T
CHINA	6.06890	1.14095	.70411	5.319	.0000
PROFESSION	1.10718	1.15355	.12894	.960	.3420
ACADEMICS	-2.38493	1.49396	-.24124	-1.596	.1170
(Constant)	25.23910	1.01338		24.906	.0000

Adjusted R Square 0.34278 F =9.86668 Signif F = 0.0000

Model 2:

$$\text{LnScore} = a + b_1\text{CHINA} + b_2\text{PROFESSION} + b_3 \text{ACADEMICS}$$

Variable	B	SE B	Beta	T	Sig T
CHINA	.21110	.04158	.68334	5.077	.0000
PROFESSION	.03614	.04204	.11742	.860	.3942
ACADEMICS	-.07639	.05444	-.21558	-1.403	.1670
(Constant)	3.22437	.03693		87.315	.0000

Adjusted R Square 0.32064 F =9.02339 Signif F = 0.0001

Model 3:

$$\text{Score} = a + b_1\text{CHINA} + b_2 \text{ACADEMICS}$$

Variable	B	SE B	Beta	T	Sig T
CHINA	6.08696	1.13987	.70621	5.340	.0000
ACADEMICS	-3.07692	1.30742	-.31124	-2.353	.0227
(Constant)	25.91304	.73010		35.492	.0000

Adjusted R Square 0.34384 F =14.36250 Signif F = 0.0000

Dependent variable: score

Independent variable:

Lnscore = Ln form of score,

CHINA = if subject is from China, CHINA =1; if he or she is
from Britain, CHINA = 0,PROFESSION = if professional accountant, PROFESSION = 1;
otherwise =0,

ACADEMICS = if academics, ACADEMICS =1; otherwise =0.

All of the three models are significant (Signif F < or = 0.0001). The signs of the coefficients of the independent variables are consistent in all of the three models (table 6-12). The positive sign of the coefficient of CHINA indicates that the Chinese group tends to agree with the regulations, while the UK group tends to hold negative view about the regulations. The coefficient on CHINA is significant at any significance level ($p=0.0000$ at all three models).

Professionals tend to view the accounting regulations positively. In contrast, academics hold a negative view about the regulations. But the coefficient on PROFESSION is not significant in model 1 and 2 ($p=0.3420$ and $p=0.3942$ respectively). Only in model 3, is the coefficient on ACADEMICS significant ($p=0.0227$).

Both univariate and multivariate analyses suggest that the Chinese group and the UK group hold different views on the Chinese joint venture accounting regulations. While the Chinese group tends to approve the regulations, the UK group has considerable reservation about the regulations.

The difference in view would seem to stem from the different accounting subcultures. In the absence of some important accounting standards, such as the principle of lower of cost and net realisable value, the accelerated depreciation method, provision for losses on stocks and foreign exchanges, the respondents in UK group do not believe that such an accounting system can provide a true and fair view of financial position and results. Because these standards have been generally accepted in the UK for quite a long period, the true and fair concept is inseparable from those principles. Such principles may be crucial for the judgment, therefore, as to whether financial statements are true and fair.

On the other hand, Chinese professionals and academics are used to an accounting system without such standards. So they may not think that this is a serious problem. This is evidence that the accounting tradition and environment affect the judgment of people.

The result also suggests that, owing to accounting subculture as well, the Chinese group and UK group may not understand the true and fair concept in the same way at all. In that case, they may apply actually different criteria(the true and fair concept) to measure the same thing(Chinese joint venture accounting regulation), then different conclusions will certainly occur. Whether, how, and to what extent, the understanding of true and fair concept is affected by culture is an interesting area for further research.

6.4.6 Individual accounting treatments and opinions

Mann-Whitney tests on the views of the two groups for individual accounting treatments and issues were performed in order to give more insight into the problem. Table 6-13 presents the results of the Mann-Whitney tests.

There are differences between the two groups in all cases except for the accounting treatment for patents and goodwill(table 6-13). Both the Chinese group and UK group agree with the two accounting methods(average score greater than 3). For the remaining 5 accounting standards, the difference is statistically significant. These results are consistent with those in table 6-7 where a less powerful χ^2 test is performed. While the UK group holds a positive view of accounting for fixed assets, patents and goodwill(mean score greater than 3), they hold negative views on all 4 other accounting methods: accounting for use of land, for organisation costs, for foreign exchanges, and for extraordinary items. Accounting for foreign exchanges gets the lowest average score from the UK group (2.34), which suggests that they have the most reservations about this accounting method. Next to the lowest is accounting for extraordinary items(2.52). contrast, the Chinese group holds a positive view about all of these accounting methods. However, similar to the UK group, the Chinese group gives the lowest score to accounting for extraordinary items(3.20), and for foreign exchanges(3.23).

Table 6-14 gives the results of the Mann-Whitney test of views about the assessment of true and fair profit and value, and other accounting issues.

Table 6-13 Mann-Whitney test: Views on
individual accounting treatments
(Chinese vs UK group)

Accounting treatment for	Mean score China(1)	Mean score UK(2)	Z	1-tailed p (1)>(2)
fixed assets	3.93	3.34	2.97	0.002
patents	3.53	3.39	0.89	0.188
goodwill	3.30	3.35	0.15	0.442
use of land	3.63	2.74	3.79	0.000
organisation costs	3.60	2.91	2.63	0.005
foreign exchange	3.23	2.34	3.07	0.001
extraordinary items	3.20	2.52	2.72	0.004

Table 6-14 Mann-Whitney test: Views on book profit and value and other accounting issues (Chinese vs UK group)

A. True and fair accounting profit and value				
	Mean score China(1)	Mean score UK(2)	Z	1-tailed p (1)>(2)
true and fair profit	3.10	2.83	1.34	0.090
true and fair value	3.20	2.48	3.18	0.001

B. Views on proposed accounting standards				
	Mean score China(1)	Mean score UK(2)	Z	1-tailed p (1)<(2)
principle of lower of cost and value	2.97	4.17	4.03	0.000
revaluation of fixed assets	3.06	3.48	1.50	0.066

C. Views on economic consequences				
	Mean score China	Mean score UK	Z	p
cashflow effect	4.67	3.00	5.38	0.000
wealth effect	4.13	2.82	3.80	0.000

As to whether joint venture accounting profit and value is true and fair, the Chinese group has a positive view, while the UK group has a negative view(table 6-14). Both differences are significant, though the difference in profit view is only marginally significant($p=0.09$).

The UK group strongly supports the proposal that the principle of lower of cost and value be introduced into the joint venture accounting system(average score=4.17, between agree and strongly agree), while the Chinese group holds a marginally negative view(2.97), close to neutral(table 6-14). The difference is significant at any conventional level($p=0.000$). The reason for the difference is obvious. It is an overwhelming principle in the UK and other western countries. But in China, up to now, it has not been allowed in local firms.

The UK group also supports the revaluation of fixed assets, while the Chinese group's attitude is not far from neutral(3.06).

While the UK group hold neutral or negative views about the concept of economic consequences, the Chinese group strongly believe that different accounting treatments may have a cash flow effect and a wealth transfer effect(table 6-14). The difference is significant at any conventional level($p=0.000$). The reason perhaps is that the UK group may not be fully aware of the fact that Chinese accounting does not distinguish reported earnings and taxable earnings. Some cash flow effect is from the different taxable earnings using different accounting methods. On the other hand, the UK group may be right when they do not believe that different accounting treatments may affect the interests of partners of the joint ventures, since allocation of profit is based only on the share of investment of partners in the joint venture.

6.4.7 A logistic regression model

A further test is carried out which removes those respondents who have no opinion or stand neutral which may bias the result. The remaining respondents have a definite answer to the question as to whether Chinese joint venture accounting can provide a true and fair view of profit and value. The answers of strongly agree and agree are combined as one answer 'agree'; and the answer 'disagree' includes both strongly disagree and disagree. Thus the dependent variable has only two value: 1=agree, 0=disagree. A logistic regression model is estimated. Table 6-15 reports the results of the tests.

In the two models, the sign of the coefficient on CHINA is positive as predicted, and significant (in model 1, $p < 0.05$; in model 2, $p < 0.01$). This result is consistent with the hypothesis that Chinese group and UK group hold opposite views over the true and fair view of accounting profit and value of joint ventures. Model 1 correctly predicts 68.75% of those who agree or not agree with joint venture book profit. However, the model is not significant overall ($p = 0.133$). Model 2 correctly predicts 75.76% of those who agree or not agree with joint venture book value (table 6-15). The model is significant overall at less than the one percent level ($p = 0.007$).

Table 6-15 Logistic regression test

Model 1:

$$\text{Pro(agree with jv profit)} = a + b_1\text{CHINA} + b_2\text{PROFESSION} + b_3\text{ACADEMICS}$$

Variable	B	S.E.	Wald	df	Sig
CHINA	1.9257	.9566	4.0524	1	.0441
PROFESON	.1966	.8897	.0488	1	.8252
ACADEMIC	-1.9840	1.2455	2.5376	1	.1112
Constant	-.6348	.7671	.6849	1	.4079

Chi-Square=5.594 df=3 Significance=0.1331

Classification table for AGREE with joint venture book profit: 1=agree, 0=disagree

Observed	Predicted		Percent Correct
	0	1	
0	14	2	87.50%
1	8	8	50.00%
Overall			68.75%

Number of selected cases: 32

Model 2:

$$\text{Pro(agree with jv value)} = a + b_1\text{CHINA} + b_2\text{PROFESSION} + b_3\text{ACADEMICS}$$

Variable	B	S.E.	Wald	df	Sig
CHINA	3.3409	1.2067	7.6649	1	.0056
PROFESON	1.2566	1.2129	1.0732	1	.3002
ACADEMIC	-.8759	1.2136	.5210	1	.4704
Constant	-2.4649	1.1851	4.3261	1	.0375

Chi-Square=12.072 df=3 Significance=0.0071

Classification table for AGREE with joint venture book value: 1=agree, 0=disagree

Observed	Predicted		Percent Correct
	0	1	
0	14	5	73.68%
1	3	11	78.57%
Overall			75.76%

Number of selected cases: 33

6.5 SUMMARY AND CONCLUSIONS

Significant differences are found between the Chinese group and the UK group in their attitudes towards the Chinese joint venture accounting regulations. Taking it as a whole, the two groups have an opposite view: the Chinese group tends to hold a positive view, while the UK group tends to have a negative view. In particular, the UK group does not believe that Chinese joint venture accounting profit and value is true and fair, while the Chinese group does.

This difference seems to result from the different accounting subcultures between China and the UK. This accounting subculture provides a foundation on which personal judgment is formed. So that in the absence of some important accounting principles, the UK group tends not to believe that the Chinese accounting system is appropriate to present a true and fair view. In contrast, the Chinese group are living and working in an accounting tradition without such principles. As a result, they may not necessarily link these principles to the presentation of a true and fair view. This is consistent with the hypothesis that people from different culture of accounting may understand the true and fair concept differently. Further evidence of accounting subculture influence on attitudes is that the two groups have significantly different views about the proposal that the principle of lower of cost and net realisable value and revaluation of fixed assets be introduced in joint ventures. As these two principles have been used in the UK for quite a long time, the UK group support or strongly support the proposal. These two standards have not been used in China for decades, however, so the Chinese group tends to stand neutral or have reservations about such a proposal.

This study does not come to the conclusion that the Chinese group is right or UK group is right. However, the empirical evidence supports the hypothesis that there is a relationship between culture and accounting. People living in different accounting traditions and environments may have different ideas about whether an accounting system can provide a true and fair view of financial position and results, or may understand the concept itself differently.

CHAPTER 7

SUMMARY AND CONCLUSIONS

7.1 INTRODUCTION

This is a research project about accounting issues in international joint ventures between Chinese and foreign partners. The study investigated the main accounting problems in international joint ventures: 1) How do accounting differences between home and foreign countries affect business decisions in the context of international joint ventures? 2) What are the economic consequences of the international harmonisation of accounting standards in Chinese joint ventures? 3) What are the foreign influences on accounting practices in joint ventures? 4) How do culture and accounting interact? The following are the main conclusions summarised from the study.

7.2 INTERNATIONAL ACCOUNTING DIVERSITY AND BUSINESS DECISIONS

An important question is whether or not the diversity among national accounting and disclosure practices and regulations affects the business decisions of major foreign users of financial statements. The study focused on Chinese joint venture financial statements and the use of them by UK multinational companies in relation to the business decisions about a joint venture.

The research methodology used here was to carry out case studies of 9 British MNCs which have joint ventures in China using questionnaire and interview techniques. The

interviews conducted were structured but open-ended. The questionnaire included factual and behavioural questions relating to decision processes, information requirements, nature of accounting diversity, coping mechanisms, and capital market effects.

The participants in the sample met the following criteria:

- 1) The UK MNCs must be among 100 largest companies.
- 2) The UK MNCs must have a considerable interest in China.
- 3) The UK MNCs must have at least one joint venture in China.
- 4) The joint venture operation is disclosed in the annual report.

The main conclusions, subject to the reservation relating to the limited nature of the study, are that:

- 1) Most UK MNCs in the sample rely extensively on these financial statements to make business decisions;
- 2) Generally speaking, accounting differences affect UK MNC's decisions. But the effects on individual decisions are different depending on the nature of the decisions involved.
- 3) The most serious problem in using Chinese financial statements is to determine the true and fair value of the existing joint venture. Most UK companies in the sample do not think Chinese financial statements can provide a true and fair value of the joint venture. Consequently, these differences affect the assessment of performance of the joint venture.
- 4) UK MNCs in the sample are aware of accounting diversity, and have developed coping mechanisms for accounting problems. The major approach by UK MNCs in the sample to deal with the differences in accounting standards is to establish a separate

financial reporting system using UK standards to account for the investment in, to assess the performance of, and to determine the value of, a joint venture. Another way to solve the problem is, with the cooperation of the Chinese partner, to establish a joint venture accounting system which is similar to the UK system.

7.3 ECONOMIC CONSEQUENCES OF HARMONISATION OF ACCOUNTING STANDARDS

The issue of economic consequences of the international harmonisation of accounting standards is a subject which is neglected in current accounting literature. A theoretical model was proposed which may be used to explain and predict the harmonisation of accounting standards across countries. The theory proposed emphasises the economic consequences of the suggested harmonisation of accounting standards on local affected groups. Not only should the benefit of the harmonisation exceed the cost, but also the benefit and cost should be fairly distributed among affected groups. Key variables which are included in the model are:

- 1) the extent to which foreign users (e.g. foreign investors) find it difficult to use local financial statements;
- 2) the extent to which the needs of foreign users are recognised by local regulators and legislators of accounting standards and rules;
- 3) the extent to which the local groups are willing to bear the direct costs of the proposed change of accounting standards and rules;
- 4) the extent to which the local affected groups are willing to accept unfavourable economic consequences of the proposed change of accounting standards and rules.

This model was then used to explain the process of harmonisation of accounting standards in the case of Chinese joint ventures. The relationship between these economic factors and harmonisation was examined. It provides evidence that foreign investors get most of the direct benefits of changes in accounting regulations, while local groups bear most of the direct costs and unfavourable economic consequences. But the host country benefits in terms of a long-run strategic advantage by encouraging foreign investment. Based on this consideration, local groups and regulators are willing to see a real change in accounting take place. The main conclusion of the study is that the harmonisation of accounting standards is actually a political process. The interests of local groups vs foreign users play a key role in the process of accounting harmonisation. Harmonisation will not take place if it is only for the benefit of foreign users. Only when local groups believe that it is for their own benefit, is it possible for a plan of harmonisation of accounting standards to be carried out.

As an example, the financial statements of a Chinese-Hong Kong joint venture were adjusted by the author in order to see the economic consequence of changes in accounting standards. It was found that the tax effect may be the most obvious one of the economic consequences caused by the harmonisation of accounting standards. However, economic consequence may not be restricted to taxation. In different countries and different situations, there could be other economic consequences. The favourable or unfavourable effect on the interests of a particular party may also vary depending on circumstances.

7.4 FOREIGN INFLUENCE ON ACCOUNTING MEASUREMENT PRACTICES

A further question is whether or not accounting measurement practices appear differently as between joint ventures with different foreign backgrounds. The study focuses on the major foreign partners in Chinese joint ventures: US, Japan, Hong Kong and UK investors. Rather than testing individual accounting method choice separately, the study

attempts to make an overall assessment of accounting practices of Chinese joint ventures. For this purpose, a point-system is designed to measure the extent to which a joint venture uses income-decreasing or conservative accounting measurement methods for each joint venture taken from a random sample of companies. Then comparisons of the conservative measurement scale are made between different joint venture groups using univariate and multivariate analyses. The findings support the hypothesis that there are significant differences in accounting choices between joint ventures with different foreign backgrounds. In particular, UK and US joint ventures are using more income-decreasing or conservative accounting methods than HK and Japanese joint ventures. When the joint ventures tested are further grouped according to their continental backgrounds, significant differences are also found: accounting measurement in Asian joint ventures is less conservative than those of American and European joint ventures.

As to the specific reason for the accounting differences between joint venture groupings, four competing hypotheses are examined to see whether they have the power to explain the difference: income tax considerations, firm size, political consideration and investor confidence. The results seem to be mostly consistent with the confidence hypothesis, assuming that accounting tools may be used to deal with uncertainty and business risk. Investors from nearby areas such as Hong Kong and Japan are more familiar with the investment environment than those from America and Europe. The latter then may meet more uncertainty and investment risk. This situation may drive them to choose a more cautious and conservative measurement policy to report their financial position and operating result. The result is also consistent with political consideration hypothesis.

In addition to a portfolio analysis of individual accounting method choices, the study also performed separate tests on individual accounting treatments for the depreciation of fixed assets, provision for loss on stocks, capitalisation of R & D, and the inventory valuation method. Systematic measurement patterns are not found across those tests. This result suggests that firms do not make separate, unrelated decisions on individual accounting policies. Rather, managers may be concerned with how the combination of methods

affects earnings instead of the effect of just one particular accounting method.

The robustness of the results of the tests comes from the following facts:

1) All the tests were performed under two assumptions:

Assumption I: The effects of some accounting methods are assumed to be half the effects of other methods on the current earnings (e.g. a shorter period for the amortisation of intangible assets has half the effect on earnings of the accelerated depreciation method).

Assumption II: All the accounting choices have an equivalent effect on current earnings (i.e. the earnings decreasing method for depreciation has the same effect on earnings as the earnings decreasing method for the inventories).

2) Both parametric and non-parametric methods are used. The results are similar. Thus, the findings appear valid on both the assumption of normal distribution and non-normal distribution of the variables;

3) The dependent variable and some independent variables are transformed to Ln form and tested again. The results are consistent with each other, suggesting that the findings are fairly reliable;

4) Besides the tests on overall accounting methods, individual accounting methods are also tested separately. This provides additional insight about firms' accounting choices.

Since the evidence across all the tests are generally consistent, this provides support for the conclusion of this study.

7.5 CULTURE AND ACCOUNTING STANDARDS

Finally the interaction of cultural factors and accounting standards is investigated. In particular, the study is concerned with how the accounting environment affects people's judgment about the appropriateness of accounting standards in terms of the truthfulness and fairness of financial statements. The hypothesis is that people from different accounting subcultures may have different judgments as to whether a particular accounting standard can provide a true and fair view of financial position and results.

The research tests the attitudes of British and Chinese people towards the Chinese joint venture accounting regulations as to whether the regulations can give a true and fair view of financial position and results. The subjects of this experiment are people who are in accounting practice, research, and teaching in China and in Britain. Subjects in Britain were selected from the Big-Six partners, accountants from other accounting firms, and financial managers from large UK companies which have joint ventures in China. Subjects in China were accountants in accounting firms, accounting teachers, and accountants in joint ventures and other companies. All together there were 53 subjects, 30 from China, and 23 from Britain. After being given a brief description of the main accounting standards in Chinese joint ventures, they were asked whether they think the standard is suitable. They were also asked as to whether a particular accounting standard should be introduced in joint ventures. Finally, they were invited to offer an overall judgment based on their knowledge whether, taken as a whole, the regulations can provide a true and fair view of profit, and the value of assets and liabilities of a joint venture.

The findings were generally consistent with the hypothesis that people from different accounting subcultures may have different judgments. Contrasting views were found between the two groups of subjects from Britain and China. For instance, few British people in the sample think that Chinese joint venture accounting can provide a true and fair view about the value of a joint venture's assets and liabilities, while most Chinese

subjects do. They also have different views on some particular accounting standards.

7.6 CONCLUDING REMARKS

7.6.1 Implications of the study

This research is an attempt to explore international accounting issues in joint ventures. The findings, on the one hand, extended our knowledge about accounting practices in Chinese-foreign joint ventures; and also gave new insight look at a number of hot accounting debates and unsolved problems on the other. The research provided evidence supporting hypotheses in respect to association between accounting diversity and business decisions, and interaction between culture and accounting. Meanwhile a theoretical framework of harmonisation of accounting standards has been proposed.

7.6.2 Limitations of the research

The main limitation of the study is that the findings are only based on a rather small set of data. The sample sizes in the study are relatively small. This is due to the difficulties in collecting data and information about the management behaviour and financial position of Chinese-foreign joint ventures. Published financial accounts of joint ventures were not available, and a questionnaire survey had to carry out. However, even the questionnaire survey suffered from a problem of low response rate, because Chinese firms were not used to this kind of research. This was also the reason that some study had to be based on a case study base. So that generalisations from the findings should be subject to great care.

7.6.3 Suggestions for further research

It is believed that there are abundant opportunities in the new field, international joint ventures for accounting research. Among others are:

1) Financial reporting of international joint ventures. How financial statements of joint ventures should be prepared to serve the need of parent companies in decision-making, given that there are considerable differences in accounting standards between home and host countries and unavoidable conflict in accounting? How the conflict in accounting is dealt with by joint venture partners in the context of joint venture business? What is the role of political consideration in the determination of accounting choice? How the conflict is related to common objective of joint venture partners? In other words, how are accounting standards harmonised in joint ventures? Is this experience useful for other course of international accounting harmonisation?

2) Further evidence is required as to whether there is an economic consequence from harmonisation of accounting standards internationally. Who bear the direct cost, who bear the unfavourable economic consequence and who benefit from the change in accounting standards? What is the effect of economic consequences on the process of accounting harmonisation? This kind of research can be carried out in various situations. Data may be obtained from not only successful experiences and cases, but unsuccessful attempts and proposes to harmonise international accounting standards may be particularly useful.

3) Research on relationship between culture and accounting. International joint ventures are an ideal field for research on the cultural influences on managerial, accounting and financial behaviour, for interaction between cultural factors and behaviour may be easier to be observed. For example, how management and accounting practices are affected by the different managerial styles and philosophies, accounting and financial traditions of

local and foreign partners? How the decision-power is shared between local and foreign partners? How does the sharing of decision-power affect managing behaviour and accounting and financial practices of a joint venture? Cultural influence on accounting conceptual framework and basic concepts such as true and fair concept is another interesting area for further research.

It is expected that accounting research in this area be useful for the understanding of international accounting and reporting practice in an environment of globalisation and for the course of harmonisation of accounting standards.

APPENDICES

APPENDIX 1-1

Foreign direct investment ventures in China, 1979-1989
(Number and millions of US dollars)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Equity joint ventures											
1	6	20	28	29	107	741	1412	871			12000
2	8	63	28	29	188	1066					
3					74	255	580				
Contractual joint ventures											
1		320	70	402	331	1089	1611	480			8000
2		500	1300	926	504	1484					
3					227	465	585				
Wholly-foreign-owned-ventures											
1				33	15	26	46	18			1500
2					40	100					
3					43	15	13				
Joint-exploration											
1	8	4		1	18		4				
2	110	1112		170	1031						
3	110				292	523	481				
Total											
1										11000	22000
2					1763	2650	5850	3300			
3				1800	636	1258	1570	1490			15400

1=Number of agreements; 2=Foreign investment (or contribution) pledged; 3=Foreign investment (or contribution) realised

Note: Some discrepancies in totals are due to rounding and the inclusion of some unspecified items.

Sources: Nai-ruenn Chen, 1986, "Foreign investment in China"; and People's Republic of China, 'Almanac of China's foreign Economic Relations and Trade' (Beijing, October 1985 and 1986); Lao Yuanyi, 1987, "Management Development for Joint Ventures: Case of China"; Business Asia (Business International Asia/Pacific Ltd), 22 June 1987; People's Daily, Overseas Edition, 6/4/1990.

APPENDIX 1-2

Foreign invested enterprises in China (1990-May 1992)

	1990	1991	May 1992
Foreign invested enterprises (number)	29,000	37,189	50,876
including:			
Joint ventures (equity and contractual)	25,700	31,288	
Realised foreign direct investment (\$US billion)	19	23.3	

Source: People's Daily, March 19, 1991; January 27, April 21, August 7, 1992.

APPENDIX 1-3

Sources of foreign direct investment in China, 1979-1989
(Contracted investment, US \$ million)

Country	Cumulative total	%
1 H.K, Macaw	22,662.2	61.6
2 US	4,110.2	11.2
3 Japan	3,183.7	8.7
4 Singapore	697.7	1.9
5 W.Germany	586.1	1.6
6 UK	548.2	1.5
sub-total	31,788.1	86.40
others	5,006.9	13.60
total	36,795.00	100.00

Note: This includes all kinds of equity joint ventures, contractual joint ventures, wholly foreign owned enterprises, joint offshore oil exploration, leasing, compensation deals and processing and assembly.

Sources: Nai-ruenn Chen, 1986, " Foreign investment in China"; and People's Republic of China, 'Almanac of China's foreign Economic Relations and Trade" (Beijing, October 1985, 1986, 1987, 1988, 1989, 1990).

APPENDIX 1-4

Foreign backgrounds of equity joint ventures in China:

A Sample of 1608 joint ventures(1979-1989)

Country	Number of JVs	%
-----	-----	-----
1 H.K, MACAW	1,003	62.3
2 US	209	13.0
3 Japan	160	10.0
4 SINGAPORE	90	5.6
5 FRANCE	25	1.5
6 THAILAND	22	1.3
7 UK	18	1.1
-----	-----	-----
Sub-total	1,527	95.0
others	81	5.0
-----	-----	-----
total	1,608	100.0

Source: People's Republic of China, 'Almanac of China's foreign Economic Relations and Trade"(Beijing, October 1985, 1986,1987,1988,1989,1990) .

APPENDIX 2-1

Form of balance sheet in Chinese joint ventures

ASSETS

LIABILITIES AND CAPITAL

CURRENT ASSETS

Cash on hand
 Cash in bank
 Notes receivable
 Accounts receivable
 Income tax paid
 in advance
 Advance payments
 Other receivables
 Prepaid and deferred
 expenses
 Inventories
 Total current assets

CURRENT LIABILITIES

Short term bank loans
 Notes payable
 Accounts payable
 Advance from customers
 Accrued payroll
 Taxes payable
 Dividends payable
 Other payable
 Provision for expenses(c)
 Staff and workers bonus(d)
 Total current liabilities

LONG TERM INVESTMENTS

LONG TERM LIABILITIES

Long term bank loans
 Other long term loans
 Total liabilities

FIXED ASSETS

Historical cost of
 fixed assets
 less: Accumulated
 depreciation
 Net value of
 fixed assets

CAPITAL

Paid in capital
 -Chinese investment
 -Foreign investment
 Reserve funds(e)
 Expansion funds(f)
 Current year profit
 Retained earning
 Total capital

CONSTRUCTION WORK IN
 PROCESS(a)

INTANGIBLE AND
 OTHER ASSETS

Right to use a site(b)
 Proprietary technology
 and patents
 Other intangibles
 Organisation expenses
 Total intangible
 and other assets

TOTAL ASSETS

TOTAL LIABILITIES
 AND CAPITAL

FOOT NOTES(g)

Notes

- (a) long-term contracts.
- (b) the right is an investment from the Chinese partner.
- (c) this expenses should be identified, e.g.interest on loans.
- (d) provision made from profit after income tax payable to employees according to their performance, or used for the welfare of employees.
- (e) made from profit after income tax, used only for possible losses and expansion.
- (f) made from profit after income tax used only for expansion.
- (g) including rental fixed assets, import tariff, etc.

Form of income statement in Chinese joint ventures

ITEMS

Sales of products

Including: export sales

Less: sales tax

cost of goods sold

Including: cost of goods

sold for export

Gross profit on sales

Less: selling expenses

General and administrative expenses

Including: interest expenses

Exchange losses (less gains)

Profit on goods sold

Add: profit from other operations(a)

Operating profit

Add: Non-operating income(b)

Less: Non-operating expenses(b)

NET PROFIT

FOOT NOTES(c)

Notes

- (a) profit other than from sales of goods, e.g. rent income.
- (b) income and expenses other than those relating to operation profit, e.g. gains and losses on investment, and on disposal of fixed assets; bad debts.
- (c) footnotes of income statement should disclose the foreign currencies and amounts in relation to export sales; and the amounts of notes convertible to foreign currencies in relation to local sales.

APPENDIX 2-3

Form of statement of changes in financial position
in Chinese joint ventures

SOURCES AND APPLICATION OF WORKING CAPITAL	CHANGES OF WORKING CAPITAL ITEMS
1 SOURCES OF WORKING CAPITAL	1 INCREASES OF CURRENT ASSETS
1.1 Current year profit	1.1 Cash on hand
Add: amounts not affecting working capital	1.2 Cash in banks
(1) Depreciation	1.3 Notes receivable
(2) Amortisation of intan- gible and other assets	1.4 Accounts receivable
(3) Loss from shortage of fixed assets	1.5 Income tax paid in advance
Sub-total	1.6 Prepayment to suppliers
	1.7 Other receivables
	1.8 Prepaid and deferred expenses
	1.9 Inventories
1.2 Other sources:	
(1) Proceeds from disposal of fixed assets	TOTAL INCREASE OF CUR. ASSETS
(2) Increase of long term loans	2 INCREASE OF CURRENT LIABI.
(3) Withdraw of long term investment	2.1 Sort term bank loans
(4) Increase of reserve funds and expansion funds	2.2 Notes payable
(5) Increase of capital	2.3 Accounts payable
Sub-total	2.4 Advances from customers
	2.5 Accrued payroll
	2.6 Taxes payable
	2.7 Dividends payable
	2.8 Other payables
	2.9 Accrued expenses
	2.10 Staff and workers bonus
TOTAL SOURCES OF WORKING CAPITAL	TOTAL INCREASE OF CURRENT LIABILITIES
2 Application of Working Capital	
2.1 Distribution of profit	
(1) Income tax	
(2) Staff and workers bonus	
(3) Reserve funds	
(4) Enterprise expansion funds	
(5) Dividends	
Sub-total	
2.2 Other applications	
(1) Purchase and construction of fixed assets	
(2) Fixed assets from investment	
(3) Increase of intangible and other assets	
(4) Reimbursement of long term loans	
(5) Increase of long term investment	
Sub-total	
TOTAL APPLICATION OF WORKING CAPITAL	
NET INCREASE OF WORKING CAPITAL	NET INCREASE OF WORKING CAPITAL

APPENDIX 3-1

UK MNCs surveyed and their joint ventures in China

Name of UK MNC	BOC	
Number of principal foreign operations	87	
Name of jv	Shanghai BOC Manufacture of Gaseous products	
Business scope(jv)		
Total investment in the jv(\$m)	15.5	
Share of equity	50%	
Duration of business(year)	30	
Name of UK MNC	CABLE & WIRELESS	CABLE & WIRELESS
Number of principal foreign operation	38	
Name of jv	Huaying Nanhai Oil Telecommunication Service Co.Ltd.	Shenda Telephone Co. Ltd.
Business scope(jv)		Telephone Manufac- ture
Total investment in the jv(\$m)	7	10
Share of equity	49%	49%
Duration of business(year)	15	20
Name of UK MNC	COATS VIYELLA PLC.	COATS VIYELLA PLC.
Number of principal foreign operation	43	
Name of jv	Guangying Spinning Co.Ltd.	Jingying Spinning Company Ltd.*
Business scope(jv)		
Total investment in the jv(\$m)	10.8	17.6
Share of equity	50%	50%
Duration of business(year)		
Name of UK MNC	COURTAULDS	GKN
Number of principal foreign operations	55	62
Name of jv	International Paint of Shanghai Co. Ltd.	Shanghai GKN Co.Ltd.
Business scope(jv)	Pharmacy	Automot components
Total investment in the jv(\$m)	12.2	13
Share of equity	51%	25%
Duration of business(year)	25	undefined
(to be continued)		
continued)		

Name of UK MNC	GLAXO	PILKINGTON
Number of principal foreign operation	65	33
Name of jv	Chongqing Glaxo Pharmaceuticals Limited Pharmacy	Shanghai Yaohua Pilkington Glass Co.Ltd. Glass Manufacture
Business scope(jv)		
Total investment in the jv(\$m)	9.9	100
Share of equity	50%	12.5%
Duration of business(year)	50	18

Name of UK MNC	ROTHMANS	UNILEVER
Number of principal foreign operation	28	172
Name of jv	Shandong Rothmans Tobacco, Co.Ltd.	Shanghai Lever
Business scope(jv)	Tobacco Manufacture	Manufacture
Total investment in the jv(\$m)	10	10
Share of equity	50%	50%
Duration of business(year)	20	39

Name of UK MNC	UNILEVER	UNILEVER
Number of principal foreign operation		
Name of jv	Shanghai pond's Ltd*	Shanghai Van Den Bergh Ltd*
Business scope(jv)		
Total investment in the jv(\$m)		
Share of equity	50%	50%
Duration of business(year)		

* not included in the study.

**UNIVERSITY OF GLASGOW
GLASGOW BUSINESS SCHOOL
DEPARTMENT OF ACCOUNTING AND FINANCE**

**CHINESE-BRITISH JOINT VENTURE
ACCOUNTING AND FINANCE PROJECT**

QUESTIONNAIRE SURVEY

GENERAL INSTRUCTIONS FOR COMPLETION

1 The survey involves Chinese-British joint ventures located in China. The aim of this study is to learn about accounting practices in Chinese joint ventures in the year of 1991.

2 The suitable person to complete the questionnaire is someone who is familiar with the accounting or financial affairs of the joint venture.

3 The respondent only needs to tick or circle the appropriate box or number in respect to the firm's accounting practices for most questions. However, the answers to a few questions may need a brief explanation. If you are not sure of the answer to a particular question, please complete the answer box or space with a 'x'.

CONFIDENTIAL

All the information provided in the questionnaire will be kept strictly confidential. The results of the study will be presented in aggregated form only. The anonymity of replies from individual respondents and their firms will be carefully protected.

Your time and co-operation is greatly appreciated. A summary of the results of the study will be sent to all participants in due course.

Please mail completed questionnaire to (paid envelope provided):

**Mr. Qingliang Tang, BEc MAcc.
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Glasgow Business School
University of Glasgow
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Glasgow, G12, 8LE UK**

Tel: 041 339 8855 Ext. 6314

SURVEY OF JOINT VENTURE ACCOUNTING AND FINANCE IN CHINA

SECTION 1: GENERAL BUSINESS BACKGROUND

Question 1.1: Please give the name and address of the joint venture:

Name of the joint venture: _____

Address of the joint venture in China: _____

Name of the Chinese Participant: _____

Name of the British participant: _____

Question 1.2: Please indicate the nature of ownership of the Chinese participant:

Tick box

The Chinese participant is a state enterprise

The Chinese participant is a collective enterprise

Information is not available

Question 1.3: Personnel of the joint venture in 1991(1.3-1.5)

Who is the Chairperson of the board of directors in the joint venture?

Tick box

The Chairperson is from the Chinese participant

The Chairperson is from the UK participant

The Chairperson is from the other participant

Question 1.4: Who is the Chief Executive of the joint venture?

Tick box

The Chief Executive is from the Chinese participant

The Chief Executive is from the UK participant

The Chief Executive is from the other participant

Question 1.5: Who is the Chief Accountant of the joint venture?

Tick box

The Chief Accountant is from the Chinese participant

The Chief Accountant is from the UK participant

The Chief Accountant is from the other participant

Question 1.6: Please indicate the business activity of the joint venture.

Question 1.7: What is the total investment (registered capital plus loans) in the joint venture? (please complete the box with a number or with a 'x' if information is not available).

Question 1.8: What is the percentage of your share of equity in the joint venture? (please complete the box with a number or with a 'x' if information is not available).

Question 1.9: What is the agreed duration of the business of the joint venture?

That is from 19_____ to _____.

Question 1.10: Please indicate the objectives of investment in China. In respect of those objectives please can you indicate their relative importance. (Please circle one number in respect of each objective listed)

	Not applic-able	Not at all	Minor import-ance	Moderate import-ance	High import-ance
i)for access to a potentially huge market	0	1	2	3	4
ii)to achieve a higher level of profitability	0	1	2	3	4
iii)for access to cheap labour	0	1	2	3	4
Other(please specify)					
iv)_____	0	1	2	3	4
v)_____	0	1	2	3	4
vi)_____	0	1	2	3	4
vii)_____	0	1	2	3	4

Question 1.11a: Assessment of the business. To the statement "*The business of the joint venture is successful.*", your answer is: (please circle one number)

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 1.11b: Did the joint venture make profit in 1991?

Yes

No

If yes, how many years did the joint venture make profit including 1991? _____

Question 1.12: Future plans for the joint venture. To the statement "*The agreement of the joint venture should be renewed, i.e. the joint venture should continue after the end of the current agreement.*", your answer is: (please circle one number)

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 1.13: Assessment of the investment environment of China (taking into account Chinese laws and regulations regarding foreign investment, compared to other foreign countries, developing or developed). To the statement "*It is a good investment environment.*", your answer is: (please circle one number)

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 1.14: Please indicate the relevant factors you took into account in your decision to create a joint venture in general. In respect of those factors please can you indicate their relative importance.

	Not applic- able	Not at all	Minor import- ance	Moderate import- ance	High import- ance
i) marketability	0	1	2	3	4
ii) availability of financial source	0	1	2	3	4
iii) tax incentives	0	1	2	3	4
iv) labour source	0	1	2	3	4
v) legal requirements for foreign investment	0	1	2	3	4
vi) accounting regulations	0	1	2	3	4
Other (please specify)					
vii) _____	0	1	2	3	4
viii) _____	0	1	2	3	4
ix) _____	0	1	2	3	4

SECTION 2: CHINESE LOCAL ACCOUNTING REGULATIONS AND PRACTICES

Question 2.1: Assessment of accounting differences. To the statement "*Generally speaking, there are significant differences between Chinese local accounting systems and U.K. systems, both in disclosure and valuation.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 2.2: To the statement "*Generally speaking, accounting differences affect your decisions to create a joint venture in a foreign country.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

If you agree, why do accounting differences affect your decisions?

Question 2.3: The following are some major accounting differences in the valuation of assets and liabilities between UK and China(local regulations). Please assess their relative importance in terms of decision-making of the joint venture.

	Not applic- able	Not at all	Minor import- ance	Moderate import- ance	High import- ance
i)no concept of lower of cost or net realisable value in China	0	1	2	3	4
ii)no re-valuation of fixed assets in China	0	1	2	3	4
iii)no provisions for possible losses(e.g bad debts)	0	1	2	3	4
iv)different treatment of foreign currency transactions	0	1	2	3	4
Other(please specify)					
v)_____	0	1	2	3	4
vi)_____	0	1	2	3	4
vii)_____	0	1	2	3	4
viii)_____	0	1	2	3	4
ix)_____	0	1	2	3	4

Question 2.4: To the statement "*These main accounting differences should be removed in order to establish a better business cooperation between joint venture partners.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

SECTION 3: JOINT VENTURE ACCOUNTING IN CHINA: VALUATION AND PROFIT MEASUREMENT(i.e. accounting methods used in 1991 for the official annual financial statements of your joint venture in China).

Question 3.1: To the statement "*The current Chinese joint venture accounting regulations(Ministry of Finance, China, 1985) have solved the major accounting problems in relation to joint venture business.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 3.2: Chinese joint ventures follow accounting regulations which are separate from local regulations. To the statement "*This is a good way to solve accounting problems in joint ventures.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 3.3: Who actually has been directly involved in the preparation of financial statements and accounting affairs in the joint venture?

Tick box

The Chinese participant

The UK participant

Jointly

Question 3.4: Who decided the detailed accounting policies to be followed by the joint venture under Chinese joint venture accounting regulations?

Tick box

The Chinese participant

The UK participant

Jointly

Question 3.5: Was there any detailed agreement as regards accounting issues between you and the Chinese partner of the joint venture?

Yes

No

Question 3.6: Have you had any disputes over accounting issues with your Chinese partner?

Yes

No

If yes, which accounting issues did the dispute involve?

Question 3.7 Accounting for stocks

Question 3.7a: Generally speaking, historical cost, using FIFO or the weighted average method for the determination of cost of sales, and the disclosure of net realisable value are the main features of accounting regulation for stocks in Chinese joint venture accounting. To the statement "*The regulation for stocks is appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 3.7b: What was the accounting method used for stock in your joint venture?

	Tick box
FIFO	<input type="checkbox"/>
Weighted average method was used	<input type="checkbox"/>
Other method(please specify below)	<input type="checkbox"/>

Question 3.7c: Was any of the stock valued at a net realisable value below cost in your joint venture?

Yes

No

No re-valuation

If yes, was the net realisable value of stock disclosed in the annual account of the joint venture?

Yes

No

Question 3.7d: Were there any provisions for losses on stocks in your joint venture?

Yes

No

Question 3.7e: To the statement "*The joint venture accounting should be allowed to adopt the principle of lower of cost and net realisable value.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

If agree, the reasons are:

(1) It is a common accounting practice in the West.

Yes

No

(2) It gives a truer and fairer view of value of the business than book value.

Yes

No

(3) Book value is too far away from the economic reality of stock in the joint venture.

Yes

No

other reasons(please specify)

If disagree, the reasons are: (please specify)

Question 3.8 Accounting for fixed assets

Question 3.8a: Accounting regulations for fixed assets are featured normally by historical cost, non-revaluation, and straight-line depreciation in Chinese joint ventures. To the statement "*This regulation is appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer:

Question 3.8b: Did the joint venture use the accelerated depreciation method (i.e not straight line method)?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

If yes, please specify the reasons and for what assets:

Question 3.8c: How long was the estimated useful life of fixed assets?

- a) for buildings and houses, the minimum life is: _____ years;
the maximum life is: _____ years.
- b) for machines and equipment, the minimum life is: _____ years;
the maximum life is: _____ years.
- c) for electronics equipment, the minimum life is: _____ years;
the maximum life is: _____ years.

Question 3.8d: What was the estimated residual value of fixed assets, as an average % of historical cost, when calculating depreciation?

The estimated residual value of fixed assets is _____ % of cost.

Question 3.8e: To the statement "*Revaluation for fixed assets should be allowed in the joint venture whenever necessary.*", Your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer:

Question 3.8f: What is the most important improvement which should be made regarding accounting for fixed assets?

Question 3.9 Accounting for R & D

Question 3.9a: Were any R & D expenses capitalised in your joint venture?

Yes

No

If you accounted for R & D expenses separately, please go on to question 3.9b and 3.9c:

Question 3.9b: Research expenses accounted for about _____ % of total R & D expenses in your joint venture.

Were any research expenses capitalised?

Yes

No

Question 3.9c: Development expenses accounted for about _____ % of total R & D expenses in your joint venture.

Were any development expenses capitalised?

Yes

No

Question 3.10: Accounting for goodwill

Question 3.10a: The accounting regulation for purchased goodwill requires the use of historical cost which should be written off during its useful life, or 10 years, but not longer than the duration of the joint venture(it can not be written off immediately against equity). To the statement "*This regulation is appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer below.

Question 3.10b: What was the amount of purchased goodwill in the joint venture? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.10c: The purchased goodwill was amortised over how many years? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.11 Accounting for other intangible assets

Question 3.11a: Organisation expenses are normally accounted for by historical cost which should be written off in no less than 5 years(Regulation). To the statement "*This treatment is appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 3.11b: What was the amount of organisation expenses in the joint venture? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.11c: The organisation expenses were amortised over how many years in your joint venture? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.11d: Purchased patents and know-how are normally accounted for by historical cost which may be written off over its useful life or 10 years, but not longer than the life of the joint venture(Regulation). To the statement "*This treatment is appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer below.

Question 3.11e: What was the amount of purchased patents and know-how in the joint venture? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.11f: The purchased patents and know-how were amortised over how many years? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.11g: Accounting regulation for the right to use a site for the joint venture is that the right is treated as an intangible asset. To the statement "*This regulation is appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 3.11h: What was the amount paid for the right to use a site in the joint venture? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.11i: The right to use a site was amortised over how many years? (please complete the box with a number or with a 'x' if there is no such an item).

Question 3.12: Accounting for extraordinary items. In the regulation, extraordinary items are defined as gains and losses on investment in other organisations gains and losses on disposal of fixed assets, donation expenditures and receipts, bad debts and extraordinary damage. Prior year adjustments are excluded. To the statement "*These treatments are appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Question 3.13: Accounting for foreign currency transactions. The principle in the accounting regulations for foreign currency transactions is that all foreign exchange gains and losses cannot be recognised in the current income statement until realisation. To the statement "*The accounting regulations for foreign currency transactions are appropriate for your joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer below.

Question 3.14: To the statement "*Chinese joint venture accounting regulations for measurement of profit can provide a true and fair profit for the joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer below.

Question 3.15: To the statement "*Chinese joint venture accounting regulations for valuation of assets and liabilities can provide a true and fair value of the joint venture.*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer below.

Question 3.16: To the statement "*To choose different accounting methods and policies for valuation and measurement would affect your interest in the joint venture, (e.g. affect the allocation of profit between partners of the joint venture.)*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer below.

Question 3.17: To the statement "*To choose different accounting methods and policies for valuation and measurement would affect the cash flow of the joint venture(e.g taxable profit).*", your answer is:

strongly disagree	disagree	neutral/no opinion	agree	strongly agree
0	1	2	3	4

Please give reasons briefly for your answer below.

What other roles do you think accounting can play in the joint venture? (Please specify):

SECTION 4: JOINT VENTURE ACCOUNTING IN CHINA: USE OF REPORTS

Question 4.1: How often did you use the financial statements(income statement, balance sheet and statement of changes in financial position) prepared by the joint venture?

	Tick box
Frequently	<input type="checkbox"/>
Often	<input type="checkbox"/>
Hardly	<input type="checkbox"/>
Never	<input type="checkbox"/>

(if you select NEVER, please go to question4.3)

Question 4.2: In what ways did you use the financial statements(income statement, balance sheet and statement of changes in financial position)prepared by the Chinese joint venture?

You used a financial statement of Chinese joint ventures:

(1)For the assessment of the performance of the joint venture;

Yes

No

(2)For the determination of the true value of the joint venture;

Yes

No

(3)For the determination of true value of your share of equity of the joint venture;

Yes

No

(4)For the allocation of profit of the joint venture between partners;

Yes

No

other purposes (e.g. for tax purpose, please specify below)

Question 4.3: For the purpose of assessment of the performance of the joint venture, please indicate the relative importance of the principal financial statements of the joint ventures.

	Not applicable	Not at all	Minor importance	Moderate importance	High importance
i)balance sheet	0	1	2	3	4
ii)income statement	0	1	2	3	4
iii)statement of changes in financial position	0	1	2	3	4

Question 4.4: For the purpose of determination of the true value of the joint venture, please indicate the relative importance of the principal financial statements of the joint ventures.

	Not applicable	Not at all	Minor importance	Moderate importance	High importance
i)balance sheet	0	1	2	3	4
ii)income statement	0	1	2	3	4
iii)statement of changes in financial position	0	1	2	3	4

Question 4.5: For the purpose of allocation of the profit of the joint venture between partners, please indicate the relative importance of the principal financial statements of the joint ventures.

	Not applicable	Not at all	Minor importance	Moderate importance	High importance
i)balance sheet	0	1	2	3	4
ii)income statement	0	1	2	3	4
iii)statement of changes in financial position	0	1	2	3	4

Question 4.6: Do you have your own financial reporting system for the joint venture, in which some different accounting methods and policies may be used from that used by the joint venture?

Yes

No

If yes, what are the major differences in accounting methods and policies used?

If no, please go to Question 4.8.

Question 4.7: The purposes of establishing your own and separate financial reporting system are:

(1) For the assessment of the performance of the joint venture;
Yes
No

(2) For the determination of the true value of the joint venture;
Yes
No

(3) For the determination of your share of equity of the joint venture;
Yes
No

(4) For the allocation of profit of the joint venture between partners;
Yes
No

other purposes (e.g. for tax purpose, please specify below)

Question 4.8: How did you account for your investment in China in your consolidated financial report?

	Tick box
Using cost method	<input type="checkbox"/>
Using equity method	<input type="checkbox"/>
Using proportionate method	<input type="checkbox"/>
Using other method (please specify below)	<input type="checkbox"/>

APPENDIX 5-1

Non-response bias test:
earlier response group vs later response group

A. Mann-Whitney test of scores

	Number of Cases	Mean	Standard Deviation	Standard Error
earlier response group	39	1.7436	1.075	.172
later response group	47	1.8085	1.130	.165
	--			
Total	86			

Z=0.3135, p=0.7539

B. t-test of investment

	Number of Cases	Mean	Standard Deviation	Standard Error
earlier response group	38	1088.5526	2841.981	461.030
later response group	45	782.9333	1222.485	182.237

t=0.65, p=0.515

C. t-test of foreign equity
(earlier response group vs later response group)

	Number of Cases	Mean	Standard Deviation	Standard Error
earlier response group	39	43.0000	15.803	2.531
later response group	47	46.7021	12.450	1.816

t=1.22, p=0.228

APPENDIX 5-2

Scores in China-foreign joint ventures (Assumption II)

A.

Scores in US-China
joint ventures (n=12)

Scores	Frequency	Percent
.00	1	8.3
1.00	1	8.3
2.00	1	8.3
2.50	3	25.0
3.00	1	8.3
3.50	2	16.7
4.50	2	16.7
5.50	1	8.3

TOTAL	12	100.0

Mean=2.917 Median= 2.750
Std Dev=1.535

B.

Scores in Japan-China
joint ventures (n=14)

Scores	Frequency	Percent
.00	2	14.3
.50	3	21.4
1.00	1	7.1
1.50	2	14.3
2.00	1	7.1
2.50	1	7.1
3.00	2	14.3
4.50	2	14.3

TOTAL	14	100.0

Mean=1.786 Median=1.500
Std Dev=1.528

C.

Scores in HK-China
joint ventures (n=27)

Scores	Frequency	Percent
.00	1	3.7
.50	5	18.5
1.00	2	7.4
1.50	10	37.0
2.00	2	7.4
2.50	3	11.1
3.50	1	3.7
4.50	1	3.7
6.00	2	7.4

TOTAL	27	100.0

Mean=1.889 Median=1.500
Std Dev=1.528

D.

Scores in UK-China
joint venture (n=8)

Value	Frequency	Percent
1.00	1	12.5
1.50	2	25.0
2.50	1	12.5
4.50	1	12.5
5.00	2	25.0
6.50	1	12.5

TOTAL	8	100.0

Mean=3.438 Median=3.500
Std Dev=2.060

APPENDIX 5-3

Parametric tests of average scores of Chinese-foreign joint ventures

A. F-test: average scores (means) of joint ventures with different foreign country backgrounds

	assumption I			assumption II	
	Cases	Mean	Std Dev	Mean	Std Dev
For Entire Population	78	1.7885	1.1152	2.3462	1.7270
US	12	2.2917	1.1172	2.9167	1.5349
Japan	14	1.3214	1.0304	1.7857	1.5281
Hong Kong	27	1.5556	0.9838	1.8889	1.5275
UK	8	2.4375	1.1783	3.4375	2.0605
Other foreign partner	17	1.8824	1.1796	2.6176	1.9083
	F = 2.3872 p=0.0588			F = 2.2024, p=0.0771	

B. F-test: Average scores of joint ventures with different country groups (US & UK vs Japan & HK)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
For Entire Population (n=78)	1.7885	1.1152	2.3462	1.7270
US and UK (n=20)	2.3500	1.1133	3.1250	1.7311
Japan & HK (n=41)	1.4756	0.9934	1.8537	1.5093
Others (n=17)	1.8824	1.1796	2.6176	1.9083
	F=4.6031 p=0.0130		F=4.2402 p=0.0180	

C. t-test: Average scores of joint ventures with different country groups (US & UK vs Japan & HK)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
US & UK (n=20)	2.3500	1.1133	3.1250	1.7311
Japan & HK (n=41)	1.4756	0.9934	1.8537	1.5093
US&UK>Japan&HK	t=3.10	p=0.002	t=2.94	p=0.003

D. F-test: Average scores of joint ventures with different continent backgrounds (n=78)

	assumption I		assumption II	
	Mean	Std Dev	Mean	Std Dev
America (n=13)	2.4231	1.1699	3.1923	1.7741
Asia (n=51)	1.5490	1.0259	2.0000	1.5684
Europe (n=14)	2.0714	1.1579	2.8214	1.9671
	F=4.0243 p=0.0219		F=3.3012 p=0.0423	

APPENDIX 5-4

Test of collinearity of variables in
multiple regression model (assumption I)

$$\text{MODEL: SCORE} = A + B_1\text{US} + B_2\text{UK} + B_3\text{HK} + B_4\text{JAPAN} \\ + B_5\text{INVEST} + B_6\text{FOREIGNE} + B_7\text{ORGRATIO}$$

Collinearity Diagnostics

Number	Eigenval	Cond Index	Variance Proportions			
			Constant	INVEST	FOREIGNE	ORGRATIO
1	3.45728	1.000	.00294	.01477	.00598	.02117
2	1.14593	1.737	.00000	.09913	.00002	.07903
3	1.06989	1.798	.00030	.01854	.00092	.02305
4	1.00036	1.859	.00001	.00000	.00001	.00000
5	.74594	2.153	.00007	.29001	.00000	.18415
6	.42395	2.856	.00260	.28028	.00252	.62660
7	.13190	5.120	.00394	.14244	.29111	.05848
8	.02476	11.815	.99014	.15483	.69943	.00753
	JAPAN	UK	US	HK		
1	.00753	.00621	.00465	.00626		
2	.04776	.18556	.01987	.01168		
3	.11548	.05620	.10208	.04605		
4	.03916	.04124	.25328	.06094		
5	.02040	.20713	.02395	.00424		
6	.17433	.08821	.00047	.01386		
7	.21927	.19038	.34879	.37338		
8	.37606	.22507	.24690	.48359		

APPENDIX 5-5

Multiple regression test: Transformation of dependent variable into Ln form (Under assumption II)

MODEL 1: $\text{LNSCORE} = A + B_1\text{US} + B_2\text{UK} + B_3\text{HK} + B_4\text{JAPAN} + B_5\text{INVEST} + B_6\text{FOREIGNE} + B_7\text{ORARATIO}$

Variable	B	SE B	Beta	T	Sig T
US	.020560	.442587	.009736	.046	.9632
UK	.028642	.440204	.012552	.065	.9485
HK	-.670277	.374450	-.445214	-1.790	.0824
JAPAN	-.558354	.427709	-.281588	-1.305	.2005
INVEST	-1.03442E-04	1.14141E-04	-.162485	-.906	.3712
FOREIGNE	-.003652	.008225	-.071894	-.444	.6598
ORGRATIO	-4.565040	3.809763	-.196479	-1.198	.2391
(Constant)	1.320884	.597983		2.209	.0340
adj.R ² =0.03774 F = 1.22970 Significance F = .3140					

MODEL 2: $\text{LNSCORE} = A + B_1\text{HK} + B_2\text{JAPAN} + B_3\text{INVEST} + B_4\text{FOREIGNE} + B_5\text{ORARATIO}$

Variable	B	SE B	Beta	T	Sig T
HK	-.686852	.259275	-.456224	-2.649	.0119
JAPAN	-.574914	.329986	-.289939	-1.742	.0900
INVEST	-1.05149E-04	1.03672E-04	-.165167	-1.014	.3172
FOREIGNE	-.003758	.007848	-.073975	-.479	.6350
ORGRATIO	-4.597157	3.601887	-.197861	-1.276	.2100
(Constant)	1.343664	.464190		2.895	.0064
adj.R ² =0.09107 F = 1.82163 Significance F = .1333					

MODEL 3: $\text{LNSCORE} = A + B_1\text{US} + B_2\text{UK} + B_3\text{INVEST} + B_4\text{FOREIGNE} + B_5\text{ORARATIO}$

Variable	B	SE B	Beta	T	Sig T
US	.535008	.340049	.253342	1.573	.1244
UK	.482340	.363291	.211378	1.328	.1926
INVEST	-1.62977E-05	1.05038E-04	-.025600	-.155	.8776
FOREIGNE	4.340338E-04	.007957	.008544	.055	.9568
ORGRATIO	-3.626039	3.819680	-.156064	-.949	.3488
(Constant)	.551928	.411038		1.343	.1878
adj. R ² =0.00478 F = 1.03942 Significance F = .4096					

MODEL 4: $\text{LNSCORE} = A + B_1\text{USUK} + B_2\text{JAHK} + B_3\text{INVEST} + B_4\text{FOREIGNE} + B_5\text{ORGRATIO}$

Variable	B	SE B	Beta	T	Sig T
USUK	.025410	.367289	.015118	.069	.9452
JAHK	-.635318	.349309	-.425455	-1.819	.0773
INVEST	-9.90648E-05	1.07980E-04	-.155609	-.917	.3650
FOREIGNE	-.003886	.007969	-.076491	-.488	.6288
ORGRATIO	-4.646485	3.653201	-.199984	-1.272	.2116
(Constant)	1.328888	.580572		2.289	.0281
adj.R ² =0.08821 F = 1.79332 Significance F = .1390					

APPENDIX 5-6

Multiple regression test: Transformation of independent variable into Ln form (Under assumption II)

$$\text{MODEL 1: SCORE} = A + B_1\text{US} + B_2\text{UK} + B_3\text{HK} + B_4\text{JAPAN} + B_5\text{LNINVEST} + B_6\text{FOREIGNE} + B_7\text{ORARATIO}$$

Variable	B	SE B	Beta	T	Sig T
US	.738324	.976137	.146431	.756	.4542
UK	.347850	1.023269	.063780	.340	.7358
HK	-.806264	.800581	-.230448	-1.007	.3204
JAPAN	-.951505	.893826	-.222056	-1.065	.2940
LNINVEST	.162077	.189140	.152206	.857	.3970
FOREIGNE	-.008983	.018609	-.074889	-.483	.6321
ORGRATIO	-3.584113	5.948829	-.100859	-.602	.5505
(Constant)	2.213652	1.731566		1.278	.2091

adj.R²=0.04735 F = 1.31242 Significance F = .2719

$$\text{MODEL 2: SCORE} = A + B_1\text{US} + B_2\text{UK} + B_3\text{LNINVEST} + B_4\text{FOREIGNE} + B_5\text{ORARATIO}$$

Variable	B	SE B	Beta	T	Sig T
US	1.395491	.764649	.276766	1.825	.0757
UK	.987022	.850710	.180975	1.160	.2530
LNINVEST	.184974	.177986	.173709	1.039	.3051
FOREIGNE	-.002861	.017672	-.023853	-.162	.8722
ORGRATIO	-4.052512	5.636073	-.114040	-.719	.4764
(Constant)	1.149207	1.366349		.841	.4054

adj.R²=0.06392 F = 1.60089 Significance F = .1827

$$\text{MODEL 3: SCORE} = A + B_1\text{HK} + B_2\text{JAPAN} + B_3\text{LNINVEST} + B_4\text{FOREIGNE} + B_5\text{ORARATIO}$$

Variable	B	SE B	Beta	T	Sig T
HK	-1.182750	.586569	-.338056	-2.016	.0507
JAPAN	-1.289009	.714777	-.300820	-1.803	.0791
LNINVEST	.131524	.171442	.123514	.767	.4476
FOREIGNE	-.010534	.018045	-.087815	-.584	.5628
ORGRATIO	-4.267509	5.694577	-.120090	-.749	.4581
(Constant)	2.829445	1.500608		1.886	.0668

adj.R²=0.08215 F = 1.78762 Significance F = .1381

APPENDIX 5-7

Multiple regression test: Transformation of both dependent and independent variables into Ln form (Under assumption II)

$$\text{MODEL 1: } \underline{\text{LNSCORE}} = A + B_1\text{US} + B_2\text{UK} + B_3\text{HK} + B_4\text{JAPAN} \\ + B_5\text{LNINVEST} + B_6\text{FOREIGNE} + B_7\text{ORGRATIO}$$

Variable	B	SE B	Beta	T	Sig T
US	.261108	.430990	.123642	.606	.5486
UK	.013524	.444735	.005927	.030	.9759
HK	-.456788	.349401	-.303410	-1.307	.1999
JAPAN	-.430700	.410777	-.217209	-1.048	.3018
LNINVEST	.071714	.085889	.159748	.835	.4096
FOREIGNE	-.001994	.008224	-.039248	-.242	.8099
ORGRATIO	-1.958740	4.071091	-.084304	-.481	.6335
(Constant)	.563660	.807536		.698	.4899
adj.R ² =0.03429 F = 1.20800 Significance F = .3251					

$$\text{MODEL 2: } \underline{\text{LNSCORE}} = A + B_1\text{US} + B_2\text{UK} \\ + B_3\text{LNINVEST} + B_4\text{FOREIGNE} + B_5\text{ORGRATIO}$$

Variable	B	SE B	Beta	T	Sig T
US	.618629	.338322	.292939	1.829	.0758
UK	.327255	.375773	.143414	.871	.3896
LNINVEST	.094953	.082548	.211515	1.150	.2576
FOREIGNE	.001107	.007838	.021798	.141	.8884
ORGRATIO	-1.355929	4.035011	-.058359	-.336	.7388
(Constant)	-.069118	.653758		-.106	.9164
adj.R ² =0.03942 F = 1.33655 Significance F = .2712					

$$\text{MODEL 3: } \underline{\text{LNSCORE}} = A + B_1\text{HK} + B_2\text{JAPAN} \\ + B_3\text{LNINVEST} + B_4\text{FOREIGNE} + B_5\text{ORGRATIO}$$

Variable	B	SE B	Beta	T	Sig T
HK	-.562254	.255373	-.373463	-2.202	.0342
JAPAN	-.525432	.329276	-.264984	-1.596	.1193
LNINVEST	.051924	.076451	.115663	.679	.5014
FOREIGNE	-.002397	.007936	-.047179	-.302	.7644
ORGRATIO	-2.682253	3.812265	-.115444	-.704	.4862
(Constant)	.807823	.686440		1.177	.2470
adj.R ² =0.07693 F = 1.68338 Significance F = .1636					

$$\text{MODEL 4: } \underline{\text{LNSCORE}} = A + B_1\text{USUK} + B_2\text{JAHK} \\ + B_3\text{LNINVEST} + B_4\text{FOREIGNE} + B_5\text{ORGRATIO}$$

Variable	B	SE B	Beta	T	Sig T
USUK	.142896	.353395	.085019	.404	.6883
JAHK	-.459658	.325630	-.307820	-1.412	.1667
LNINVEST	.055559	.075322	.123760	.738	.4655
FOREIGNE	-.001950	.007999	-.038386	-.244	.8088
ORGRATIO	-2.515448	3.828404	-.108265	-.657	.5153
(Constant)	.672853	.755097		.891	.3788
adj.R ² =0.08079 F = 1.72067 Significance F = .1549					

APPENDIX 6-1

Summary answers to Chinese joint venture
accounting(whole sample,n=53)

DO YOU AGREE WITH ACCOUNTING METHOD FOR FIXED ASSETS?

Value Label	Frequency	Percent	Valid Percent
strongly agree	3	5.7	5.7
agree	37	69.8	69.8
neutral/no opinion	6	11.3	11.3
disagree	7	13.2	13.2
	-----	-----	-----
	53	100.0	100.0

DO YOU AGREE WITH ACCOUNTING METHOD FOR PATENT AND KNOW-HOW?

Value Label	Frequency	Percent	Valid Percent
agree	32	60.4	60.4
neutral/no opinion	14	26.4	26.4
disagree	7	13.2	13.2
	-----	-----	-----
TOTAL	53	100.0	100.0

DO YOU AGREE WITH ACCOUNTING METHOD FOR GOODWILL?

Value Label	Frequency	Percent	Valid Percent
strongly agree	1	1.9	1.9
agree	27	50.9	51.9
neutral/no opinion	12	22.6	23.1
disagree	12	22.6	23.1
	1	1.9	MISSING
	-----	-----	-----
TOTAL	53	100.0	100.0

DO YOU AGREE WITH ACCOUNTING METHOD FOR LAND FEE?

Value Label	Frequency	Percent	Valid Percent
agree	29	54.7	54.7
neutral/no opinion	11	20.8	20.8
disagree	10	18.9	18.9
strongly disagree	3	5.7	5.7
	-----	-----	-----
TOTAL	53	100.0	100.0

DO YOU AGREE WITH ACCOUNTING METHOD FOR ORGANISATION EXPENSES?

Value Label	Frequency	Percent	Valid Percent
agree	31	58.5	58.5
neutral/no opinion	9	17.0	17.0
disagree	11	20.8	20.8
strongly disagree	2	3.8	3.8
	-----	-----	-----
TOTAL	53	100.0	100.0

DO YOU AGREE WITH ACCOUNTING METHOD FOR FOREIGN EXCHANGES?

Value Label	Frequency	Percent	Valid Percent
agree	22	41.5	42.3
neutral/no opinion	3	5.7	5.8
disagree	24	45.3	46.2
strongly disagree	3	5.7	5.8
	1	1.9	MISSING
	-----	-----	-----
TOTAL	53	100.0	100.0

DO YOU AGREE WITH ACCOUNTING METHOD FOR EXTRAORDINARY ITEMS?

Value Label	Frequency	Percent	Valid Percent
agree	18	34.0	34.0
neutral/no opinion	13	24.5	24.5
disagree	21	39.6	39.6
strongly disagree	1	1.9	1.9
	-----	-----	-----
TOTAL	53	100.0	100.0

DO YOU AGREE WITH INTRODUCTION OF REVALUATION OF FIXED ASSETS IN JOINT VENTURES?

	Frequency	Percent	Valid Percent
strongly agree	1	1.9	1.9
agree	25	47.2	47.2
neutral/no opinion	14	26.4	26.4
disagree	12	22.6	22.6
strongly disagree	1	1.9	1.9
	-----	-----	-----
TOTAL	53	100.0	100.0

CAN THE REGULATIONS PROVIDE A TRUE AND FAIR PROFIT OF A JOIN VENTURE?

	Frequency	Percent	Valid Percent
agree	17	32.1	32.1
neutral/no opinion	20	37.7	37.7
disagree	14	26.4	26.4
strongly disagree	2	3.8	3.8
	-----	-----	-----
TOTAL	53	100.0	100.0

CAN THE REGULATIONS PROVIDE A TRUE AND FAIR VALUE OF A JOIN VENTURE?

	Frequency	Percent	Valid Percent
agree	14	26.4	26.4
neutral/no opinion	20	37.7	37.7
disagree	18	34.0	34.0
strongly disagree	1	1.9	1.9
	-----	-----	-----
TOTAL	53	100.0	100.0

DO THE DIFFERENT ACCOUNTING TREATMENTS HAVE A CASH FLOW EFFECT?

	Frequency	Percent	Valid Percent
strongly agree	28	52.8	52.8
agree	9	17.0	17.0
neutral/no opinion	5	9.4	9.4
disagree	7	13.2	13.2
strongly disagree	4	7.5	7.5
	-----	-----	-----
TOTAL	53	100.0	100.0

DO THE DIFFERENT ACCOUNTING TREATMENTS HAVE A WEALTH TRANSFER EFFECT?

	Frequency	Percent	Valid Percent
strongly agree	22	41.5	41.5
agree	8	15.1	15.1
neutral/no opinion	7	13.2	13.2
disagree	10	18.9	18.9
strongly disagree	6	11.3	11.3
	-----	-----	-----
TOTAL	53	100.0	100.0

APPENDIX 6-2

Parametric tests of scores
of Chinese group vs UK group

	Number of Cases	Mean score	Standard Deviation	Standard Error
Chinese group	30	30.7333	3.841	.701
UK group	23	25.9130	3.383	.705

t=4.76 p=0.000

F=22.6974 p=0.000

BIBLIOGRAPHY

- Abdallah, W.M., and D.E.Keller. 1985. Measuring multinational's performance. *Management Accounting* (October): 26-30.
- Accounting Principles Board. 1971. The Accounting Principles Board of the Financial Executives Research Foundation. APB opinion, No.18 para.i.d.
- American Accounting Association. 1973. Report of the Committee on international accounting. *The Accounting Review*(Supplement to Vol. 48):252-69.
- American Accounting Association. 1974. Report of the Committee on international accounting. *The Accounting Review*(Supplement to Vol. 49):143-74.
- Anderson,D.R., K.J.Sweeney.,and T.A.Williams. 1990. *Statistics for Business and Economics*. Saint Paul,USA: West Publishing Company.
- Archer,S., and S.J.McLeay.1989. Financial reporting by interlisted European companies: Issues in transnational disclosure. in Hopwood,A.G.1989. Editor. *International Pressures for Accounting Change*. The Institute of Chartered Accountants in England and Wales.
- Ascher, W. 1978. *Forecasting: An Appraisal for Policy-makers and Planners*. pp160. Johns Hopkins University Press. Baltimore.
- Ashton,A.A. 1984. A field test of implications of laboratory studies of decision making. *The Accounting Review*(July): 361-75.
- Ayres,F.L.1986. Characteristics of firms electing early adoption of SFAS 52. *Journal of Accounting & Economics*(June): 143-58.
- Ball,R., and G.Foster.1982. Corporate financial reporting: A methodological review of empirical research. *Journal of Accounting Research*(Supplement): 161-234.
- Bartlett,C.A. and S.Ghoshal. 1989. *Managing Across Borders- The Transnational Solution*. Cambridge, MA: Harvard Business School Press.
- Bavishi,V.B. 1992. International accounting differences and the globalisation of capital market: Issues and answers. in V.K. Zimmerman: *Changing International Financial Markets and Their Impact on Accounting*. IL: University of Illinois.
- Benke,R.L.Jr., and D.L.Street. 1992. Accounting education research methodology. *Accounting Education* 1: 33-45.
- Blattner,K.1991. Cultural influences on the Japanese accounting system. *Changing International Financial Markets and Their Impact on Accounting*. Editor,V.K.Zimmerman. Center for International Education and Research in Accounting, Department of Accountancy, University of Illinois, Urbana-champaign.
- Bowen,R.M., E.W.Noreen., and J.M.Lacey. 1981. Determinants of the corporate decision to capitalise interest. *Journal of Accounting & Economics*(August): 151-79.
- Bromwich,M.,and G.Wang. 1991. Management accounting in China: A current evaluation. *The International Journal of Accounting*. (26). 51-66.
- Brownell, P. 1987. The role of accounting information, environment and management control in multi-national organisations. *Accounting and Finance*(May): 1-16.

Chen,H.,M.Hu.,and J.Shieh.1991. The wealth effect of international joint ventures: The case of U.S. investment in China. *Financial Management*(Winter):31-41.

Chinese government. 1979, 1990. *The Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment*. Beijing,China.

Chinese government. 1983. *Regulations for the Implementation of the Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment*. Beijing,China.

Chinese government: The State Council. 1984. *Regulations of Cost management in State Enterprises*. Beijing,China.

Chinese government. 1985a. *Accounting Law of the People's Republic of China*. China: Beijing. (referred to hereafter as "Accounting Law"). Beijing,China.

Chinese government. 1985b. *Accounting System in Joint Ventures Using Chinese and Foreign Investment in People's Republic of China*. Beijing,China.

Chinese government: The State Council. 1985c. *Trial Regulations for Depreciation of fixed Assets in State Enterprise*. Beijing,China.

Chinese government. 1990. *The Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment(Revised version)*. Beijing,China.

Chinese Government. 1991a. *Income Tax Law of the Peoples' Republic of China for Enterprises with Foreign Investment and Foreign Enterprises*. Beijing,China.

Chinese Government. 1991b. *Detailed Rules and Regulations on the Implementation of the Income Tax Law of the Peoples' Republic of China for Enterprises with Foreign Investment and Foreign Enterprises*. Beijing,China.

Chinese government. 1992. *Accounting System in Foreign Invested Enterprises in People's Republic of China*. Beijing,China.

Cho,S., Chow,L., Q.Tang., and R.Xie. 1992. The 1991 income tax law for foreign investment in the PRC-Changes and implications for foreign investors. *The Hong Kong Accountant*(September/October): 39-42.

Choi,F.D.S., and V.B.Bavishi.1982. Diversity in multinational accounting. *Financial Executive* (August): 45-49.

Choi,F.D.S. 1989. Economic effects of multinational accounting diversity. *Journal of International Financial Management and Accounting*(Summer): 105-29.

Choi,F.D.S, and G.G.Mueller.1984. *An Introduction to Multinational Accounting*. Prentice-Hall.

Choi,F.D.S, S.K.Min., S.O.Nam., H.Hinoo., J.Ujiiie., and A.I.Stonehill. 1983. Analysing foreign financial statements: The use and misuse of international ratio analysis. *Journal of International Business Studies*(Spring/Summer): 113-31.

Choi,F.D.S., and R.M.Levich.1990. *The Capital Market Effects of International Accounting Diversity*. Homewood, IL:Dow Jones-Irwin.

Choi,F.D.S. and R.M.Levich. 1991. *The Capital Market Effects of International Accounting Diversity*. Salomon Brothers Centre for the Study of Financial Institutions. New York: New York University.

Christie,A. 1990. Aggregation of test statistics: An evaluation of the evidence on contracting and size hypotheses. *Journal of Accounting & Economics*(12): 15-36.

Cooke,T.E.,and R.S.O.Wallace.1990. Financial disclosure regulation and its environment: A review and further analysis. *Journal of Accounting and Public Policy* (Summer): 79-110.

Cooper,D.J., and Sherer, M.J. 1984. The Value of corporate accounting reports: Arguments for a political economy of accounting. *Accounting , Organisations and Society* (Vol.9, No.3/4): 207-32.

Cushing,B.E., and M.J.LeClere. 1992. Evidence on the determinants of inventory accounting policy choice. *The Accounting Review* 67 (April): 355-366.

Cyert,R.M., and J.G.March. 1963. *A Behavioural Theory of the Firm*. Englewood Cliffs, N.J.: Prentice-Hall.

daCosta,R.C., J.Fisher,and W.M.Lawson. 1980. Linkages in the international business community: Accounting evidence. *Journal of International Business Studies* (Fall): 92-102.

Daley,L.A., and R.L.Vigeland. 1983. The effects of debt covenants and political costs on the choice of accounting methods: The case of accounting for R & D costs. *Journal of Accounting & Economics*(December): 195-211.

DeAngelo,L.E. 1986. Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. *The Accounting Review*(61): 400-20.

DeAngelo,L.E.,1988. Managerial competition, information costs, and corporate governance: The use of accounting performance measures in proxy contests. *Journal of Accounting & Economics*(10): 3-36.

Dendall,M.G., and A.Stuart. 1969. *The Advanced Theory of Statistics*. Vol.1, 3rd ed. Griffin. London.

Dong,F.1990. Reform of the economic operating mechanism and reform of ownership. in P.Nolan and F.Dong, *The Chinese Economy and its Future-Achievements and Problems of Post-Mao Reform*. Cambridge, The United Kingdom: Polity Press.

Douppnik,S., and M.E.Taylor.1985. An empirical investigation of the observance of IASC standards in Western Europe. *Management International Review*(Spring):27-33.

Dyckman, T.R. 1988. Credibility and the Formulation of Accounting Standards Under the Financial Accounting Standards Board. *Journal of Accounting Literature* (vol.7): 1-30.

Economic Cooperation for Europe(ECE). 1987. Guide on legal aspects of new forms of industrial co-operation: International joint venture contracts. Thirtieth Session of the Group of Experts on International Contract Practices in Industry.

Economic and Social Commission for Asia and Pacific(ESCAP). 1989. *China's Experience in Economic Development and Reforms*. United Nations.

Egelhof, W.G.1988. *Organising the Multinational Enterprise: An Information- Processing Perspective*. Ballinger Publishing Company.

Eisenhardt, K.M. 1989. Building theories from case study research. *Academy of Management Review* (Vol.14,No.4): 532-50.

Evans, T.G., and M.E.Taylor.1982. "Bottom-line compliance" with the IASC: A comparative analysis. *International Journal of Accounting*(Fall):115-28.

Fang, Z.,and Y.Tang. 1991. Recent accounting developments in China: An increasing internationalisation. *The International Journal of Accounting*(26). 85-103.

Fine,F.L.1989. *Mergers and Joint Ventures in Europe: The Law and Policy of the EEC.* London, The United Kingdom: Graham and Trotman.

Financial Accounting Standards Board. 1979. *Joint Venture Accounting.* FASB.

Financial Accounting Standards Board. 1980. *Statement of Financial Accounting Concepts, No.2: Qualitative Characteristics of Accounting Information.* Stamford,CT: FASB.

Gaa,J.C. 1988. *Methodological Foundations of Standard setting for Corporate Financial Reporting.* Studies in Accounting Research No.28. Sarasota, FL: American Accounting Association.

Gaver,J.J., K.M.Gaver, and G.P. Battistel. 1992. The stock market reaction to performance plan adoptions. *The Accounting Review* 67(January): 172-82.

Ghicas,D.C. 1990. Determinants of actuarial cost method changes for pension accounting and funding. *The Accounting Review* (April): 384-405.

Govindarajan, V. 1984. Appropriateness of accounting data in performance evaluation: An empirical examination of environmental uncertainty as an intervening variable. *Accounting, Organisations and Society*:125-35.

Gray,S.J. 1988. Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*(March):1-15.

Gray,S.J. and C.B.Roberts.1989.Voluntary Information Disclosure and the British multinationals: Corporate perceptions of Costs and Benefits. in Hopwood,A.G.1989. Editor. *International Pressures for Accounting Change.* The Institute of Chartered Accountants in England and Wales.

Gray,S.J.1980. The impact of international accounting differences from a security-analysis perspective: Some European evidence. *Journal of Accounting Research*(Spring):64-76.

Gray,S.J.,L.G.Campbell., and J.C.Shaw.1984. *International Financial Reporting -A Comparative International Survey of Accounting Requirements and Practices in 30 Countries.* London: Macmillan.

Gray,S.J and C.B.Roberts. 1991. East-West accounting issues: A new agenda. *Accounting Horizons*(March):42-50.

Groebner,D.F.,and P.W.Shannon. 1989. *Business Statistics: A Decision-making Approach.* Columbus,Ohio: Merrill.

Hagerman,R.L., and M.E.Zmijewski. 1979. Some economic determinants of accounting policy choice. *Journal of Accounting & Economics*(August): 141-61.

Hamrin,C.L.1990. *China and the Challenge of the Future.* San Francisco, The United States: Westview Press.

Hassel,L. 1991. Headquarter Reliance on Accounting Performance Measures in a Multi-national Context. *Journal of International Financial Management and Accounting*(Spring): 17-38.

- Hawkins,D.F. 1965. Controlling Foreign Operations. *Financial Executive*(February): 25-32.
- Hawkins,D.F.1975. Estimation of non-response bias. *Sociological Methods and Research* 4: 461-484.
- Healy,P.M. 1985. The effect of bonus schemes on accounting decisions. *Journal of Accounting & Economics*(April): 85-107.
- Hendriksen. 1982. *Accounting Theory*. 4th ed. pp81-83. Homewood, IL: Irwin.
- Herbst,K.1986. The regulatory framework for foreign investment in the Special Economic Zones. in Y.C.Jao and C.K.Leung. *China's Special Economic Zones*. Hong Kong: Oxford University Press.
- Hladik,K.J. 1985. *International Joint ventures*. Massachusetts, The United States: D.C.Heath and Company.
- Hofstede,G.1984. Cultural dimensions in management and planning. *Asia Pacific Journal of Management*(January):81-99.
- Holthausen,R., and R.Leftwich. 1983. The economic consequences of accounting choice: Implications of costly contracting and monitoring. *Journal of Accounting & Economics*(5): 77-117.
- Hoyt,R.E. and L.D.Maples. 1980. Accounting for joint ventures with the Soviet Bloc and China. *The International Journal of Accounting*(Fall):105-24.
- Hunt,H.G. 1985. Potential determinants of corporate inventory accounting decisions. *Journal of Accounting & Economics*(Autumn): 448-67.
- International Accounting Standards Committee. 1991. *International Accounting Standard 31: Financial Reporting of Interests in Joint Ventures*. London, The United Kingdom: IASC.
- Kanuk,L., and C.Berenson. 1975. Mail surveys and response rates: A literature review. *Journal of Marketing Research*: 440-453.
- Kaplan,S.E. and R.G.Ruland. 1991. Positive theory, rationality and accounting regulation. *Critical Perspectives on Accounting* (December):361-74.
- Kirkman, P.R.A., and C.W.Nobes. 1977. Problems of depreciation under a C.C.A. system. *Accountancy*(February): 40-45.
- KPMG Peat Marwick. 1992. *Accounting Policies, Disclosure and Financial Trends in the International Airline Industry*. Watford: KPMG Peat Marwick.
- Lee,J.C., and D.A.Hsieh. 1985. Choice of inventory accounting methods: Comparative analyses of alternative hypotheses. *Journal of Accounting Research*(Autumn): 468-85.
- Lee,P.N.S.1987. Industrial Management and Economic reform in China, 1949-1984. in Y.C.Jao and C.K.Leung, *China's Special Economic Zones*. Hong Kong: Oxford University Press.
- Lou, Erying. 1987. Introduction and Outline. in E.Lou and A.Enthoven, *Accounting and Auditing in The Peoples's Republic of China*. Shanghai University of finance and Economics and Centre for International Accounting Development. Dallas, The United States: The University of Texas at Dallas.

- Lou, Erying, Wang, Youmei, Shi, Chengyue. 1987. Financial Accounting (a). pp.26,128. Shanghai, China: Shanghai People's Press.
- Malmquist,D.H.1990. Efficient contracting and the choice of accounting method in the oil and gas industry. *Journal of Accounting & Economics* 12: 173-205.
- McDonald,D.L. 1968. A test application of the feasibility of market based measure in accounting. *Journal of Accounting Research(Spring)*: 39-49.
- McKinnon,J.L.,and G.L.Harrison. 1985. Cultural influence on corporate and governmental involvement in accounting policy determination in Japan. *Journal of Accounting and Public Policy*. 201-23.
- McKinnon,S.M.,and P.Janell.1984. The international accounting standards committee: A performance evaluation. *International Journal of Accounting(Spring)*:19-34.
- Meek,G and S.J. Gray. 1992. The Impact of Stock Market and Corporate Globalisation on Disclosure Trends in International Financial Reporting. in V.K. Zimmerman: *Changing International Financial Markets and Their Impact on Accounting*. IL: University of Illinois.
- Mian,S.L., and C.W.Smith,Jr. 1990. Incentives for unconsolidated financial reporting. *Journal of Accounting & Economics* 12: 141-171.
- Morse,D., and G.Richardson. 1983. Th LIFO/FIFO decision. *Journal of Accounting Research (Spring)*: 106-27.
- Moyer,S.E.,1988. Accounting choices in commercial banks. Ph.D. dissertation, University of Rochester, Rochester.
- Mueller, G.G.1967. *International Accounting*. New York: Macmilan.
- Nair,R.D., and W.G.Frank. 1980. The impact of disclosure and measurement practices on international accounting classification. *The Accounting Review(July)*:426-50.
- Nair,R.D.,and W.G.Frank. 1981. The harmonisation of international accounting standards. *International Journal of Accounting(Fall)*:61-77.
- Nobes,C.W.1983. A judgmental international classification of financial reporting practices. *Journal of Business Finance and Accounting(Spring)*: 1-19.
- Nobes,C.W.1987. An empirical investigation of the observance of IASC standards in Western Europe: A comment. *Management International Review(Winter)*:78-79.
- Nobes, C.W. 1989. *Interpreting European Financial Statements: Towards 1992*. London and Edinburgh, United Kingdom: Butterworths.
- Nobes,C.W.1988. *Interpreting US Financial Statements*. Butterworths.
- Nolan,P., and F.Dong. 1990. *The Chinese Economy and its Future-Achievements and Problems of Post-Mao Reform*. Cambridge, The United Kingdom: Polity Press.
- Osborne,M.1986. *China's Special Economic Zones*. Paris, France: Development Centre of the Organisation for Economic Co-operation and Development.
- Otley,D.T. 1979. Budget use and managerial performance. *Journal of Accounting Research(Spring)*:122-49.

- Pearson, M.M. 1991. *Joint Ventures in the People's Republic of China-The Control of Foreign Direct Investment Under Socialism*. Princeton, The United States: Princeton University Press.
- Peasnell, K.V. 1977. The CCA depreciation problem: An analysis and proposal. *Abacus* (December): 129.
- Perera, M.H.B. 1989. Towards a framework to analyse the impact of culture on accounting. *The International Journal of Accounting*: 42-56.
- Pushkin, A.B. and D.B. Pariser. 1991. Political and economic forces shaping regulatory accounting for troubled debt restructuring. *Critical Perspectives on Accounting* (2): 127-43.
- Radebaugh, L.H. 1975. Environmental factors influencing the development of accounting objectives, standards and practices in Peru. *International Journal of Accounting*(Fall):39-56.
- Riskin, C. 1987. *China's Political Economy-The Quest for Development since 1949*. pp316-340. New York, The United States: Oxford University Press.
- Rutteman, P. 1989. International pressures for the harmonisation of accounting. in Hopwood, A.G. 1989. Editor. *International Pressures for Accounting Change*. The Institute of Chartered Accountants in England and Wales.
- Scapens, R.W. 1990. Researching management accounting practice: The role of case study methods. *British Accounting Review* 22: 259-81.
- Siegel, S., and N.J. Castellan. 1988. *Nonparametric Statistics for the Behavioural Sciences*. USA: McGraw-Hill.
- Skinner, R.C. 1982. Fixed asset lives and replacement cost accounting. *Journal of Accounting Research*(Spring): 210-26.
- Skinner, R.C. 1988. The role of conservatism in determining the accounting lives of fixed assets. *The International Journal of Accounting* (Spring): 1-18.
- Skousen, C.R., and J. Yang. 1988. Western management accounting and the economic reforms of China. *Accounting, Organisations and Society*. Vol.13. 201-06.
- Solomons, D. 1986. *Making Accounting Policy: The Quest for Credibility in Financial Reporting*. p.96. New York: Oxford University Press.
- Stirling, R.R. 1967. Conservatism: The fundamental principle of valuation in traditional accounting. *Abacus*(December):109.
- Stirling, R.R. 1990. Positive accounting: An assessment. *Abacus*(March):97-135.
- Tang, Q., and D. Hwuang. 1991. On a specific accounting method in China: the increase-decrease method. *Proceedings. The Third Asian-Pacific Conference on International Accounting Issues, Hawaii*.
- Tinker, A., Merino, B.D. and Ncemark, M.D. 1982. The normative origins of positive theories: Ideology and accounting thought. *Accounting, Organisations and Society*. (Vol.7, No.2): 167-200.
- Tinker, T. 1980. Towards a political economy of accounting: An empirical illustration of the Cambridge controversies. *Accounting, Organisations and Society* (Vol.5, No.1): 147-60.

- Tonkin, D.J.1989. World Survey of Published Accounts. London: Lafferty Publications.
- Trombley,M.A. 1989. Accounting method choice in the software industry: Characteristics of firms electing early adoption of SFAS 86. *The Accounting Review* 64(July): 529-38.
- Tsao,J.T.H.1987. China's Development Strategies and Foreign Trade. Massachusetts, The United States: D.C.Heath and Company.
- United Nations Economic commission for Europe. 1988. East-West Joint-Ventures. UN.
- United Nations Centre on Transnational Corporations. 1989. Workshop of accounting for and by joint ventures in centrally planned economies. UN.
- van der Tas,L.G.1988. Measuring harmonisation of financial reporting practice. *Accounting and Business Research(Spring)*:157-69.
- Wang,Songnian and Qian Jiafu. 1987. Financial accounting and reporting in China. in E.Lou and A.Enthoven. *Accounting and Auditing in The Peoples's Republic of China*. Shanghai University of finance and Economics and Centre for International Accounting Development. Dallas, The United States: The University of Texas at Dallas.
- Wang, zhongwen., and Liu, Gaozuo. 1989. *Accounting in Joint Ventures Using Chinese and Foreign Investment*. pp 306. Beijing, China: Worker's Press.
- Watts,R.L. 1977. Corporate financial statements, a product of the market and political processes. *Australian Journal of Management* 2: 53-78.
- Watts,R.L., and J.L.Zimmerman. 1978. Towards a positive theory of the determination of accounting standards. *The Accounting Review(January)*: 112-34.
- Watts,R.L., and J.L.Zimmerman. 1986. *Positive Accounting Theory*. Englewood Cliffs, HJ: Prentice Hall.
- Watts,R.L., and J.L.Zimmerman. 1990. Positive accounting theory: A ten year perspective. *The Accounting Review(January)*: 131-56.
- Weetman,P., and S.J.Gray.1990. International Financial Analysis and Comparative Corporate Performance: The Impact of UK versus US Accounting Principles on Earnings. *Journal of International Financial Management and Accounting*. Vol.2:2 and 3.
- Weetman,P. and S.J.Gray. 1991. A Comparative International Analysis of The Impact of Accounting Principles on Profits: The USA versus the UK, Sweden and The Netherlands. *Accounting and Business Research(Autumn)*: 363-79.
- Yin,R.K.1989. *Case Study Research: Design and Methods*. Sage Publications.
- Zarnowits,V. An appraisal of short-term economic forecasts. Occasional paper, No.104(NBER,1967), 45 and 48. National Bureau of Economic Research.
- Zeff,S.1971. *Forging Accounting Principles in Five Countries: A History and Analysis of Trends*. USA: Stripes Publishing Co.
- Zeff,S. 1978. The rise of economic consequences. *Journal of Accountancy (Vol.146, No.6)*: 56-63.
- Zhou,Z.H.1988. Chinese accounting systems and practices. *Accounting , Organisations and Society*. Vol.13. 207-24.

Zmijewski, M.E., and R.L. Hagerman. 1981. An income strategy approach to the positive theory of accounting standard setting/choice. *Journal of Accounting & Economics* (August): 129-49.