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Managing International Transfer Pricing Policies: A Grounded Theory Study

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May 1999

ABSTRACT

The importance of international transfer pricing (ITP) has increased alongside the globalisation of business and the increasing importance of international trade and global marketing. During the 1990s, the OECD and numerous different countries (including the United Kingdom and the United States) have published a series of transfer pricing guidelines, rules and regulations. These developments have raised the profile of ITP and increased the pressures placed on multinational enterprises (MNEs) to ensure that their intra-group transactions reflect arm's length prices.

There have been many studies investigating transfer pricing policies within companies, the majority of which are survey-based, but invariably these have suggested confounding theories, objectives and evidence. There have been suggestions that previous studies lack the focus required to understand the role of transfer pricing policies in MNEs and the organisational context into which these policies fit.

The present study addresses the issue of focus and uses a grounded theory approach (Strauss and Corbin, 1990) to investigate how its international transfer pricing policy (TPP) is implemented in a medium-sized MNE and how the affects of that policy are managed. The MNE manufactures and distributes industrial fastenings in a number of countries and recent acquisitions have resulted in the TPP taking on more prominence. The main focus of the study has been the consideration of five specific cross-border intra-group transactions using open, axial and selective coding and theoretical sampling. The emergent substantive theory is grounded in the data and a set of emergent hypotheses are suggested. The study demonstrates that longitudinal grounded theory case studies can provide some valuable insights into our understanding about how MNEs manage ITP.

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ACKNOWLEDGEMENTS

I am extremely grateful to my supervisor Professor Clive Emmanuel for his help and guidance throughout the course of my doctoral research. He has been a constant source of advice, reason and inspiration on both the methodological part of the research and on the subject area of international transfer pricing. I would like to record how much I have enjoyed our collaboration over the time that I have been registered at the University of Glasgow. In addition, I am grateful to the staff of the Accounting and Finance department for their various contributions during my doctoral presentations.

I am also very grateful to Trifast plc, and Stuart Lawson in particular, for allowing me access to all relevant people and information in relation to my transfer pricing research. Everyone that I have met at Trifast plc has been very accommodating and friendly, no matter how often I returned for further information, understanding or confirmation! I would like to extend my thanks to all concerned for their co-operation and the generous way in which I was received.

My thanks are also extended to numerous other people and organisations who have been prepared to discuss transfer pricing with me over the last 5 years. Many of these participants have contributed on an anonymous basis and to them I extend a collective thank you. Others who I would like to acknowledge by name include Michael Aidin, Peter Blackwood, Tony Carroll, Adrian Ogley, Mike Price, David Ross, John Sheer, and Bob White. I am grateful to the 24 companies which participated in my questionnaire survey and to Systems Union for supporting this survey.

I acknowledge the generous advice, help and friendship of Dr Olivier Curet on the use of case-based reasoning. I thank Dr Nicky Jarrett and Dr Sheila Payne for their helpful comments and advice on using the grounded theory approach. I thank Miguel Hemzo for his help.

Finally, I would like to thank my family for their belief, encouragement and tolerance over the ups and downs of part-time doctoral research. In particular, I am indebted to my wife and sons (Jacklin, Ryan and Scott), my parents (Barry and Diana), my brother (Giles) and my mother-in-law (Mehri). Throughout the long haul they have all supported me, spurred me on and given me time and space to carry out my work.

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1. INTRODUCTION

1.1 International Transfer Pricing (ITP)

ITP refers to the pricing policies and practices which are established when physical goods, intangible property and services are charged between group companies located in different countries (or tax jurisdictions). The importance of ITP to multinational enterprises (MNEs) is apparent from :

- **Survey evidence** : For instance, in a survey of the Global 1000 MNEs, Ernst & Young (1997a) found that "MNEs throughout the world regard transfer pricing as the most important international tax issue their organisations will face over the next two years" (p762).
- **Statistics** : For instance, UNCTAD (1997a) estimated that both global foreign direct investment (FDI) inflows and outflows were just under $350 billion in 1996. UNCTAD (1997b) stated that the value of goods and services of foreign affiliates are now greater than exports and appear to be the principal means for delivering goods and services to foreign markets
- **Developments in transfer pricing guidelines and regulations** : For instance, the OECD has updated its guidelines and many countries have introduced new rules and regulations to deal with ITP. OECD (1994) stated that "The growth of MNEs presents increasingly complex taxation issues for both tax administrations and the MNEs themselves since separate country rules for the taxation of MNEs cannot be viewed in isolation but must be addressed in a broad international context"(paras 1,2 p13).
- **Political pressures** : For instance, US Senator Byron Dorgan complained about perceived abuses due to income shifting in a letter to Congressional colleagues on 19 January 1993 : "Foreign-based multinationals have found a new tax haven. It's not the Cayman Islands or the Netherland Antilles. It's the United States. The IRS has conceded to Congress that over seventy percent of the foreign-controlled corporations in the US are paying no US income taxes".

The last 40 years have witnessed intensive empirical and theoretical research focusing on both domestic and international transfer pricing (see Leitch and Barrett, 1992; McAulay and Tomkins, 1992; Emmanuel and Mehafdi, 1994; and Mehafdi and Emmanuel, 1997, for extensive literature reviews). The literature emerging over this period also confirms that ITP is complex, multi-disciplinary and remains a puzzle. This body of work has provided us with a limited understanding of ITP within MNEs - it has merely highlighted the gap between theory and practice (Mehafdi and Emmanuel, 1997).

1.2 The Research Problem

The main objective of this research study is to make a contribution to an improved understanding of ITP within MNEs. There have been limited advances in understanding produced by 40 years of questionnaire survey research, income shifting studies using abstract high-level data, and theoretical studies based on assumptions of convenience. This study aims to employ inductive reasoning to learn more about the domain and generate research findings / theories which might help both academics and practitioners to understand ITP better.

1.3 The Research Methodologies

The thesis consists of two empirical studies using different inductive techniques. The initial empirical study (in chapter 4) is an inductive analysis of survey evidence using case-based reasoning (CBR). CBR is an inductive approach to reasoning and understanding which uses cases to discover solution strategies. The main empirical study (in chapters 5 to 9) consists of a grounded theory case study in an acquisitive, fast-growing, medium-sized UK MNE.

1.3.1 Case-Based Reasoning (CBR)

Over the past 15 years, CBR (sometimes referred to as classification trees) have been used to explore a variety of financial domains. A selection of financial domains include top management fraud (Curet and Jackson, 1995), predicting stock market behaviour (Braun and Chandler, 1987) , predicting loan defaults and bankruptcies (Messier and Hansen, 1988), and estimating Standard & Poor's (S&P) bond ratings (Buta, 1994).

This is the first study to investigate the potential applicability of CBR for exploring the domain of ITP. Data on transfer pricing were collected from a sample of 24 MNEs using a questionnaire survey. CBR was then used to explain the relationship (if any) between a range of variables and whether or not the company has had a transfer pricing audit by the Inland Revenue.

1.3.2 Grounded Theory Case Study

A review of previous grounded theory studies suggests that grounded theory provides a rigorous framework for designing and analysing a longitudinal exploratory case study of ITP within one MNE. The Strauss and Corbin (1990) framework was used to conduct an exploratory case study in Trifast plc - a manufacturer and distributor of industrial fastenings. Strauss and Corbin's (1990) approach is used because it supports the desirability of prior knowledge and theoretical sensitivity, and provides a helpful framework for a researcher wishing to use grounded theory in practice.

The study's main research question shifted from "How do MNEs formulate their ITP policy ?" to :

"What is the affect of a MNE's ITP policy and how does it manage the ITP policy for specific cross-border intra-group transactions?"

Following a pilot study, the case study concentrates on five cross-border intra-group transactions for a range of functions (manufacturing, distribution, bulk buying), covering a range of products (standard to proprietary), and relating to four countries (Norway, Singapore, Southern Ireland and the UK). In accordance with Strauss and Corbin's (1990) framework for collecting and analysing data, 50 categories (across 10 category groups) are identified at the open coding stage; three paradigm models are developed at the axial coding stage; the descriptive story line and substantive theory are developed at the selective coding stage (see figure 7-5) and grounded in the data; and a set of hypotheses emerge for future research.

The main value added contributions of this study include :

- The grounded theory case study allows a rich investigation and description of ITP in one MNE. The nature of the study means that ITP can be placed into its multi-disciplinary context.

- The study investigates specific transactions at the subunit / subsidiary level. Previous studies have focused on the parent company rather than studying the intra-group transactions themselves.

- The researcher was allowed total access to sites and personnel. As a result, the researcher interviewed all subsidiary and top management who were involved with both 'ends' of each of the five cross-border intra-group transactions. In addition, the interview evidence was supplemented by both confidential company and public domain documentary evidence.

- The case study resulted in a substantive theory which has been presented to the case company's management and reconciled with the existing literature. It is hoped that the findings are a valuable contribution to our understanding of ITP within MNEs.

1.4 Layout of the Thesis

The remainder of the thesis proceeds as follows :

Chapter 2 explains why international transfer pricing (ITP) is important. In monetary terms, there are very high levels of cross-border intra-group transactions partly explained by the importance of Foreign Direct Investment (FDI) to MNEs. In terms of corporate policy, the chapter outlines the range of objectives and factors influencing a transfer pricing policy (TPP). In terms of regulation, the chapter describes the influential role of the United States (US) and the OECD in shaping the rules governing ITP. Finally, recent changes to the UK's transfer pricing rules are explored.

Chapter 3 reviews the empirical and theoretical literature relating to ITP and MNEs. This is followed by a critical evaluation of the limitations of income shifting studies, surveys and case studies, with a view to adopting an alternative and more appropriate research approach.

Chapter 4 explains this researcher's assumptions and beliefs about the world which are consistent with the phenomenological paradigm. This paradigm guides this researcher's choice of research methodologies which are appropriate to the study and analysis of ITP. The chapter also describes the initial empirical study carried out by the researcher, which was an inductive analysis of survey evidence using case-based reasoning (CBR).

Chapter 5 proposes and supports the use of a grounded theory approach for investigating and understanding ITP. The chapter describes the Strauss and Corbin (1990) framework and includes a literature review of previous grounded theory studies in accounting and management.

Chapter 6 introduces Trifast plc (the case study company), five cross-border intra-group transactions and the 20 Trifast participants interviewed in the course of the study. Chapter 7 provides a full description and explanation of the grounded theory case study, concluding with a substantive theory. Chapter 8 grounds the theory in the five cross-border intra-group transactions. Chapter 9 presents a set of hypotheses, reports the feedback from Trifast plc concerning the substantive theory, evaluates the study in terms of qualitative criteria, and reconciles the theory and the research findings with the ITP literature.

Chapter 10 concludes the thesis with a review of the study's strengths and limitations, and suggestions for future research.

2. THE IMPORTANCE OF INTERNATIONAL TRANSFER PRICING (ITP)

2.1 Introduction

This chapter considers the importance of international transfer pricing (ITP). First, ITP is introduced in a broad sense. This is followed by an analysis of the high incidence of Foreign Direct Investment (FDI) and intra-group transactions, and a discussion about some of the objectives and factors influencing a MNE's transfer pricing policy (TPP). Then the development of transfer pricing regulations are described in terms of the influential role of the United States (US), responses by the OECD, and recent changes to the UK regime.

2.2 Transfer Pricing Defined

Transfer pricing refers to the pricing policies and practices which are established when physical goods, intangible property and services are charged between companies within a group. The prices which are established should satisfy the 'arm's length principle'. This principle states that "intra-group transfer prices should be equivalent to those which would be charged between independent persons dealing at arm's length in otherwise similar circumstances" (Inland Revenue, 1997a, para 2.4).

2.2.1 National Companies

National companies have long decentralised or divisionalised by product specialism or geographical area in order to obtain benefits. At divisional level the benefits include better market information, quicker decisions, easier identification of strong and weak areas of business, greater local management motivation and at the centre top management is released to concentrate on strategy. However, there are certain risks attached to divisionalisation such as loss of economies of scale from the duplication of resources and the potential loss of goal congruence where top management and divisional management follow different goals.

The possibility of such dysfunctional behaviour has long been recognised and it is taken into account when setting transfer prices for goods transferred between divisions. The setting of transfer prices needs to consider and possibly reconcile a range of factors including autonomy, credible performance evaluation and goal congruence. Autonomy means that the divisional management are not reduced to agents but take decisions and responsibility; credible performance evaluation requires that transfer prices are set at a level that does not distort relative performance of divisional managers (e.g. by ensuring that inefficiency in one division does not reflect badly on the managers of another division); goal congruence means that the divisional managers make decisions that improve the overall group profit (Elliott, 1994).

2.2.2 Multinational Enterprises (MNEs)

Once transactions cross national borders transfer pricing takes on a set of added dimensions. Where the group is a MNE which includes subsidiaries and branches that undertake activities in different tax jurisdictions, the transfer prices for these cross-border intra-group transactions cease to be solely an internal concern. There is an external aspect because the accounts of the subsidiaries invariably form the basis for determining and assessing liability to tax in each tax jurisdiction (Ogley, 1993). The corporate goal for a multinational is often *perceived* to extend beyond the internal objectives of control and motivation to the maximisation of global after tax profits by using transfer prices to shift income to countries where the corporate tax is lower[1]. If there are corporate tax rate differentials between the parent's country and the subsidiary's country then this might influence the transfer prices on flows between the parent and subsidiary[2].

Take as an example a parent manufacturing in a low tax country with a 10% corporate tax rate and selling in a high tax country with a 50% corporate tax rate and incurring the following costs and revenue:

		£'000
Sales	[in high tax country]	20,000
Cost of sales	[in a low tax country]	12,000
Gross profit		8,000
Operating expenses	[in a low tax country]	2,000
	[in a high tax country]	4,000
Profit	[in high tax country]	2,000
Tax	[in high tax country] (@50%)	1,000

Figure 2-1 The relationship between transfer prices and tax payments

If the transfer price is at cost (£12m + £2m) then the tax payable is £1m. However, tax would be minimised (ignoring the potential for tax losses) by setting the transfer price at £16m which means that the profit of £2m [Transfer price £16m - Cost of sales £12m - Operating expenses £2m] is shifted to the low tax country where it would suffer tax at 10% i.e. £200,000. The group after tax profit would be increased by £800,000.

In practice there are many other reasons why a decision might be made to set high transfer prices on flows from the parent. A whole list of exogenous market

[1] Brean(1985) and Arpan (1988) have cited the classic strategy of adjusting operating costs resulting from production functions to achieve this objective. A parallel argument applies to tax-deductible interest payments (financial costs).

[2] Aliber (1985) is one of many authors to have suggested that firms can manage transfer prices within an international context to arbitrage national differences in tax rates, interest rates, tariffs, and exchange controls.

imperfections might influence transfer prices. For example, considerations include ad valorem tariffs, competition, local loans based on the financial structure of the subsidiary, export subsidies or tax credits on the value of exports, inflation rates, restrictions on the value of products that can be imported, profit repatriation regulations, exchange controls, intervention in currency markets, multiple exchange rates, price controls, investment barriers and political instability (Natke, 1985; Arpan, 1988). This demonstrates that any decisions concerning transfer pricing are subject to competing pressures both internal and external to the MNE.

2.2.3 Setting Transfer Pricing

One of the problems of setting transfer prices is that there are numerous bases for defining a price and often the setting of transfer prices is not transparent. Transfer pricing may rely on a MNE's internal accounting system being based on cost-oriented transfer prices (internal costs) or being based on market prices (external prices). The question then arises as to which of these is to be preferred and how to reconcile the tax authorities'[3] requirements with the internal requirements of the MNE.

2.2.3.1 Setting Transfer Pricing : Previous Case Studies

BIC (1973) provides a series of case studies explaining how companies organise for transfer pricing. Appendix 1 gives a short summary of some of the pertinent issues for 9 of the case studies. One of these cases considers how a US company sets its transfer price. The (cost-plus) transfer price is:

> "determined by a corporate controller, director of taxes, legal counsel, and the CEO...(then) essentially the transfer price is a relationship between the seller and the buyer...Audits of transfer pricing are made on a periodic basis by the corporate internal audit department. From time to time there will be a review of the entire transfer price structure by the tax department to determine if the cost-plus formula falls within the range of general US tax guidelines" (p76).

In this example, there is evidence of a group of decision-makers, the potential for negotiation between buyers and sellers, periodic reviews, and an influential role played by the tax department to ensure compliance.

Although the BIC (1973) report precedes major changes in both the way MNEs do business and the way in which fiscal authorities legislate for transfer pricing, many of the key findings of the report still apply 25 years later. BIC (1973) summarised that :

- There is little in the way of a pattern;
- Transfer pricing is, however, a top-priority matter;
- Transfer pricing decisions are usually made at higher levels in the organisation than market price decisions;

[3] Tax authorities and fiscal authorities are terms which are used interchangeably in this thesis.

- There are few transfer pricing departments or managers[4] [5];
- In a world-wide product division organisation, pricing decisions are somewhat easier because all units report to a single division head with world-wide profit responsibility;
- A formalised pricing committee is becoming more common;
- Pricing decisions should generally be weighed in favour of international rather than domestic product managers.

In particular, BIC (1973) reported that there is little pattern in the way in which companies organise for transfer pricing : "The process of making transfer pricing decisions varies enormously and is greatly dependent on management philosophy and style" (p.73). Nearly 25 years later, Ernst & Young (1997a) reiterated the different approaches adopted by different organisations : *"Transfer pricing is viewed as a compliance exercise in some organisations while in others it has made the move to the boardroom, where it is considered as part of corporate strategic planning" (p762).*

2.2.3.2 Setting Transfer Pricing : The Influence of Taxation

The importance of ITP to MNEs is evident in a series of surveys carried out by Ernst & Young. Ernst and Young (1995) interviewed a sample of over 200 MNEs from the Global 1000[6]. 82% of the complete sample (and 92% of UK MNEs in the sample) considered transfer pricing to be the main international tax issue. The study was repeated in a more recent survey (Ernst & Young, 1997a) of 393 parent companies in the Global 1000. One of the findings was that "MNCs throughout the world regard transfer pricing as the most important international tax issue their organisations will face over the next two years" (p762)[7].

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[4]There is no doubt that this position has changed. Elliott and Emmanuel (1998) are carrying out a field study of ITP in 12 MNEs. On anecdotal evidence, each of the transfer pricing managers has commented on the growth in specialist transfer pricing departments within MNEs.

[5] One need only scan the Financial Times' job advertisements to deduce that there are specialist transfer pricing managers now. E.g. Senior Transfer Pricing Adviser (Deutsche Bank) - "responsible for creating a centre of excellence to advise the investment banking business on transfer pricing issues throughout their operations in all its territories" (Financial Times, Thursday June 11 1998, 17); Global Transfer Pricing Manager (Reuters) - "to focus on and co-ordinate Reuters' global Transfer Pricing (TP) opportunities in the context of a rapidly evolving worldwide legislative framework. Principal responsibilities will include - identifying existing and potential TP issues and ensuring compliance; driving TP issue awareness across all business units" (Financial Times, Thursday July 2 1998, 40).

[6] The sample represented 11% of the Global 1000 and a range of businesses (for instance 34% of the MNEs' primary businesses are financial services) with headquarters in Australia, Canada, France, Germany, Japan, Netherlands, UK and US.

[7] KPMG (1996) reported that 120 companies are under investigation in Australia for transfer pricing issues. The transfer pricing audit activity is concentrating on Australian headquaretered MNEs and companies with a history of losses, but this will widen as the "ATO's risk assessment processes and audit products are refined." In addition, "taxpayers with international related-party dealings now need to supply information concerning: the size and range of related party dealings; whether any products, services or loan funds have been supplied for non-monetary or nil-consideration; the pricing methodologies which have been used to set or review intra-group pricing of goods, services and asset transfers; how pricing methodologies have been selected and applied; and the methodologies used to monitor related-party debt to equity ratios."

In part, the globalisation of business and the increasing importance of international trade and global marketing has raised the profile of ITP. OECD (1994), recognising that the role of MNEs in world trade has increased dramatically over the last 20 years, commented on the tax implication:-

> "The growth of MNEs presents increasingly complex taxation issues for both tax administrations and the MNEs themselves since separate country rules for the taxation of MNEs cannot be viewed in isolation but must be addressed in a broad international context. These issues arise primarily from the practical difficulty, for both MNEs and tax administrations, of determining the income and expenses of a company or a permanent establishment that is part of an MNE group that should be taken into account within a jurisdiction, particularly where the MNE groups' operations are highly integrated" (paras 1,2 p13).

The increased influence of tax rules on ITP is recognised by Bonfiglio (1995) who contended that the "Internal Revenue Service made it clear in the final regulations that from its perspective, *intercompany pricing is a tax determination, not a financial or a business decision.* Thus, the final regulations essentially will force the tax department (within the company) to take a more prominent role in the development of the company's international tax strategy and the implementation process than has previously been the case" (italics added, p. 13-14). If this viewpoint holds to be true, it means that companies must be able to demonstrate that their pricing policy complies with tax regulations rather than being set purely for commercial reasons.

2.2.3.3 Setting Transfer Pricing : Perceptions on how MNEs Handle the Influence of Taxation

In some quarters there is an implicit (if not explicit) assumption that one of the primary drivers of a transfer pricing decision is the desire to minimise global taxes. Owens (1993) suggested that:

> "MNEs can exploit these difficulties (in determining arm's length prices) to shift income and expenses between different tax jurisdictions by manipulatory transfer prices. The incentive to shift profit comes about mainly because of differences in statutory tax rates...Tax administrations find that they have to devote considerable resources to enforcing complex rules, which in turn imply high compliance costs for tax-payer"(pp35-36).

Brean (1985) reiterated the potential for MNEs to indulge in tax optimal transfer pricing :

> "Recent developments in the theory of multinational corporate finance indicate that a firm has much more scope for minimising the global tax bill (and achieving other corporate objectives as well) through international, intra-

corporate financial manoeuvring[8]. Of course, the exercise is cloaked in corporate secrecy and, therefore, evidence is harder to uncover, but there are some consistencies[9] " (p150).

However, tax minimisation should not be viewed as the sole influence on a MNE's ITP policy[10]. In practice, numerous considerations will shape the transfer prices in place[11]. For instance, in established companies the pricing structure may be the product of years of evolution which defies any logical explanation. Any attempt to identify a clear methodology might run into numerous obstacles which are the result of industry conventions, acquisitions, diversification and other corporate activities (which may be totally unrelated to inter-corporate price setting). In addition, an organisation's transfer pricing policies may be continually changing and evolving. For instance, the transfer pricing policy might depend on such factors as the position of intermediate and final goods in the product/process life cycle, and a trade-off between diversity (different policies for all transfers) and uniformity (same policies for all transfers)[12].

Pagan (1993) expressed concerns about some of the perceptions on ITP policies. In particular, she noted this attitude when she assessed an OECD Task Force Report's [13] observations. She stated that :

> "The disappointing aspect of the Task Force is that it sends strong signals that the issue of transfer pricing is still dominated in government circles by the outdated and incorrect view that it is mainly about counteracting tax avoidance by MNEs... the order in which issues are dealt with and the shades of emphasis throughout leave no doubt that the spectre of tax avoidance looms disproportionately large. Thus, the Task Force Report provides continuing encouragement for the incorrect use of the term transfer pricing to mean, in a pejorative sense, a pricing decision by an MNE to deliberately shift income from

[8] Mathewson and Quirin (1979) suggested that there is "serious difficulty in even determining when income-shifting via intra-corporate debt financing is taking place, and almost insuperable difficulty in showing that it is illegal, as long as the amounts involved are modest. Nor, given the availability of financial intermediaries as substitutes for the parent company, does there appear to be very much that could be done to stop it without interfering with perfectly proper transactions" (p76).

[9] Benvignati (1985) conducted one of the few studies to examine transfer pricing data for a sample of US manufacturing companies (using US Federal Trade Commission data). The difficulty in studying intra-corporate transfers is evident because "..there has been relatively little documentation of their magnitude, uniqueness, method of pricing, and associated firm and/or industry characteristics" (p193).

[10] Emmanuel and Mehafdi (1994) asserted that "..the manipulation of transfer prices to evade tax can also be considered as non- or negative-value creation, especially when probing by fiscal agencies and host governments incurs unwarranted financial and other costs" (p151).

[11] One example of the relationship between different business units was reported in The Times on 6th September 1994 concerning charges against George Walker, the former chairman and chief executive of Brent Walker. Concerning management techniques, The Times reports that "the court heard of monthly meetings in which the heads of various Brent Walker divisions were left to fight over available funds. Mr Walker said 'A lot of people have called this divisive, but I thought that was a good way to manage a company.'"

[12] Eccles (1985) considered that transfer pricing policies are a top management tool, the use of which depends on the historical, strategic, and organisational characteristics of a company.

[13] The OECD's Task Force was set up to appraise the US (1992) proposed s482 regulations.

one member of the group to another to reduce the tax liability in the first member country" (p181-182).

Some active researchers promulgate the view that transfer pricing abuse is rife amongst MNEs. Often this view is based on little or unconvincing evidence :

"Until the inequitable reallocation of tax revenues can be identified and halted, many MNEs will continue to choose transfer pricing methods driven primarily by the strategy of income shifting, benefiting themselves at the expense of other countries' tax bases" (Borkowski, 1997a, p44).

2.3 The Significance of ITP : Underlying Influences

2.3.1 Foreign Direct Investment (FDI)

Foreign direct investment in the world economy represents a very important part of public policy decision making. Nobes and Parker's (1995) analysis of UNCTAD(1993) describes the growth in inward stocks of global FDI[14] from \$448.2bn (1980) to \$685.3bn (1985) to \$1496.1bn (1990). The UK's share of that inward FDI (and percentage of world figure) grew from \$63.0bn (14.1%) to \$62.6bn (9.5%) to \$205.6bn (14.0%). In global terms, UNCTAD (1997a) shows that as at the mid 1990s there were about 44,500 MNEs world-wide with over 275,000 foreign affiliates[15]. UNCTAD (1997b) also stated that the value of goods and services of foreign affiliates are now greater than exports and appear to be the principal means for delivering goods and services to foreign markets. Similarly, stocks of global FDI (representing the investment underlying international production) increased by a factor of four between 1982 and 1994. The value of foreign affiliates' world-wide assets were \$8.4 trillion in 1994.

On a global basis, UNCTAD (1997a) estimated that both global FDI inflows and outflows were just under \$350 billion in 1996. The two largest outward investors were the US (\$85 billion) and the UK (\$54 billion). The two largest recipient countries of inward investment were the US (\$85 billion) and China (\$41 billion). Appendices 2,3 and 4 provide further statistics on FDI.

Maclachlan (1990) confirmed the surge in the 1980s in investment in UK productive and service industries and identified that the US, Japan and Germany are the chief investing nations into the UK[16]. The Invest in Britain Bureau monitors the levels of

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[14] Hartman (1985) distinguishes direct investment as those instances in which there is control over the recipient of the capital. The US Department of Commerce defines FDI as the sum of net transfers of debt and equity from parent to affiliate, plus earnings retained by the affiliate.

[15] UNCTAD (1997b) identified 22,111 parent corporations and 54,862 foreign affiliates based in the EU.

[16] "..between 1980-88, the UK's share of global inward FDI was second only to that of the US...the largest overseas investors in the UK are first the US and then Japan. The UK's share of US and Japanese investment in the EC stood at 41 per cent and 38 per cent respectively by the end of 1989...From within the EC, but some way behind the US and Japan, Germany , The Netherlands and, more lately, France are the main investors in the UK...In recent years, however, German investment in the UK has increased

inward investment into the UK (see IBB, 1994a[17]). IBB (1995) stated that "the importance of the UK's continued leadership in inward direct investment should not be underestimated. Our stock of inward investment has risen from £52 billion in 1986 to £131 billion in 1994. Latest figures show that foreign-owned companies provide 18% of manufacturing jobs, 24% of net output, 32% of manufacturing investment and around two-fifths of all Britain's manufacturing exports" (p2). This investment includes a high proportion of international companies seeking European headquarters[18] [19] [20] and it also includes UK subsidiaries of virtually all European multinationals (IBB, 1994a, p4). The cross-border trading practices of foreign-owned companies is emphasised in IBB (1994b) which stated that "The UK's strategic position for export operations is demonstrated by the fact that 41[21] of this country's top 100 exporters are overseas owned[22]." IBB (1997) provides information on specific FDI projects undertaken by some major foreign MNEs in the UK.

2.3.2 The Value of International Intra-Group Transfers

2.3.2.1 The Value of International Intra-Group Transfers : European Community

The Commission of the European Communities (1992)[23] placed a value on transfer pricing transactions based on 1989 data. There are no precise figures on the level of transfer pricing between Member States but the report put forward some estimates :

> "..total trade in goods between the different Member States amounts to as much as ECU 614 billion[24]. On the assumption that 50% of this amount is traded between related persons..ECU307 billion of transfer prices in terms of volume would have to be scrutinised by the tax authorities. Moreover this figure does

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materially, although the investment needs of a reunified Germany could well mean that this growth will not be sustained" (p72).

[17] 12.0% of Germany's net direct investment abroad 1982-93, second only to 26.4% in the USA, was in the UK (source: Federal Ministry of Economics, Bonn). 42.9% of US direct investment in the EU 1993 was in the UK (source: US Department of Commerce). 40.7% of Japanese direct investment in the EU 1951 to March 1994 was in the UK (source: Japanese Ministry of Finance).

[18]According to IBB(1995), "London possesses the highest concentration of Fortune Global 500 companies in Europe with the multinational headquarters of - amongst others - Honda, Agfa-Gervaert, Fujitsu, Toshiba, Reebok and Texaco" (p12).

[19]According to a report by London Economics (The City and Inward Investment: Revitalising the UK Economy; Corporation of London) the UK is the most popular site (with Germany second) for a European headquarters. 56 % of US and 32% of Japanese European HQs are in the UK ("City 'plays growing role in drawing investors'", Financial Times, Monday October 2 1995, p11).

[20]In a review of EC directives, especially the Parent/Subsidiary Directive, Tretiak (1993) notes the possibility of setting up tax efficient European holding companies. But he contends that in the UK case "..because the US-UK income tax treaty substantially reduces the effective UK tax rate, a direct holding by a US parent of a UK subsidiary is preferred" (p80).

[21]According to the Autumn 1995 Financial Times Top 100 Exporters, 46 of the top 100 are foreign-owned (3 of which are UK/Dutch joint ventures).

[22]A Financial Times survey of exporters included MNEs such as Ford, Esso UK, IBM UK, Vauxhall, Texaco, Kodak, Jaguar, Compaq, Motorola, Cononco, Exxon Chemical, Hewlett Packard, Seagram Distillers and Monsanto.

[23] Also referred to as the Ruding Committee.

[24] EC information No 5/1991, p7, numbers refer to 1989 and were converted from US dollars into ecus at the average exchange rate of ECU 1 = US$ 1.1075.

not include trade between the European Community (EC) and third countries so an estimate of total transfer prices for goods involving EC countries amounts to:

	billion ECUs
Transfer prices within EC	307
Transfer prices EC : North/South America	108
Transfer prices EC : Asia/Pacific	90
Transfer prices EC : Rest of world	226
Total	731

Table 2-2 Estimates of the Level of EC Transfer Pricing (1989)

This would suggest that Member States' tax authorities have to examine the validity of transfer prices for goods worth over ECU 730 billion a year. On top of this payments for services, interest, royalties, licences, know-how fees, etc. have to be taken into account[25]" (p128).

Owens[26] (1993) reviewed some of the main findings of the Commission of the European Communities (1992) which suggested that the location of the following operations is tax-driven (or tax is an important factor) - financial centre (70% of respondents); co-ordination centres (57%); R&D centres (41%). Owens contended that these results are understandable as the maximisation of post-tax profitability is the primary objective of these functions. Also, on the topic of transfer pricing, Owens stated that ".. the determination of prices for intra-firm transactions is probably the single most important influence on the allocation of the tax base between the countries in which an MNE operates, and it is not unusual to have a single transfer pricing case which runs into millions of dollars of disputed tax liability" (p36).

2.3.2.2 The Value of International Intra-Group Transfers : US & Japan

In another study, Bonturi and Fukasaku (1993) considered the level of intra-firm trade for the US[27] and Japan in particular. Data sources are limited to firm surveys required by national authorities and limited private sources. Bonturi and Fukasaku used Department of Commerce survey data on trade between foreign affiliates and the US parents, and Ministry of International Trade and Industry survey data on trade between foreign affiliates and the Japanese parents. In 1989 about 25% of total US merchandise exports were accounted for by transfers from US parents to their

[25] UNCTAD (1997b) estimated that about 70% of total global payments of royalties and fees represented intra-group transactions.
[26] The Head of Fiscal Affairs Division, OECD
[27] In a separate report, Dunning (1998) discussed intra-firm royalties and fees : "..of all royalties and fees received by US firms from foreign-based firms in the three years 1993 to 1996, 79% were internal to US MNEs" (p58).

affiliates[28] and about 15% of total US merchandise imports was accounted for by transfers to US parents from their affiliates[29] [30]. The Japanese data are harder to interpret because of more limited coverage. According to those companies in the 1989 sample, about 33% of exports were accounted for by transfers from Japanese parents to their affiliates and about 29% of imports were accounted for by transfers to Japanese parents from their affiliates [31].

Murray et al (1995) studied the global sourcing strategies of US subsidiaries of foreign companies. On average, 33% of the total value of all components was procured internally, either most of this was procured domestically from the US (57%) or from the parent's country (33%). Japanese firms and European firms were significantly different in their internal sourcing strategies. Japanese firms sourced higher levels of internal sourcing from their parent's country (62%) compared to European firms (25%). Murray et al's results are consistent with Kotabe (1992) who suggested that European firms would rely more on US production facilities whilst Japanese firms would rely more on exporting to the US.

2.4 Influences on an ITP policy

2.4.1 International is more complex than domestic transfer pricing

As introduced earlier, one of the main difficulties associated with formulating an ITP policy is that it is driven by many different factors and serves numerous (often competing) objectives. Previous empirical studies and literature have identified numerous factors which influence an organisation's choice of transfer pricing method.

Choi and Mueller (1992) recognised the difficulties associated with ITP, because it

> "a) is conducted on a relatively larger scale internationally than it is domestically (intercompany transactions reportedly account for approximately 50% of the business conducted by MNEs[32]);
> b) is affected by a larger number of variables than are found in a strictly domestic setting;
> c) varies from company to company, industry to industry, and country to country;
> d) affects social, economic and political relationships in multinational business entities and, indeed, in entire countries" (p518).

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[28] Just under a third of this was accounted for by Europe.
[29] 18% of this was accounted for by Europe.
[30] Bonturi and Fukasaku (1993) found that "US intra-firm trade ..is mostly concentrated in industries which are intensive in technology and human capital such as machinery, electric/electronic equipment and transportation industries" (p149).
[31] Bonturi and Fukasaku (1993) found that "Wholesale trade represents a large percentage of Japanese intra-firm trade ..as for manufacturing, Japanese intra-firm trade is largely concentrated in transportation equipment and electrical machinery....on the import side..is concentrated on petroleum and coal products" (p151-153).
[32] Choi and Mueller's (1992) source for this assertion is Poniachek (1988).

2.4.2 What role should an ITP policy fulfil within a MNE ?

There have been numerous attempts by commentators to identify the role of an ITP policy. Given that there are potentially many different objectives[33], Abdallah (1989) identified five criteria which must be satisfied to achieve an efficient ITP mechanism:

"1. The international transfer pricing policy should provide an adequate profit measurement to evaluate the performance of foreign subsidiaries and their managers in terms of their controllable divisional contributions to global profits;
2. It should provide adequate information to top management to be used as guidelines in managerial decision making;
3. It should increase the overall profit rate of the MNE; in other words, the MNE's overall performance must be improved by the use of the international transfer pricing system;
4. It should motivate foreign subsidiary managers to increase their efficiency and maximise their divisional profits in harmony with the objectives of top management.
5. It should minimise the international transaction costs for a MNE by minimising border and income tax liabilities, foreign exchange risks, currency manipulation losses, and conflict with the foreign government's policies" (pp10-11).

Eccles (1985) adopted a different approach (see Eccles, 1985, figure 1.1, p7) and argued that the two principal determinants of the transfer pricing policy are strategy[34] (determining what a company does) and the administrative process (determining how a company implements its strategy). There are five elements to the administrative process - how transfer prices are set; who sets them; what information is used; when transfer prices are set; how conflict is resolved. Once established, the transfer pricing policy then affects economic decisions (affecting corporate performance) and performance measurement, evaluation, and reward (affecting perceptions of fairness by individuals within the organisation).

2.4.3 Confounding Objectives : Is it possible to satisfy all the objectives of an ITP policy ?

Reviewing the literature, Grabski (1985) identified three main objectives - to maintain divisional autonomy; to encourage divisions to achieve central management optimal

[33] For instance, Abdallah (1989) set out nine objectives for establishing an ITP policy - reduction of income taxes; reduction of tariffs; minimisation of foreign exchange risks; avoidance of a conflict with host countries' governments; management of cash flows; competitiveness; performance evaluation; motivation; goal congruence.

[34] Eccles gave many examples of how changes in strategy lead to changes in transfer pricing. Strategic changes include changes in : product characteristics, market characteristics, technology, competitors' strategies, the balance of internal and external sales, and management of the profit centres. See also Porter (1980).

results; and to facilitate divisional performance measurement[35]. On the basis of these three objectives alone (setting aside the implications of taxation for one moment), Grabski argued that "these objectives, while desirable, do not seem to be internally consistent but rather contradictory" (p35).

Similarly, Leitch and Barrett (1992) reviewed the transfer pricing literature and concluded that "MNEs often have many objectives whose achievement depends on situation-specific factors...The majority of these factors are motivated by MNE,FDI and organisational theory. Because they are often so closely interrelated...many of these objectives conflict and are difficult to rank in spite of what surveys may indicate. These difficulties are indicative of the complexity surrounding the multinational transfer-pricing element" (p67-68).

2.4.4 Confounding Objectives : A different approach to studying ITP policy ?

One of the shifts in apparent research thinking is that the whole question of transfer pricing is complex and requires a different approach to understand it within the context of a MNE. Several authors have questioned the focus of previous studies (Emmanuel and Mehafdi, 1994; Cravens and Shearon, 1996). One view is considered here, but the arguments in favour of adopting a different methodology are considered in full in chapter 5.

Cravens and Shearon (1996) argued that the ITP policy should be considered in terms of its relevance to and relationship with the organisation's decision making process :

> "The key to understanding the role of transfer pricing method is examining how the method fits into the entire decision making process...The transfer pricing policy consists of the transfer pricing method and various means by which the transactions may occur. This includes the dollar value, frequency and extent of transfers, the countries through which the goods are routed, the stage of completion of the good at transfer and the use of different methods for international versus domestic transfers" (p420).

2.5 The United States - A Driving Force in ITP

Price Waterhouse (1991) investigated the international tax policy of the United States. One of the main themes of the study was the increasing importance of international trade and global marketing to the US[36]. Indeed the report states that:

> "International competitiveness frequently requires global manufacturing and marketing strategies to avoid tariffs and nontariff barriers, to reduce

[35]Choi and Mueller (1992) suggested broadly similar objectives.
[36]As at 1991 30% of worldwide sales and 43% of reported (book) worldwide profits of US multinationals originated from their foreign affiliates.

manufacturing and transportation costs, and to maximise the value of intangible assets (e.g. know-how, brand name etc"(Executive Summary p3).

2.5.1 Capital Export Neutrality

When fiscal authorities formulate international tax policy, one of the fundamental decisions is to achieve a balance between capital export neutrality (uniform treatment of domestic and foreign operations of a resident company) and capital import neutrality (uniform treatment of indigenous and foreign companies within a country). One of the problems with achieving capital export neutrality is that source and residence countries will probably have different tax rates and treatments across assets, industries and types of finance.

Since The Revenue Act in 1962 [37] the US fiscal authorities have attempted to ensure that the foreign source income of US corporations is treated in a similar way to US income[38]. Over the years there has been frequent legislation to redefine the definition of foreign taxable income and reduce the possibility for deferral. The Tax Reform Act of 1986 imposed additional limitations on the US foreign tax credit and how to allocate interest expense between foreign and US sources. The Revenue Act 1989 introduced an "earnings stripping" provision to limit any US interest deductions which arise from debt held by a related party that is not subject to US tax. The Omnibus Budget Reconciliation Act (OBRA) of 1990 expanded the scope of penalty provisions applicable to valuation misstatements of related-party transactions and introduced a number of retrospective measures to force foreign corporations to release information on their operations (including divisions and branches). Further international tax provisions were 'ncluded in OBRA 1993.

However in some instances there appears to be a higher tax imposed on foreign than domestic source income. Price Waterhouse (1991) carried out a case study example to investigate the difference in tax burdens which arise when the same operations are conducted by the foreign affiliates of parent companies based in the US, Canada, France, Germany, Japan, the Netherlands, and the UK. The case study is based on IRS figures of the typical characteristics of US corporations engaged in manufacturing and trade. In this example, the US MNE attracted the highest effective tax rate on foreign income. The rankings were : US (35.2%); Germany (31.8%); Canada (31.1%); Japan (29.5%); UK (29.3%); Netherlands (28.6%); and France (25.1%).

Empirical evidence suggests that the US tax system affects the behaviour of US corporations which seems to favour foreign direct investment over domestic investment (Hines and Rice, 1994) and also has an impact on the way in which they structure and co-ordinate remittances of income from their foreign subsidiaries (Altshuler and Newlon, 1991).

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[37] In 1962, *Subpart F was enacted to prevent deferral for certain-types of low-tax and relatively mobile* trading, service and passive income in foreign affiliates.

[38] Bonfiglio (1995) reports that "..if a US-based company has subsidiaries operating outside the United States, IRS auditors will be visiting soon. The auditors ....will be looking in the transfer pricing area" (p1).

Zach (1993) puts capital export neutrality into a global context. He reported that "..a senior tax counsel with a US-based pharmaceutical group recalls the furore in the US some years ago surrounding several of the US's multinationals. 'They were accused of earning billions of dollars, but paying what seemed to be completely little in US taxes', she says. In some instances their tax refunds exceeded their US tax liabilities for the year with the result that some not only paid zero taxes but actually received money from the government. 'What people forgot was that those companies were active globally and were claiming perfectly legitimate foreign tax credits in the US on the taxes the company had paid all over the world', she adds" (p15).

2.5.2 Capital Import Neutrality

In the early 1990s, the US fiscal authorities were concerned with capital import neutrality due to one widely held perception that foreign MNEs investing in the US were not paying their fair share of US tax. The House Ways and Means Committee held hearings to investigate the possibility that foreign corporations were benefiting from tax underpayments. According to Jake Pickle, foreign companies were underpaying up to 30 billion dollars of taxes a year through transfer pricing abuses [39]. In his Opening Statement before the Committee on Ways and Means (July 10 1990) he stated that "the specific purpose of today's hearing is to set the record straight on whether the foreign-controlled US companies the Subcommittee (on Oversight) reviewed have paid the amount of taxes our Federal tax laws require...are they paying the proper amount of taxes ?" He explained that "..some of the companies investigated have been operating in the US for years and have never sent a check to Uncle Sam for 'one thin dime' in corporate income taxes....many foreign multinational corporations are setting the transfer prices for their US subsidiaries too high."

This political issue was also pursued in a letter by Senator Byron Dorgan to Congressional colleagues on 19 January 1993[40]:

> "Foreign-based multinationals have found a new tax haven. It's not the Cayman Islands or the Netherland Antilles. It's the United States. The IRS has conceded to Congress that over seventy percent of the foreign-controlled corporations in the US are paying no US income taxes. This includes many of the Japanese automobile and electronics firms that are household names.

In a more balanced article, Laster and McCauley (1994) questioned whether the tax revenues paid from foreign-owned firms in the US are fair. Using Bureau of Economic data on the operations of foreign-owned affiliates in the US and on US businesses acquired or established by foreign investors, Laster and McCauley (1994) used regression analysis to test several hypotheses. Their results confirmed their hypotheses that very low levels of profits are due to two main factors. First, foreign firms pay very high prices in acquisitions and servicing the debt is very expensive.

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[39] However, a study by the IRS put the figure at a maximum of 3 billion dollars a year (Economist 25 July 1992).

[40] The letter was entitled "End America-Last Tax Policies That Push Jobs Abroad".

Second, although there was no evidence to suggest that affiliates manipulated transfer prices when exporting, the regression results showed that those affiliates which imported the most from their parents reported lowest profits. They reported that :

> "the scant profit of foreign firms operating in the United States has emerged as one of the biggest puzzles in international finance. That 4.7 million workers using $1.8 trillion in assets to generate sales of $1.2 trillion could fail to turn a profit strikes many as unbelievable. Could foreign companies have paid $316 billion in the past decade for firms earning $10.7 billion in the year before acquisition only to lose money overall on their holdings in 1992 - a year in which US-owned firms earned record profits?" (p44).

2.5.3 The United States : Empirical Evidence

There have been numerous empirical studies (see Slemrod and Timbers, 1990; WSJ, 1993; KPMG, 1994; Willard, 1994) comparing the performance of, and tax revenues paid by, foreign-owned US companies with US MNEs. The findings of these studies do not necessarily reconcile with the claims of abuse levelled by members of the Committee on Ways and Means [41] and suggest explanations for differences in margins. Rosenzweig (1994) referred to the management of foreign-owned affiliates in the US as the new "American Challenge". He offered three main reasons, but no evidence, for lower levels of profit margin in these firms compared to US firms - start-up costs; acquisition of underperforming companies; and transfer pricing. In addition, he referred to an assertion made by Sir John Harvey-Jones (former chairman of ICI) that firms of all nationalities and industries have a tough time managing US affiliates (Harvey-Jones, 1988). Rosenzweig suggested that these difficulties are due to challenges of scale, competitive response, scarcity of managerial talent, the cultural challenge, and integration within the MNE.

The Policy Economics Group of KPMG Peat Marwick carried out a study for the Organisation for International Investment and found that up until 1988, foreign-owned firms reported significantly poorer performance than domestic firms. For example, in 1988 the average return on assets for foreign-owned companies in the US (at least 50% foreign-owned) was much lower than for US firms (0.9% versus 2.5%). However, this shortfall could be due to the fact that foreign investment is much more recent and requires higher start-up costs [42]. In 1994 the Policy Economics Group carried out an update using 1990 IRS information on foreign controlled corporations (FCCs). This study revealed four main findings:

1. There was a 21% increase in taxes paid by FCCs using 1990 data compared to 1989 data.

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[41] For an argument which resists the suggestion of transfer pricing abuse see Grubert, Goodspeed and Swenson (1993).

[42] Economist 25 July 1992.

2. The federal tax burdens of FCCs compared to US controlled corporations (USCCs) is similar with tax to net worth ratios of 2.0% and 2.1% respectively.
3. FCC investment and exchange rate fluctuations appear to account for the discrepancy in unadjusted pre-tax rates of return of FCCs compared to USCCs (1.1% of net worth versus 8.0% of net worth). The post-adjustment (for rapid growth) figures are more comparable.
4. "There is no pattern of intercompany transfer pricing abuses by FCCs apparent from the data" (p2).

However, the study qualifies these findings :

> "..we reviewed the IRS statistical tax return data in an attempt to see whether transfer pricing manipulation is responsible for lower tax pre-tax rates of return for FCCs. Unfortunately, IRS statistical data do not include enough information for us to be able to answer this question. The only way to determine whether transfer pricing abuses exist is on a case-by-case basis with a careful examination of all the relevant facts...IRS statistical information used in this report is not suitable for resolving transfer pricing issues. Indeed, IRS does not use these data in transfer pricing litigation because they are not sufficiently detailed to demonstrate that firms are comparable" (p8).

The general results are comparable with a study by Grubert (1993)[43] which found that 50% of the difference in rate of returns between FCCs and USCCs were due to start-up costs, historic cost accounting, and exchange rate differentials. Further, the study was inconclusive with respect to transfer pricing because "a range of other factors may play an important role ....but are difficult to evaluate" (p95).

In contrast, one study carried out by the IRS concluded that foreign firms do understate their US income but the magnitude is not as great as claimed previously[44]. The IRS International Examiners proposed additional tax for 1837 tax returns (of 3357 FCCs' tax returns examined) for the 1992 Fiscal Year. Income adjustments for the top 10 national transgressors were about $1.3 billion (implying additional taxes of about $462 million). Japan was at the top of the list (with income adjustments of $508 million for 314 tax returns) and the UK was second (with income adjustments of $463 million for 229 tax returns). In terms of the ratio of $ of proposed income adjustments to imports by affiliates, the UK results were substantially higher than Japan (3.5% to 0.6%).

[43] Grubert (1985) estimated that the benefits attributable to transfer pricing distortions in the US were less than 2% of world-wide aftertax profits of US MNEs (in 1981) falling to less than 1% in 1985.

[44] Ernst & Young gained access to an unpublished briefing report for October 1992 under the Freedom of Information Act. This study is also cited in "Foreign Firms' Income is Understated" (The Wall Street Journal, Friday June 4 1993) which reports that "..the bulk of the alleged understatement of income stemmed from improperly accounting for the prices of assets that were transferred between parent companies based overseas and their US operations. The Clinton administration has pledged to crack down on such 'transfer pricing' abuse" (A2).

2.5.4 The United States : ITP Rules and Regulations

In part, it is the perceptions of transfer pricing abuse which have contributed to the US developing an aggressive tax environment which imposed onerous documentation requirements and penalty provisions on MNEs. This regime shaped the approach to transfer pricing in the US for about a decade until the s482 Final Regulations were released on 1st July 1994[45] (US, 1994)[46]. The IRS issued the final regulations relating to substantial and gross valuation misstatement penalties (Code Section 6662(e)) on 8 February 1996[47]. In response to the US legislation, fiscal authorities around the world have introduced their own transfer pricing rules and regulations. In addition, the OECD has updated its own transfer pricing rules (see the following section).

The increased focus on transfer pricing rules has led to inevitable disputes between foreign companies operating in the US and the IRS concerning which country is entitled to tax the profits of a MNE. Usually the disputes between countries will be decided on the basis of competent authority provisions which are discussed confidentially. Sometimes information about tax adjustments are well publicised. For instance, the National Tax Agency in Japan has imposed heavy tax increases on Roche, Ciba-Geigy (both Swiss pharmaceuticals) and Hoechst (German drugs company). The tax charges are based on the accusation that these companies are minimising Japanese profits by charging excessive royalty payments to the Japanese subsidiaries [48].

In response to the increased rigidity of transfer pricing rules and the increase in both the incidence and amount involved in penalty provisions, there is added emphasis on certainty and getting transfer pricing policies right. One solution gaining recognition is the introduction of Advance Pricing Agreements [49] [50]. In addition there has been increased information exchange between tax authorities. Two organisations which practice this exchange are the Group of Four (France, Germany, UK and US) and the Pacific Association of Tax Administrators (Australia, Canada, Japan and US).

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[45] They were published in the Federal Register on 8th July 1994.

[46] Revisiting the confounding objectives faced by MNEs, Borkowski (1992b) argued that "an MNC must balance choosing the transfer pricing method that is optimal for the company's operating environment with the requirements of s482 (the IRS's regulations governing transfer pricing)" (p67).

[47] See McDermott and McDermott (1996) for a review of how the penalty works and the factors which are considered in determining whether a penalty can be avoided.

[48] Up until April 1994, the Japanese authorities had applied penalty taxes for transfer pricing on 50 occasions since 1986 - and on just 5 occasions had this penalty been reduced due to inter-governmental negotiations. (Michiyo Nakamoto, Financial Times 14 April 1994).

[49] "APAs are a mechanism whereby the setting of transfer prices in respect of specified controlled transactions may be agreed with tax administrations in advance of the transactions being undertaken and reported. The mechanism offers certainty for the taxpayer that transfer pricing covered by the arrangement will not be challenged during the period of the arrangement, subject to the terms of the arrangement being observed" (Inland Revenue (1997a), para 6.38).

[50] For example, there is a long-standing APA agreed between the US and Australia for Apple Computers.

2.6 Developments in the tax treatment of transfer pricing

2.6.1 The OECD : ITP Guidelines

To coincide with the release of the US s482 Final Regulations (US, 1994), on the 8th July 1994 the OECD released a Discussion Draft on Part I of Transfer Pricing Guidelines for Multinational Enterprises (OECD, 1994) which was open to public comments[51]. Since then, the OECD released Part II[52] in early 1995 with the draft text as of 31st March (OECD, 1995a) and the final OECD report in July 1995 (OECD, 1995b)[53]. Part I addressed only the transfer of goods. Part II tackled the more difficult areas of transfer pricing for intangibles and services and it gave initial consideration to documentation and dispute resolution. The final report covered all the areas discussed in Part I plus a documentation chapter. Since then the OECD has consolidated their guidelines and released subsequent updates (OECD,1997 and 1998).

2.6.2 The Arm's Length Principle

In order to determine what constitutes an appropriate transfer price for tax purposes, tax authorities need to be able to verify that the transfer prices have been computed in a reasonable manner so that there is a 'fair' level of profits in each country in which a MNE is operating. The arm's length principle (ALP)[54] is viewed by the majority of parties involved in transfer pricing as the most appropriate method and the principle is enshrined in Article 9 of the 1979 (revised and updated on 1st September 1992) OECD Model Taxation Convention on Income and on Capital [55]. The 1979 OECD Model is the accepted blueprint for subsequent double tax treaties (DTT) between different countries. The basis of the ALP is that the result of an inter-corporate transaction should be similar to the result of a transaction which would have taken place between unrelated parties in similar circumstances.

The ALP is a simple concept in theory but has proved difficult to arrive at in practice with a comfortable level of assurance. OECD (1994) describes the two main approaches permitted : transaction-based and profit-based[56] :

[51] See Elliott (1995) for more on the developments.

[52]See Self (1995) for a brief review of Part II.

[53] See Horner (1996) for a brief review.

[54] Picciotto (1992) provides a very good historical account of the emergence of the arm's length standard.

[55] Article 9 states that :- "Where conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly."

[56]KPMG's Transfer Pricing News, August 1994 also provided descriptions of the three transaction-based methods and two profits-based methods discussed in OECD (1994). Similarly Crow and Sauls (1994) gave a further insight into the application of each of these methods.

2.6.2.1 Transaction-based methods

Transaction-based methods "compare the prices charged in controlled transactions undertaken between those enterprises with prices charged in comparable transactions undertaken between independent enterprises" (para 91). OECD (1994) identified three transaction-based methods :

2.6.2.1.1 Comparable Uncontrolled Price (CUP)

The Comparable Uncontrolled Price (CUP) method is the most direct determination of an arm's length price. This method refers to the sales price between unrelated buyers and sellers for a comparable transaction. Ideally the circumstances should be identical but some latitude is allowed to compare with a non-identical CUP (e.g. differences in the terms or timing of the transaction) and make an appropriate adjustment. One of the main problems associated with this method is that it is often very difficult for companies to access data on transactions between 'unrelated buyers and sellers'.[57]

The pharmaceutical industry provides an excellent example of the problems associated with the search for comparables. The Industry Commission (1996) summarised the problem :

> "..to satisfy transfer pricing guidelines, pharmaceutical companies must conduct comparability studies, but it is difficult for pharmaceutical companies to find comparable transactions between independent parties. The industry is characterised by products and ingredients that are unique, many of which are patented. In addition, companies operate in highly differentiated or niche markets. Each company will generally have its own particular business mix and cost structure" (p83).

2.6.2.1.2 Resale Price

The Resale Price method determines the arm's length price by taking the actual price at which goods are sold by a reseller and deducting a normal profit margin which would be obtained from transactions with unrelated parties. Any difference between the related transaction and the unrelated transaction should be reflected by an adjustment to the normal profit margin.

2.6.2.1.3 Cost Plus

The Cost Plus Method takes the cost of production and adds the appropriate gross profit margin. Again this mark-up should be determined by reference to the mark-up earned by a manufacturer's sales to unrelated parties for the same/similar transactions.

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[57] Anecdotal evidence supports this statement. At one transfer pricing conference attended by the researcher, a transfer pricing partner from one of the 'Big 6' Accounting firms offered 'a crate of champagne to anyone who can provide an example of a perfect CUP'.

2.6.2.2 Profit-based methods

Profit-based methods "examine the profits that arise from controlled transactions of one or more of the associated enterprises participating in those transactions" (para 130). Two methods are identified:

2.6.2.2.1 Comparable Profits Method (CPM) / Transactional Net Margin Method (TNMM)

The Comparable Profits Method (CPM) refers to the profit levels earned by uncontrolled parties which are considered comparable based on acceptable criteria, such as location, size and line of business. Any differences between the companies being compared should be taken into account.

CPM has been a source of disagreement between the US and the OECD. As a result, the final version of the Part I (OECD, 1995b) report no longer included a reference to CPM. To avoid misunderstandings the report instead redefined this method as the Transactional Net Margin Method (TNMM) and listed it as a Transactional Profit Method rather than a Profit Method. This revision satisfied both US and European tax administrations.

Stitt (1995) argued that "some commentators have suggested that TNMM is nothing more than CPM with a new name, except that more emphasis is placed on information about the company under review, rather than industry averages or other data not linked directly to particular transactions" (p94). Similarly, KPMG (1995) compared CPM and TNMM and stated that "overall the two methodologies are clearly quite similar and their application is described using broadly consistent language" and that "the other key question is whether the OECD's shift to TNMM will serve to increase or decrease the level of conflict in dialogues between the United States' and other tax authorities" (p4).

The main difference between the two approaches is that TNMM uses net margin measures (e.g. return on sales) to compare controlled and uncontrolled ***transactions*** whereas CPM uses measures of operating profitability (e.g. rate of return) to compare the profitability of controlled and uncontrolled ***parties*** (using an entire company or business segment). KPMG (1995) questioned whether one of the potential drawbacks of comparing transactions is that this might "encourage 'cherry-picking' of transactions by tax authorities and this might allow them to unfairly assess additional taxes even if other transactions between the same related party taxpayers point in the opposite direction" (p3).

2.6.2.2.2 Profit Split Method

The Profit Split Method splits the total profit earned between the two related parties using an equitable formula (e.g. in proportion to capital employed). This method should compare the split with profit splits between unrelated parties, but as this information is rarely available an equitable means of division should be found. It must be stressed that the profit split method should not be confused with global formulary apportionment - the two methods are distinct.

2.6.2.3 Use of Transaction-based and Profit-based methods

GAO (1995) provided some details about the relative use of these methods. For those transfer pricing issues completed in the fiscal years 1990 to 1992, the US IRS international examiners found that CUP had been used in 25% of the cases, cost plus in 14%, resale price in 12% and other methodologies in 48% (note rounding). As at July 7 1994, 75 methods used in APAs could be disaggregated to CUP being used in 8% of the cases, cost plus in 7%, resale price in 23%, profit measures in 19%, formulary apportionment in 17% and miscellaneous other allocation methods in 27% (note rounding). Also, Picciotto (1992) stressed that the use of profit split in the US has been more widespread due to the limitations of the transactional approaches. Furthermore, profit split is more appropriate for certain industries (e.g. banking). For banking functions, one of the main questions might be how to share profit between that part of the group which secures global business and that part of the group which exercises the business. The increased importance of profit split can be explained by the fact that "more than twenty years of experience of administering the US regulations has shown that in a large proportion of cases where transnational corporation pricing is examined no comparables can be found" (p774-775).

Deloitte Touche Tohmatsu (1998b) commented on the 1995/96 Schedule 25A[58] statistics published by the Australian Tax Office (ATO). According to the information, 67% of the 7,787 MNEs lodging a Schedule 25A were able to select and apply one of the recognised transactional based methodologies (for instance 2,220 used CUP and 1,300 used cost plus). However, instead of accepting that MNEs are applying the recommended methods, the ATO has questioned whether this high rate of compliance with accepted methodologies is actually plausible : "the ATO's experience and efforts to date would suggest that the lack of available comparable data in Australia would not enable companies to apply these methodologies" (p1).

2.6.3 International Tensions

There is pressure for fiscal authorities to enact rules and regulations which ensure that MNEs do not set transfer prices purely to reduce their tax liability in higher tax jurisdictions. As discussed earlier, this has led to some countries (notably the US) introducing onerous compliance measures and substantial penalty provisions to counteract practices which they deem to be unfair. MNEs' tax departments need to take these rules and penalty provisions into account when transfer prices are set.

In the 10 years leading up to the final s482 rules and the revised OECD guidelines, there had been increasing tension between the US and the rest of the world concerning

[58] The Schedule 25A form is an additional (mandatory) tax return form that requires the identification and quantification of related party dealings.

the treatment and interpretation of transfer pricing. One of the obstacles was that US's interpretation of the ALP had become increasingly divergent compared to other countries since around 1986 when the Tax Reform Act 1986 was released. The OECD's 1979 Report on Transfer Pricing and Multinational Enterprises rules demonstrate that the OECD has consistently favoured transaction-based methods for estimating an arm's length price. However, the US's support for CPM was viewed as inconsistent with the ALP.

CPM was first suggested in a 1988 IRS White Paper[59]. To satisfy the ALP under CPM, Coopers and Lybrand (1993) stated that the operating profit resulting from the transfer price must fall within a range of operating profits earned by comparable companies. Typically this range is computed by looking at a variety of profit level indicators of comparable companies (e.g. return on capital employed; operating profit to sales) and applying these to the taxpayer's financial data. This raises the question of whether an arm's length profit exists between similar organisations which might have fundamentally different approaches to business which ensure that their profit levels are far from comparable. Following CPM's initial introduction, the transfer pricing regulations in the US and the OECD were at their most disparate and controversial in 1992 with the publication of US (1992) - the proposed s482 regulations.

The fact that CPM was initially a permissible option in the OECD draft guidelines was one of the main complaints registered by BIAC in the original consultation process [60]. BIAC reported the view held by much of the business community, and many members of the OECD, that CPM does not represent an arm's length method and there are no situations in which it should be used to determine transfer prices. BIAC went further and suggested that a notion of 'normal management practice' might be an appropriate method for tax authorities to audit transfer prices. This method embraced the ideal that tax authorities should not interfere with the management of an organisation and that any adjustment by the tax authorities would be acceptable only when an organisation cannot support a transfer price on the grounds of economic and commercial considerations.

2.6.3.1 Reactions from BIAC to OECD (1994)

In a separate exercise, this researcher contacted all the members of BIAC's Committee on Taxation and Fiscal Policy (which co-ordinated with the OECD throughout the development of their transfer pricing publications) to ascertain individual country's views on the OECD's draft guidelines. The following replies make interesting reading

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[59]Notice 88-123, 1988-2 C.B. 458

[60]The OECD Task Force set up to draft OECD (1994) consulted the Business and Industry Advisory Committee (BIAC) as part of the process to produce the discussion draft. BIAC was set up in March 1962 and it has acted as an independent representative of business and industry in presenting its views to the OECD. According to BIAC's 1993 Annual Report "..BIAC's role is to provide OECD and its Member Governments the benefit of constructive comments based on the practical experience of the business community" (Inside cover). With regard to submissions on transfer pricing, "BIAC's objective in the ongoing discussions is to ensure that the arm's length standard will continue to be recognised as the preferred method" (p11).

and help to explain international reaction by three countries to the OECD's Draft Part I :

2.6.3.1.1 United States Council for International Business (USCIB)

The USCIB is the US affiliate of BIAC representing a membership of 280 leading industrial and service companies. In a direct response to Jeffrey Owens at the OECD they expressed the following reservations :

> "We are concerned with the continued acceptance of the profit comparison approach (CPM) as a method, even as a method of last resort...we do not believe that CPM meets the test of constituting a method 'consistent with the arm' length principle'.
>
> Having said that...the USCIB was willing to accept that it should be available as a method of last resort , a method which can be utilised by taxpayers at their option, but a method which cannot be applied by an examining tax authority to a taxpayer unless it can be clearly demonstrated that none of the transaction-oriented methods (including profit splits) are appropriate in a given situation."

2.6.3.1.2 Association of German Chambers of Industry and Commerce and the Federation of German Industries

These two bodies submitted a combined (and very extensive) response to both Part I and Part II of the OECD's Transfer Pricing Guidelines. The general tone was not supportive of the draft and it also questioned tax authorities' approaches :

> "We regret that the draft lacks clear guidance on the basic grounds for transfer pricing and thus to clarify in which way tax authorities should approach this issue...
>
> Transfer pricing cases have gained complexity by the attempt of tax authorities to generate more tax by utilising the uncertainty of transfer pricing to their favour."

Their views are very definite on the approaches which should be permitted by the OECD :

> "We reject all attempts to establish profit comparison or profit split as 'methods' of transfer pricing."

2.6.3.1.3 Federation of Swiss Industrial Holding Companies

The Federation represents the most important MNEs and foreign direct investors of Switzerland. Their overriding concern was, like the German response, that :

"profit approaches should not be given the status of arm's length methods allowed for transfer pricing adjustments under Article 9.1 of the OECD model convention.

A profit split is alien to an arm's length situation and cannot be found in the marketplace between truly independent parties."

Likewise the Swiss Federation of Commerce and Industry "are of the opinion that profit related transfer pricing methods are not in line with the arm's length principle of Article 9 of the OECD model and should not be given the status of arm's length methods."

2.7 The United Kingdom : Recent Developments in Transfer Pricing Legislation

In 1998, the existing UK transfer pricing legislation, which had been in place for nearly 50 years, was 'modernised'. Prior to 1998, the UK's transfer pricing rules were embodied principally in sections 770-773 of the ICTA 1988 (the precursor to s770 was originally introduced in the 1951 Finance Bill). These rules ensured that artificial transfer prices (or other intra-group charges such as interest, royalties, etc) did not allow the export of profits to other tax jurisdictions[61].

2.7.1 The UK position leading up to the "Modernisation of the Transfer Pricing Legislation"

Transfer pricing has been a regular feature in the UK Budget statements over the last few years. In the 1995 Budget, the Chancellor of the Exchequer, Ken Clarke, emphasised the importance of transfer pricing to the Inland Revenue. In the 1996 Budget, the Chancellor confirmed that draft legislation would be published in 1997 to bring transfer pricing within the self-assessment taxation framework. This coincided with the 'spend to save' initiative which allocated greater Inland Revenue resources into investigating transfer pricing[62] [63]. Following the 1997 General Election, the Labour Chancellor, Gordon Brown, reiterated the position on transfer pricing in the Budget (2nd July 1997) :

"I am introducing measures with immediate effect to end tax abuses through avoidance of corporation tax, VAT and PAYE....I am also planning to modernise the rules governing transfer pricing and controlled foreign companies"

[61] Inland Revenue (1981) provided some guidance notes; Berry(1992) and Livens (1995) provided an analysis of these UK transfer pricing rules.

[62] John Hobster (head of Ernst and Young's transfer pricing) has claimed that the Inland Revenue has trebled its transfer pricing investigations since 1990. Accountancy Age (9/5/96) recognised that the OECD guidelines "threaten to accentuate the growing tide of investigations into transfer pricing policies at multinationals".

[63] For instance, in a Sunday Times report, "Inland Revenue probes tax avoidance at Sony" (March 22, 1992, pp 7 and 16), a study found that British and non-Japanese foreign MNEs paid five times as much tax relative to their sales as Japanese MNEs.

In conjunction with this, the Inland Revenue (1997b) issued a press release which emphasised that the UK would be placing greater emphasis on the tax paid by MNEs:

> "The Government intends to change and modernise the tax rules for multinationals in the next Budget. The purpose of the changes will be to make the tax provisions more effective, to allow them to be applied more fairly, and to protect UK tax revenue. Under the new rules :
>
> - taxpayers will be required to apply the arm's length basis for transfer prices in calculating taxable profits in their tax returns.
>
> ...These changes will strengthen the legislation and bring it into line with modern practice in other major countries. They will also contribute to the Government's drive against tax avoidance."

The Government announced its intention to publish draft legislation for consultation with the added objectives of ensuring that :

> "the new provisions are clear, compliance costs are kept to the minimum necessary, and that the rules apply more consistently and more fairly."

These objectives are desirable yet very difficult to achieve. Allan Taylor (KPMG's UK Head of Transfer Pricing) emphasised the importance of clarity : "it is fundamental to a system of self-assessment that there should be as little uncertainty as possible for the taxpayer. If the taxpayer has the obligation to self-assess, the government owes the taxpayer certainty as to how he should calculate his self-assessed profits" (Taylor, 1997, p2).

2.7.2 The UK consultative document : "Modernisation of the Transfer Pricing Legislation"

On 10 October 1997, the Inland Revenue issued a consultative document which outlined proposed changes to the UK's transfer pricing legislation (Inland Revenue, 1997a)[64]. The legislation emerging from the proposals in the consultative document would come into force at the same time as corporate tax self-assessment commenced for companies[65] (accounting periods ending on or after 1 July 1999). In common with the principles of corporate tax self-assessment in general, the most obvious outcome of the consultative document is the shift in onus from the Inland Revenue to the taxpayer. In future, the taxpayer will be required to ensure that their computation of taxable profits reflect arm's length prices; the taxpayer will be required to support the transfer pricing policy; the taxpayer will be required to maintain sufficient and

[64] See Elliott (1998a) for further consideration of the Consultative Document.
[65] See Elliott (1997,1998b) for a review of the Australian experiences relating to the introduction of corporate tax self-assessment and a more explicit transfer pricing regime.

appropriate contemporaneous documentation; in certain circumstances the taxpayer will be liable to penalties on any tax adjustments based on non-arm's-length pricing.

Deloitte Touche Tohmatsu (1997) summarised the far-reaching consequences of the consultative document : "In framing the draft legislation as it has, the UK Government has created some rules which are as tough as any in the world. Many companies will need to completely rethink their approach to transfer pricing in time for the advent of Self Assessment for companies, which is almost upon us" (p1).

2.7.2.1 The main proposals

2.7.2.1.1 Arm's length pricing

It is the taxpayer's obligation now to ensure that the arm's length principle[66] is applied to the taxable profit reported in corporate tax self assessment tax returns. This means that all related party dealings must be adjusted to reflect arm's length pricing if they do not currently reflect arm's length prices. Under the previous legislation, companies were entitled to submit tax returns reflecting non-arm's-length pricing and it was up to the Inland Revenue to make (zero penalty) adjustments to reflect arm's-length pricing.

2.7.2.1.2 Joint ventures

As well as widening the potential coverage of transactions (via the arm's length provision), the document widened the coverage of related parties to increase the types of company that would need to comply with the proposed legislation. In particular, it was proposed that joint ventures would need to demonstrate arm's length pricing. Indeed, the proposals went as far as to include two 40% participants in a joint venture within its remit.

2.7.2.1.3 Documentation requirements

The main thrust of the documentation requirements was that taxpayers should be able to justify and support their transfer prices. The consultative document set out that "Taxpayers will be required to keep and preserve appropriate records in order to demonstrate the arm's length nature of the transfer prices on which their returns are based" (para 6.22). To be able to do this satisfactorily, taxpayers should create and retain contemporaneous documentation which details the taxpayer's attempts to comply with the arm's length principle. The expected documentation was based on both Chapter V of the OECD Guidelines and an appendix to the consultative document which divided the requirement into those documents which taxpayers are expected to prepare and retain; those documents which taxpayers should retain if they are prepared; those documents which taxpayers are not expected to prepare or retain.

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[66] In actual fact, the consultative document introduces the concept of an "arm's length provision". This term is not defined in the document but it appears likely that the end result will be to include a greater range of transactions within its scope.

2.7.2.1.4 Penalties

The previous transfer pricing legislation did not include the potential for imposing penalties. Under the proposed new regime, taxpayers who submit an incorrect return as a consequence of fraudulent or negligent conduct will be liable for a penalty. In the worst case scenario this could be equivalent to 100% of the tax adjustment. Penalties can be mitigated by demonstrating a reasonable attempt to comply with the arm's length principle. In turn, this demonstration is easier if the appropriate documentation is kept.

Ernst & Young (1997b) summarised the underlying impetus for the consultative document. They argued that "in order to protect the UK Revenue's tax base from erosion through over-compliance with more stringent regimes, one of the policy aims behind the proposed legislation is to bring transfer pricing within the world of returnable profits, thus providing a stick (i.e. penalties) with which to beat those who do not comply, and at the same time encouraging voluntary compliance" (p9).

2.7.2.2 Meeting its objectives

The stated intention was that any proposed legislation should be clear, should ensure the minimum necessary compliance costs, and should be consistent and fairer. This section considers whether the proposals meet these objectives.

2.7.2.2.1 Clarity

The consultative document introduced a certain degree of clarity in one direction by providing a formal acknowledgement that the legislation is consistent with OECD guidelines. The document stated that :

> "The member countries of the OECD have provided clear and detailed guidance on the practical application of the arm's length principle...(The Government) therefore considers that it would be helpful if the UK's transfer pricing legislation were to be framed in a way which more explicitly identified it with...the OECD Guidelines" (para 2.5-2.6).

However, this clarification is only as informative as the OECD guidelines. Unfortunately, many companies, notably small and medium sized MNEs, experience very real practical problems when trying to translate the OECD Guidelines into an acceptable transfer pricing policy. MNEs face the dilemma about whether or not their transfer pricing policy will be acceptable to all the tax authorities across which the MNE's operations span.

2.7.2.2.2 Compliance costs

There is a concern that the new transfer pricing legislation (coupled with corporate tax self-assessment) will increase compliance costs[67] (Ernst & Young, 1997c; Deloitte Touche Tohmatsu, 1998a[68]). The documentation requirements exceed the current level of documentation prepared and maintained by the majority of companies. Dawn Primarolo, Financial Secretary to the Treasury, claims that she "fully understands claims that compliance costs should be kept to the minimum necessary" (Inland Revenue, 1997a, Foreword)[69].

2.7.2.2.3 Consistency and Fairness

The consultative document cited fairness as one of the virtues of the mandatory application of the arm's length principle : "This will remove the inequity and potential competitive disadvantage faced under the present arrangements by taxpayers who apply the arm's length principle in setting their transfer prices and in making their returns as against those who do not" (para 6.4). In addition, the consultative document argued that the proposed administrative system will deliver the "same consistency" as the status quo. It remains to be seen whether this is the case. One might argue that the interests of consistency and fairness would be enhanced by :

- More transparency in the way in which tax inspectors review transfer pricing.
- More procedures in place for taxpayers to agree / check that their arm' length pricing is acceptable.
- More potential for timely compensating adjustments under competent authority procedures.
- A closer relationship between corporate taxes on the one hand and customs and excise duties on the other hand.

2.7.3 Outcome of the Consultations

Following the consultations[70], it was announced that the new rules governing transfer pricing will be based broadly on those disclosed in the consultative document[71]. However, there will be some refinements and additional guidance where appropriate (Inland Revenue, 1998a); there were some encouraging comments on the way in which the transfer pricing system will operate; the Inland Revenue produced

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[67] As a general comment on compliance matters, Pierpoint (1994) argued that "enterprises will ..need to employ resources to ensure that they satisfy the fiscal requirements of all of the fiscal authorities with which the enterprise comes into contact. Of course some other resources will be devoted to ensuring that the enterprise operates in a tax efficient mode. In this respect *issues of transfer pricing and thin capitalisation are particularly relevant*" (p 185, italics added).

[68] Deloitte Touche Tohmatsu (1998a) argued that over the transition period, documentation compliance costs are likely to be considerable.

[69] In Australia, there have been suggestions that in order to keep the compliance costs to the minimum necessary there is a need for some form of safe harbour legislation (Deloitte Touche Tohmatsu, 1995).

[70] The Inland Revenue received over 50 responses from a range of interested parties.

[71] Ernst & Young (1997b) anticipated that there would be few changes : "the (Inland) Revenue very much regard the thrust of the proposals as a done deal and are only looking for input on the periphery" (p9).

estimates of the expected compliance costs; and there are some proposals for future improvements.

2.7.3.1 Refinements and additional guidance

The main refinements narrow the definition of the 'control' relationship determining which companies are subject to the new legislation, and introduce a 3 year transitional period for certain joint ventures. The main additional guidance which will be forthcoming relates to the record-keeping rules and penalty provisions once transfer pricing becomes part of self assessment.

2.7.3.2 Encouraging comments

In the document Inland Revenue (1998b) there were a number of encouraging comments. In relation to penalties it was stated that : "The Government...recognises that transfer pricing is a subjective area in which there is no one 'right answer'. It acknowledges that in any given situation there is likely to be an acceptable range of prices. If prices fall within that acceptable range, the return will not be incorrect in this respect, so the question of penalties for an incorrect return will not arise" (para 5.8). Nevertheless, this does not guarantee that the Inland Revenue will agree with the taxpayer's definition of the acceptable range and it does not ensure that adjustments will not be made. Also, unlike in some other tax jurisdictions, "the Government does not propose to require taxpayers to disclose transfer pricing information in the tax return" (para 5.9).

2.7.3.3 Compliance Costs

In the appendix to Inland Revenue (1998b), "Regulatory Appraisal : Modernisation of the Transfer Pricing Legislation", the Government has estimated revenues to the Exchequer and compliance costs to the taxpayer. Whilst the Government anticipates a £50m increase in revenues per annum, it estimates that total initial compliance costs to all taxpayers will be £25m - £75m. These figures are based on a number of assumptions :

- "The taxpayers most affected by the proposals will be those at the larger end of the spectrum of UK multinationals and UK subsidiaries of foreign parents that have significant transactions with their overseas affiliates. It is estimated that there are between 2,000 and 3,000 such businesses. The impact on smaller multinational groups and, in particular on small business, will be very much less" (para 3.1).
- It is likely that additional costs will be incurred in relation to "reviewing/amending record-keeping systems, preparing comparability studies, increased management and clerical time, specialist input from professional advisers" (para 3.4).
- The estimated costs for the largest group of companies are £145,000 in initial costs and £110,000 annually recurring costs (para 3.5).
- The estimated average costs for business are £11,000 - £27,000 in initial costs and the Government states that "'typical' businesses....considered that there would be no significant ongoing compliance costs" (para 3.9/3.10).

Although it is acknowledged that compliance costs will depend on the business (size; complexity), the transactions (number; complexity), and the current and proposed systems for dealing with transfer pricing, one might question whether these estimates do consider and account for internal management time. Also, on what basis does the Inland Revenue assert that for 'typical' businesses there will be no significant ongoing compliance costs - especially in an increasingly global business environment in which, at the very least, it is prudent to continually review the transfer pricing policies, and in which fiscal authorities are continually shifting their approach to ITP ?

2.7.3.4 Future improvements

The Government intends that the Inland Revenue should consult on Advance Pricing Agreements (APAs) and then a statutory procedure will be introduced in the next Budget. Note that at present, "the UK has no statutory arrangements in place to enable taxpayers to participate in APAs. The Inland Revenue have in recent years used powers granted under the terms of Double Taxation Conventions to participate in APAs with tax authorities which have introduced legislation enabling them to enter APAs" (Inland Revenue, 1998c).

2.8 Relevance of ITP Research

This chapter has demonstrated that ITP is a very important and complex consideration for MNEs operating in a global environment. Furthermore, the importance of ITP is increasing alongside the increasing influence of MNEs in that global environment as evidenced by the significant levels of intra-group trade. Numerous tax authorities have recognised the importance of ITP by implementing updated transfer pricing rules and regulations. Therefore, ITP is a topical area of MNEs' business which demands further research. The following chapter evaluates the main contributions of 40 years of research and demonstrates that a new approach is necessary to understand and explain ITP.

3. LITERATURE REVIEW

3.1 Introduction

Many previous studies have emphasised that transfer pricing remains an area in which researchers can learn more about the problem domain (Watson and Baulmer, 1975[72]; Al-Eryani et al, 1990; Cravens, 1992; Borkowski, 1996). The majority of these transfer pricing studies have conducted surveys at the parent level (exceptions include Arpan, 1972a[73], Mostafa, Sharp and Howard, 1984[74]; and Lecraw, 1985). Typically, previous studies have investigated the practices of US MNEs (usually surveyed from the Fortune 500) with their subsidiaries (mainly in developed countries).

This chapter commences with a consideration of the theoretical influences on both the organisation of MNEs and on ITP. This is followed by a review of the literature on income shifting, questionnaire surveys and case studies. The chapter concludes with a critical evaluation of the limitations of previous studies and a suggested way forward for future research.

3.2 Theoretical Influences on the Organisation of MNEs

Leitch and Barrett (1992) contended that "the theory of MNEs argues that MNEs arise and engage in FDI in order to exploit imperfections in global markets[75]. Although not explicitly motivated by this theory, the transfer-pricing literature is largely in harmony with this exploitation argument" (p84). Indeed a number of theories have been used to try to understand and explain FDI and MNE activity, including trade theory, theories of industrial location, a theory of the firm, and industrial organisation (Dunning and Pearce, 1995). This section considers the main theories relating to FDI and Competitive Advantage.

3.2.1 Theoretical framework for MNEs : Foreign Direct Investment

Dunning's eclectic approach (Dunning, 1981 and 1988) is an established paradigm for the conditions which determine the degree to which MNEs engage in FDI. The eclectic approach is so called because it builds on industrial organisation theory, location theory and market failure theory. According to Dunning (1980) there are three main determinants that determine the likelihood of an enterprise engaging in international production through FDI, namely ownership, location and internalisation

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[72] "..little empirical evidence has been gathered on how transfer prices are established in various organisations" (p473).

[73] Arpan (1972a) considered wholly-owned subsidiaries in the US. The wholly-owned criteria was used on the basis that it minimised the influence of other cultures on the management decision making.

[74] In the UK, Mostafa, Sharp and Howard (1984) sent surveys to 250 companies, of which a small subset (50) were subsidiaries of British companies. 9 of these 50 subsidiaries (18%) responded to the survey.

[75] See Natke (1985) and Arpan (1988) for examples of exogenous market imperfections that influence transfer prices.

advantages (OLI advantages). However, this approach is not accepted by all commentators (Casson, 1987).

3.2.1.1 Dunning's Eclectic Paradigm

Dunning (1981) discussed the evolution of the eclectic approach in terms of the development (and limitations) of a number of other theories. The eclectic approach has integrated a number of economic theories to explain why firms conduct foreign production rather than domestic production and export. The theories which shaped Dunning's eclectic paradigm include :

- International capital theory - this was not suitable for explaining FDI because it involves the transfer or other resources in addition to capital (e.g. technology; management skills), and these resources are transferred within the organisation rather than externally to an independent organisation.
- Industrial organisation theory has been used to explain why international production takes place based on important ownership advantages (including technology, innovative capacity and product differentiation).
- Location theory has been used to explain why a firm produces in a particular country.
- The theory of the firm has been extended to international production by applying market failure theory (Coase, 1937; Williamson, 1975) which argues in favour of internalising markets.

Taken separately, each of these theories focuses on one main issue. For instance, industrial organisation theory does not address where ownership advantages would be exploited and location theory does not address the way in which foreign firms could compete with domestic firms. Therefore, the eclectic approach argues that to overcome the disadvantages of competing with a local firm in its local market (e.g. little specialist knowledge of the local market conditions; additional costs such as transportation costs), a firm engaged in international production must be able to rely on a set of advantages which are not available to the local firms (OLI advantages).

Therefore, combining the different theories, Dunning (1986)[76] argued that :

> "Firms with headquarters in one country will set up and/or expand value adding activities outside their national boundaries whenever :
> a) they perceive that, due to their nationality of ownership or degree of multinationality, they possess some kind of competitive advantage over indigenous firms (actual or potential) in the host country;

[76] Saying the same thing, Dunning (1981) expressed these OLI advantages in terms of "the growth of the modern MNE may be explained in terms of the growth of ownership advantages of enterprises. Particularly in knowledge and resource intensive industries, the spread of production abroad has been caused by the desire to exploit these advantages internally rather than through the market and the shift in locational advantages (due inter alia to a reduction in transport and communication costs, an increase in the size of foreign markets, and import barriers imposed by host governments) towards foreign production" (p99).

b) they find it economic to exploit these advantages themselves, i.e. to internalise their use, rather than sell the rights to do so to host country firms, via an arms length transaction (e.g. a technical service agreement or management contract);
c) they believe that it is in their global interests to produce at least part of the value added from a foreign rather than a home location" (p34).

Expressing the OLI advantages more formally[77], they are :

- ***Ownership-specific advantages***[78] - the extent to which MNEs have (or have access to) assets which give them an advantage over local firms (e.g. technology, management and organisational skills, trademarks, etc).

- ***Location-specific advantages***[79] - the extent to which MNEs prefer to locate some or all of their production overseas rather than servicing foreign demand with direct exports (e.g. input and transport costs; comparative productivity; government incentives). In addition, the way in which a MNE locates specific operations / activities in specific countries will depend on market potential, costs and market imperfections.

- ***Internalisation advantages***[80] [81] - Given that a MNE has certain comparative advantages, should it internalise these advantages (hierarchical structure) or sell them on to other firms using licensing or franchising (market structure)[82] ? Each of these organisational structures will have associated transaction costs (e.g. internalisation advantages include the protection of technology; quality control; retention of maximum flexibility; maximised returns) but it is argued that internalisation allows a MNE to gain the full benefit of the total value added of a product. It can also be argued that the costs associated with the market structure might outweigh those associated with external purchases and sales.

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[77] Dunning (1981) lists a set of OLI advantages in Table 4.2, pp80-81 entitled 'The Eclectic Theory of International Production'.
[78] Leitch and Barrett (1992) cite 1) capital assets that give an organisation a competitive edge, 2)economies of scale, 3) access to markets, 4) products to distribute, and 5)diversity of products.
[79] Leitch and Barrett (1992) cite 1) material sourcing, 2)a good labour market, 3) cooperative governmental policies (including tax policies), 4) governmental services and infrastructure, and 5)local markets.
[80] Leitch and Barrett (1992) cite 1) stable supplies, 2)control of markets, 3) exploitation of technology 4) vertical integration economies, and 5) markets.
[81] Dunning (1981)cites "(1)to avoid or reduce transaction and negotiating costs; (2)the fact that owing to the lack of knowledge or inefficiency on the part of the buying firm, it is unwilling or unable to pay the selling firm a price that will be sufficient to compensate it for not internalising the transaction; (3)to gain advantage over one's competitors through controlling the supply of inputs, product or production strategy and the access to markets; (4) to exploit or protect oneself against, the consequences of government intervention, for example, by taxation and other actions, which may place the firm in a less favourable position (the ability of a firm to engage in transfer pricing is one such example); (5) to protect the property rights of the owning firm...(6)to make better use of capacity or overheads to gain advantage of size, joint production, integration and/or diversification" (p96).
[82] See Coase(1937), Williamson (1975,1979,1985) for the origins of this framework.

Dunning argued that the eclectic theory can be used to explain all forms of international production. However, Dunning (1981,1986) pointed out that the OLI advantages vary according to industry, country, firm specific circumstances, and possibly over time.

3.2.1.2 Alternatives to Dunning's Eclectic Paradigm

The premise of Dunning's eclectic theory that there are three types of advantage is not accepted by all theorists. In particular, a number of authors argue that ownership advantages are not necessary to explain the existence of MNEs (Buckley and Casson; Rugman). It is argued that ownership advantages are more pertinent to the survival of MNEs. These authors argue that although the three sets of advantages are sufficient, they are not necessary, to explain MNEs, because internalisation advantages and location advantages are sufficient (Casson, 1987). Critics of the eclectic theory suggest that Dunning has underestimated the power of internalisation theory for explaining MNEs. "Dunning's eclectic theory implicitly denies the original powerful insight of Coase, which is that internalisation is the raison d'être of the firm. Dunning thus uses Coasian theory in a thoroughly non-Coasian way" (p35). Furthermore, in certain circumstances "transfer pricing[83] coupled with locational factors predicts that a multinational can compete successfully with independent indigenous firms" (Casson, 1987, p33).

Casson (1987) identified a number of general theories of the MNE which he categorised as "rival contenders for the title of the most general theory" (p31). Dunning's eclectic theory is but one of these theories. The other theories include Rugman's generalised internationalisation theory[84] (Rugman, 1981) and Teece's (Teece, 1982) multinational version of Williamson's 'markets and hierarchies' theory[85]. One of the main limitations of these competing theories is that "authors direct too much effort into artificially differentiating their theories from others, and spend too little time on original analytical developments. The same concept appears in different guises in different theories, so that the essential simplicity and parsimony of the conceptual framework is lost in the proliferation of rival jargon" (Casson, 1987, p32).

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[83] Casson's (1987) definition of transfer pricing is pejorative - "transfer pricing occurs when the accounting price at which intra-firm transactions take place differs from the price that would prevail in an arm's length market" (p21). This suggests that transfer pricing is a manipulative device. Also, what happens if transactions take place at market prices ? Does this mean that transfer pricing does not take place ?

[84] One of the main criticisms levelled at Rugman's internalisation theory is inconsistent references to internalisation as either the internalisation of a market (replacing an external market with an internal market)or the internalisation of an externality (removing a defect to improve social efficiency) (Casson, 1987).

[85] One of the main criticisms levelled at Williamson's 'markets and hierarchies' theory is that there is not a formal model which describes either the production process or the nature of the market environment (for instance, does the MNE compete with different rivals in different markets or the same MNEs?) (Casson, 1987).

Teece (1982) addressed the issue of when internalisation is most likely to be the most efficient way for an organisation to conduct its economic activity. One of the benefits of dimensionalising international trade is that "a contingency theory of the MNE (can be) developed" (p52). Teece (1982) explained FDI by distinguishing between production costs (associated with foreign production) and transactions / governance costs (associated with internalisation). Analysing the combination of the production cost function and the transactions cost function, Teece showed that there is a cost advantage favouring FDI compared to licensing for horizontally integrated MNEs as technological complexity / complexity of know-how increases[86]. Similarly for vertically integrated MNEs there is a cost advantage associated with internalisation once the characteristics of an asset has reached a certain level of specificity.

3.2.1.3 Implications of FDI theory for ITP

Within a MNE, FDI theory suggests that there will be internal transactions which cross international borders and have ITP consequences:

1. A MNE can be assumed to have certain ownership advantages;
2. It can be assumed from the statistics on FDI that MNEs prefer to internalise these ownership advantages. Also, the markets and hierarchies framework lends some support to this assumption.
3. Either to gain proximity to a market and/or take advantage of market imperfections[87] (Qian, 1996) a suitable location will be selected. It is these market imperfections which the FDI, coupled with appropriate ITP policies, seeks to exploit.

Therefore, from a FDI viewpoint, MNEs seek to maximise location-specific advantages by taking advantage of government incentives and market imperfections. Consistent with this, ITP can be used as a mechanism for ensuring that the MNE is able to utilise these market imperfections (Leitch and Barrett, 1992). Dunning (1981) supported the link between ITP and internalisation : "Government intervention..encourages (MNEs) to internalise existing activities and to engage in new activities which offer the possibility of internalising gains...Other things being equal, the more internal transactions the company engages in the greater its opportunity for doing this (manipulating transfer prices) - hence, in the case of MNEs, the added impetus to engage in a global strategy and to practice product or process specialisation within its organisation" (p31).

There does appear to be strong support for the view that ITP is a means for ensuring that FDI market imperfections can be exploited. Although the majority of empirical studies survey the relative importance of a set of factors on the transfer pricing

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[86] "Generally, the greater the complexity of the technology the more costly it is to effect transfer and low-cost foreign production without FDI" (Teece, 1982, p58).

[87] Tan and Vertinsky (1995) argue that MNEs with high level of international management abilities can exploit market imperfections.

decision[88], very few studies either justify how these factors were selected or ground them in terms of market imperfections and FDI theory.

3.2.2 Theoretical framework for MNEs : Competitive Advantage

3.2.2.1 Porter's Competitive Strategy

Porter (1985) stated that :

> "competition is at the core of the success or failure of firms. Competition determines the appropriateness of a firm's activities that can contribute to its performance, such as innovations, a cohesive culture, or good implementation. Competitive strategy is the search for a favourable market position in an industry, the fundamental arena in which competition occurs. Competitive strategy aims to establish a profitable and sustainable position against the forces that determine industry competition" (p1).

Porter proposed that competitive strategy is based on five competitive forces[89] [90]:

1) the threat of new entrants;
2) the threat of substitute products or services;
3) the bargaining power of suppliers;
4) the bargaining power of buyers;
5) the rivalry among the existing competitors.

3.2.2.2 Porter's Competitive Advantage

Competitive Advantage determines the way in which firms position themselves in an industry. The two basic types of competitive advantage are lower cost and differentiation (provision of superior value to the buyer). Competitive Scope refers to the range of products provided by a firm and the breadth of its customers within an industry.

Porter (1990) argued that the central task concerning competitive advantage in industries "is to explain why firms based in a nation are able to compete successfully against foreign rivals in particular segments and industries. Competing internationally may involve exports and/or locating some company activities abroad" (p10). Porter (1990) further argued that "multinational status is a reflection of a company's ability to exploit strengths gained in one nation in order to establish a position in other nations" (p18).

The reason for industries globalising is that "shifts in technology, buyer needs, government policy, or country infrastructure create major differences in competitive position among firms from different nations or make the advantages of a global

[88] Arpan (1972a,1972b),Kim and Miller (1979), Tang (1979,1981,1982,1992), Tang and Chan (1979), Wu and Sharp (1979), Burns (1980),Yunker (1983), Mostafa, Sharp and Howard (1984), Al-Eryani (1987), Al-Eryani, Alam and Akhter (1990), Borkowski (1992a), Cravens (1992), Borkowski (1996).

[89] See Figure 1-2 Elements of Industry Structure (Porter, 1985) for an analysis of the key elements of each of the five forces.

[90] See Figure 2-1 The Five Competitive Forces that Determine Industry Competition (Porter, 1990).

strategy more significant" (p63). The firm can either generate competitive advantage by concentrating activities in one country and exporting, or it can disperse activities through a number of countries via FDI. In turn, the decision to disperse activities will mean that transfer pricing is more influential within that firm. Whenever a firm does have activities located in a number of different countries it must be able to co-ordinate these activities.

The importance of co-ordinating MNEs' activities is emphasised by Porter (1985) :

> "uncontrolled decentralisation..undermines the pursuit of interrelationships by encouraging business unit managers to pursue strategies that maximise unit performance and not the corporations...other organisational practices typical of large diversified firms also work against interrelationships, such as incentive plans and transfer pricing policies" (p384).

3.2.2.3 Implications of Competitive Advantage theory for ITP

Within the competitive advantage framework, Porter (1985) identified transfer pricing policies as one of the procedures used to govern cross-business unit activities. The framework identifies a particular role for transfer pricing systems :

> "Interrelationships imply that transfer pricing and other decisions should be designed to improve the firms' overall position and not the financial results of individual business units...Business unit goals also may need to be adjusted in order to make them consistent with transfer pricing rules" (p404).

Also, Colbert and Spicer (considered later in this chapter) acknowledged Walker's (1988) contribution, combining transaction cost economics with Porter's (1980,1985) competitive strategy framework. The extent of vertical integration is considered in each framework and under the competitive strategy framework the benefits of vertical integration include :

- economies of operation
- access to technology
- supply
- offsetting bargaining power
- offsetting input cost distortions in non-competitive markets
- ability to differentiate products

3.3 Theoretical Influences on Transfer Pricing

3.3.1 Introduction to the theory

Two of the predominant shortcomings of both empirical and theoretical transfer pricing studies are that there is limited acknowledgement that transfer prices are actually a by-product of decentralisation by organisations[91] and that transfer pricing is a multi-disciplinary exercise. Some empirical studies have surveyed the practice of companies

[91] Acknowledged by Hirshleifer (1964).

without any consideration of how these companies operate in their internal and external environments. Some theoretical studies have disregarded the practicalities of applying transfer prices in the real world.

3.3.1.1 Multidisciplinary Exercise

The multidisciplinary nature of transfer pricing is noted by Mehafdi (1990) who argued that a study of transfer pricing requires the integration of accounting solutions with explanations from marketing, behavioural science (including contingency theory and agency theory) and the economics of the firm. In particular, a definitional framework is necessary to guide investigation. This framework should recognise the 'particularities and peculiarities of companies'. This requires an understanding of the internal (including organisational structure[92], technology, culture, managerial systems and the people) and external (economic, political and social environments) factors that influence and are influenced by internal transactions. Tang (1993) considers the multidisciplinary nature of transfer pricing in relation to its interfaces with selected disciplines : marketing; behavioural science; business policy; international business; economics and finance; law; taxation; and accounting.

3.3.1.2 Practical Application

Hirshleifer (1956) proved that the efficient transfer price should be the marginal cost of the selling division. Subsequent theoretical papers have suggested refinements and theoretically proved what the optimal transfer price should be. However, these theoretical findings do not hold necessarily in the 'real world'. For instance, tax and tariff distortions (Eden, 1985; Diewert, 1985), interest rates and exchange controls (Aliber, 1985), other market imperfections[93] (Natke, 1985) and vertical integration (Abdel-khalik and Lusk, 1974) are just some of the situations in which theoretically efficient transfer prices do not hold.

Eccles (1985) acknowledged that managers must deal with all aspects of a problem and cannot conveniently ignore key variables discarded by a particular theory. Consequently, based on a review of the literature, Eccles concluded that "policies that are highly recommended in economic theory, mathematical programming and accounting theory are almost completely absent in practice" (p41).

In a slightly different context, Porter (1990) identified ITP as one of the mechanisms available for achieving global co-ordination but stressed that the associated practical difficulties should not be underestimated :

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[92] Proponents of the importance of organisation structure on transfer pricing include Swieringa & Waterhouse (1982), Eccles (1983), Grabski (1985), and Spicer (1988).

[93] Leitch and Barrett (1992) suggested a number of possible market imperfections. First when there are differentials in a country's labour cost, education level, and technology. Politically motivated imperfections include taxes, duties, quotas, reinvestment requirements, and other economic differentials. Other imperfections include proximity to transport and markets for intermediate and final products; relative availability of labour, capital and raw materials; political stability and security of multinational investments.

"Even when there are significant benefits to co-ordination, however, achieving co-ordination among subsidiaries in a global strategy involves formidable organisational challenges because of sheer complexity, linguistic differences, cultural differences, and the need for high levels of open and credible information exchange" (p59).

3.3.2 Overview of the Transfer Pricing Theory

Eccles (1985) divided the literature on transfer pricing theory into early theory, economic, mathematical programming , accounting and management[94] ;

- Economic models deal with simple cases under limiting assumptions and identify the optimal output level as the point at which marginal cost equals marginal revenue. Spicer (1988) questioned the classical academic treatments of transfer pricing which "generally start by specifying a restrictive set of assumptions on organisational conditions under which the analysis will be conducted" (p304). Economic models have increased in sophistication over the years (see Schjelderup and Sorgard, 1997). For instance, recent research has considered the design and optimality of a set of transfer pricing rules and regulations from different perspectives (e.g. a single country; two countries, when one country imposes the rules; co-ordinated rules between two countries).
- In the mathematical programming model, Abdel-khalik and Lusk (1974) argued that the transfer price should be the opportunity cost of producing it. Mathematical models address some of the limitations of economic models but are complex and administratively impractical to implement. Watson and Baulmer (1975) emphasised that "many authors of the programming solutions are primarily interested in the mathematical properties (or elegance) of their solutions and only secondarily in the model's organisational implications" (p470).
- Accounting models relate to the cost-revenue decision over which pricing method should be used.
- Management theory focuses on individual fairness and administrative process (with particular reference to managing conflict).

Eccles summarised the shortcomings of four theories of transfer pricing in the table below. Due to some of these limitations, more recent studies have moved away from neo-classical normative models[95] that address profit maximisation in isolation to

[94] Grabski (1985) reviewed 81 transfer pricing studies from 1974 to 1983 that focus on decentralisation and organisational optimisation issues. He analysed the models in terms of economic, mathematical programming and behavioural. In the behavioural model, negotiated transfer prices take account of the human dimension.

[95] Ryan, Scapens and Theobald (1992)stated that the neo-classical economic framework assumes a number of core propositions including rational economic agents (investors and decision makers) i.e. maximisation of a utility function; perfectly competitive financial markets ; and, freely available information.

consider the implications of organisational and behavioural theories on transfer pricing[96].

	Economic theory	Mathematical Programming	Accounting theory	Management theory
Principle criterion:	Profit maximisation	Profit maximisation	Profit maximisation	Individual fairness
Assumptions:	Highly restrictive	Restrictive	Somewhat restrictive	Not restrictive
Completeness :	Ignores many variables	Ignores many variables	Ignores some key variables	Ignores some key variables
Empirical support	Almost none	Almost none	Some	Some
Usefulness to managers :	None	None	Limited	Limited

Table 3-1 Eccles (1985) : Shortcoming of four theories of transfer pricing

McAulay and Tomkins (1992) identified four overlapping categories which impact on the transfer pricing decision - functional necessity, economic, organisational, and strategic.

- Functional necessity refers to the classic need to satisfy both internal requirements (divisional profit measurement, motivation and control) and external requirements (tax and other regulatory requirements).
- Economic refers to the efficient allocation of resources. Transfer prices should motivate managers to make sound decisions, leading to a reasonable measure of managerial performance and not undermining divisional autonomy (Anthony and Dearden, 1980). Swieringa and Waterhouse (1982) argued that transfer pricing systems are based on the dominance of economic rationality in organisational decision making.
- Organisational means that a successful firm must be able to co-ordinate the need for differentiation and the need to integrate these different units. Whereas the economic view assumes a limited description of the organisation, the organisational view will depend on how the world is viewed "..in terms of routines, streams, processes, markets, hierarchies and other images of what goes on in organisations generally and in the transfer pricing context in particular" (Swieringa and Waterhouse, 1982, p152).
- Strategic means that companies need to match strategy and transfer pricing policy otherwise there will be ambiguities in strategy and problems for transfer pricing.

[96] Note that forty years ago Stone (1959) argued that "the role of transfer pricing depends largely on the organisational structure" (p631) and Mehafdi (1990) has since argued that "the objectives to be served by the transfer pricing system are a direct consequence of the organisational structure and strategy of the company" (p67).

3.3.3 Organisational Theory

3.3.3.1 Organisational Theory : Introduction

Woodward (1958) carried out the first UK study into whether management theory's principles of organisation bore any relation to business success. In the study of manufacturing firms in south Essex she found that organisations varied in ways which could not be attributed to firm size, industry or success. Instead, one of the most important determinants of organisational structure was technical method (technical complexity of the production system). Furthermore, organisations appeared to change as technology advanced (e.g. labour costs decreased; ratio of indirect to direct labour decreased; proportion of graduates increased; span of control of the chief executive widened).

Kotter (1976) identified strategy, environment and (human) resources as the contingent factors which relate to the appropriate organisational structure. Lawrence and Lorsch (1967) identified differentiation and integration as key concepts relating to the appropriate organisation. They found that the most successful organisations were able to differentiate and then integrate these organisational units to achieve the overall goals of that organisation. There have been numerous attempts to describe the way in which information/ information processing varies and the way it affects the organisation. Woodward (1965) focused on differences in technologies used; Perrow (1970) considered differences in complexity of information; Thompson (1967) studied differences in task interdependence.

Watson and Baulmer (1975) proposed that the main problem that complex organisations must deal with is coping with uncertainty. Furthermore, organisational design (and decentralisation in particular) is a response to the various sources of uncertainty (of which technology and environment are the main two). This approach requires some assessment of differentiation and integration between buyers and sellers; the degree of interdependence between them; and the form of conflict resolution.

3.3.3.2 Organisational Theory : Consideration of Transfer Pricing

3.3.3.2.1 Emmanuel and Mehafdi (1994)

Given the importance of decentralisation leading to internal trade, Emmanuel and Mehafdi (1994) attempted to explain an organisational framework of transfer pricing. They identified three issues :

- Researchers should have a proper understanding and justification of internal trade.
- Researchers should recognise the variety of objectives that a transfer pricing system is expected to achieve.
- Objectivity must not override human/subjective dimensions - "hence the need for a multi-disciplinary approach" (p148).

3.3.3.2.2 Watson and Baulmer (1975)

Following Lawrence and Lorsch (1967) , Watson and Baulmer (1975) argued in favour of a *theory of organisational decentralisation.* This theory is based on the contingency literature, with uncertainty contingent on technology and environment. Specifically, they proposed that "the transfer pricing mechanism..can be used to enhance organisational differentiation and to facilitate organisational integration" (p472).

3.3.3.2.3 Swieringa and Waterhouse (1982)

Swieringa and Waterhouse (1982) analysed transfer pricing in terms of four models of organisational theory that have evolved over the years - behavioural theory, 'garbage can' model, organising model and the markets and hierarchies model. The organisational approach does not assume a well-defined pre-existent organisational objective, behavioural consistency or the dominance of economic rationality in decision-making. In each of the models, transfer pricing must be considered in its organisational setting.

- The behavioural theory of the firm (Cyert and March, 1963) views a firm as a coalition of participants with different demands. The transfer price is the result of a bargaining process.
- The garbage can model (Cohen et al, 1972) is based on the principle that organisations facilitate the solving of problems and conflict resolution through bargaining.
- The organising model has three processes for information processing and removing uncertainty.
- The markets and hierarchies framework (Williamson, 1975) considers the role of transactions and contracts.

3.3.3.2.4 Eccles (1985)

Eccles illustrated the causes and effects of transfer pricing. This framework is viewed in different ways by different theories with some of the causes and effects either emphasised or ignored. The two main determinants of transfer pricing practices are strategy (what a company does - vertical integration; nature of profit centres) and administrative process [97] (how a company does it - how are the transfer prices set? by whom? based on what information? when are they set? how is conflict managed?). The transfer pricing practices affect economic decisions (which affect corporate performance) and performance measurement, evaluation and reward (which affect individual fairness).

3.3.3.2.5 Ezzamel(1987)

Ezzamel (1987) argued that many transfer pricing studies had ignored organisational characteristics in favour of consideration of the technical aspects of transfer pricing. He summarised the organisational characteristics of a company (see also Bailey and Boe, 1976) as:

[97] Subsequent studies on the contingent relationship between transfer pricing on one hand and strategy and structure on the other have been carried out by Mehafdi (1990) and Borkowski (1990).

- The degree of decentralisation adopted (substantial v limited);
- The degree of interdependence between divisions (Thompson, 1967's scale ranges from pooled to sequential to reciprocal);
- The degree of co-operation within the organisation (more co-operative v less co-operative);
- Integration mechanisms (standardised rules and routines to more liberal integrating mechanisms - see Galbraith, 1970).

3.3.3.2.6 Spicer(1988)

Spicer (1988) [98] extended Watson and Baulmer's (1975) theory to include the markets and hierarchies framework (or organisational failures framework). This framework considers uncertainty to be one of a number of interrelated factors which result in firms differentiating and integrating. Spicer (1988) argued that "an organisational theory of the transfer pricing process requires a wider consideration of relationships among a firm's diversification strategy, its intra-firm transactions, its organisation structure and its management accounting and control systems" (p304).

Spicer adapted work by Williamson (1979), illustrating the effect of Williamson's three dimensions of transactions (investment characteristic; frequency and volume; level of certainty/ uncertainty) on both production economies and transaction costs. The incidence of internal transfers will be related to the organisation's strategic choice about whether to buy components or make them. Spicer developed nine interrelated hypotheses of which three linked the transfer pricing policies to dimensions of intra-firm transactions between specific sub-units. Spicer's ultimate hope is that the combination of his hypotheses and additional hypotheses will lead to a "genuine organisational theory of transfer pricing" (p321).

No.	Hypothesis
6a	"Where standardised intermediate products are the subject of the transfer, or the transfer involves products for which the degree of customisation is minor, market prices will be the primary basis for setting internal transfer prices and for profit centre managers choosing between internal and external suppliers and customers" (p318).
6b	"Where the internally transferred intermediate product involves a moderate degree of customisation and a material transaction-specific investment, internal manufacturing costs will play a greater role in the initial negotiations to set transfer prices and in ex-post proposals to adjust them" (p319).

[98] Figure 1 (Spicer, 1988, p309) illustrates some major factors affecting control of inter-firm transfers.

6c	"Where the internally transferred intermediate product is idiosyncratic, and involves a large investment in transaction specific human and/or physical capital, internal manufacturing costs will be the primary basis for setting transfer prices; and there will be strong central control over the make-or-buy decision. Whether internal transfers are made at simulated market prices (cost-plus), or simply at some measure of cost, is a function of the degree of uncertainty associated with the intermediate product and the control strategy adopted by the firm" (p319-320).

Table 3-2 Spicer (1988): Three hypotheses on transfer pricing

Degree of transaction specific investment			
	High idiosyncratic	Neutral customised	Low standard
Inter-divisional trade			
Stable	Manufacturing cost	-	-
Annual change	-	Manufacturing cost and negotiation	-
Monthly change	-	-	Market price

Table 3-3 Spicer (1988) : Organisational theory of transfer prices (adapted from Figure 8.2, Emmanuel and Mehafdi, 1994, p145)

3.3.3.2.7 Colbert and Spicer

Colbert and Spicer (1995) considered the transfer pricing process using a transaction costs economics framework in four vertically integrated companies. In this framework analysis is conducted at the transaction level and the transaction costs are determined by the dimensions of that transaction. Three dimensions are identified :

- Asset specificity - including physical asset; human asset; site specificity; dedicated asset specificity (productive capacity);
- Uncertainty;
- Extent - frequency and volume of transactions.

3.3.4 Contingency Theory

3.3.4.1 Contingency Theory : Introduction

Contingency theory recognises the claims that some theories are inappropriate to certain circumstances. Otley (1980) contended that "conflicting results which could not satisfactorily be resolved within a universal framework, have been one source of stimulus for the development of contingency formulations" (p414).

Kast and Rosenzweig (1985) discussed the meaning of contingency theory:

> "The thrust of contingency views of management practice is to offset such claims (that theories are inappropriate to individual circumstances) by providing appropriate guidelines for action. Contingency views recognise both similarities and differences among organisations but still emphasise that the primary managerial role is to seek congruence between the organisation and its environment and among its various subsystems. Systems and contingency concepts facilitate more thorough understanding of complex situations and increase the likelihood of appropriate managerial actions....Application of contingency concepts requires increased understanding and sophistication on the part of managers"(p117).

Kast and Rosenzweig (1985), Jones (1985) and Schweikart (1985,1986) recognised that the contingency theory approach does not seek to apply universal management principles to all situations. Instead, management styles and organisation structures are situation specific and depend on an array of contingent variables. There have been a number of views about the nature of these contingent variables. For instance, in relation to the management control system, Soin (1995) identified the major classes of contingent factors as the environment, organisational structure, technology, strategy and culture.

Many commentators have subdivided contingent variables into internal (organisational) and external (outside the organisation; environmental) components (see Thompson, 1967). Schweikart further divided external environmental variables into A1 variables (e.g. education, economics, political-legal, socio-cultural) which effect the structure and type of organisation, and A2 variables which are more obvious contingent variables and affect the decision more directly. According to Schweikart, the major goal of international managerial accounting research should be to identify both the A1 and A2 environmental variables applicable to the contingency model. Schweikart (1985) suggests that the best way to identify these effects is to carry out a number of experiments in the same MNE..."*in effect, the case method is necessary to arrive <u>inductively</u> at a contingency theory*" (p95, italics added).

Emmanuel et al (1990) identified three classes of contingent variable that impact on particular features of the accounting system design : environment, organisational structure and technology. Emmanuel et al also classified a number of contingency theory case studies according to their main focus : environmental uncertainty, technology, size, strategy or culture. Although most empirical studies have restricted their approach to the way in which contingent variables effect organisational design, Otley (1980) argued that this approach could be extended to include other aspects of organisational control (including accounting systems, reward and incentive systems, etc).

3.3.4.2 Contingency Theory : Limitations

The contingency theory approach has been questioned by a number of commentators. The main criticisms relate to whether or not contingency theory is a 'theory' (see for instance, Schoonhoven, 1981). Also, Dent and Ezzamel (1987) summarised some of the technical limitations of the contingency approach as:

> "i) lack of precision in defining contingency factors;
> ii) misspecification of model parameters and use of perceptual measures as proxies for organisational characteristics;
> iii) use of cross-sectional approaches to measure dimensions of variables that can only be meaningfully measured by employing longitudinal approaches;
> iv) lack of consideration of multiple (and possibly conflicting) contingencies on structural configurations;
> v) lack of consideration of the implications of intraorganisational heterogeneity;
> vi) frequent use of defective sampling techniques" (p99).

3.3.4.3 Contingency Theory : Consideration of Transfer Pricing

The seminal work on a contingent approach to transfer pricing is provided by Solomons (1965) with further contributions by Anthony et al (1984) and Kaplan and Atkinson (1989). Since then various commentators have attempted to identify the important contingent variables for transfer pricing (although the inclusion of organisational and behavioural variables has been limited). Mehafdi (1990) carried out five case-studies and he acknowledged the potential for applying the contingency approach to transfer pricing :

> "Electronic Duo case is another example that proves that there is no cure-all transfer pricing formula for all situation and reflects the necessity to locate the problem not only in the organisational context but to take account of the technological and market considerations" (p296).

3.3.4.3.1 Solomons

In table 3-4, Solomons recommended that different transfer pricing policies should apply to different situations :

Situation :	Policy :
There is an outside competitive intermediate market and divisions have free access to it.	Outside price
There is no outside competitive intermediate market and transfers are in large or potentially large amounts.	Negotiated price, usually full cost plus return on capital mark-up

There is no outside competitive intermediate market, transfers are significant but are not a predominant part of the selling division's business.	Two-part tariff price: -a charge per unit equal to marginal cost -annual lump sum for fixed costs and profit
There is no outside competitive intermediate market, transfers are a predominant part of the selling division's business, and it can meet all probable requirements.	Selling division treated as service centre. Standard variable cost. Fixed costs charged as periodic costs.
There is no outside competitive intermediate market, transfers are significant but selling division has capacity constraints and cannot meet all requirements.	Programming methods

Table 3-4 Solomons (1965) : Contingency approach to transfer pricing

3.3.4.3.2 Eccles

Eccles proposed a two-dimensional normative framework (the Manager's Analytical Plane (MAP)) in which transfer pricing policies are one aspect of strategy implementation and depend on vertical integration and diversification. Four types of organisation are identified by Eccles (each with a specified transfer pricing policy) :

- Collective Organisation - typically small and new firms with very few functions or products.
- Co-operative Organisations - typically mature or capital intensive industries (or evolving collective organisations) with a narrow range of products.
- Competitive Organisations - typically conglomerates or holding companies with many different businesses but very little sharing of resources.
- Collaborative Organisations - typically project-based industries (e.g. aerospace; construction) or common technologically-based industries (e.g. electronics) which have numerous related businesses

Eccles (1985, p279) places each of these organisations and their transfer pricing policy on a MAP :

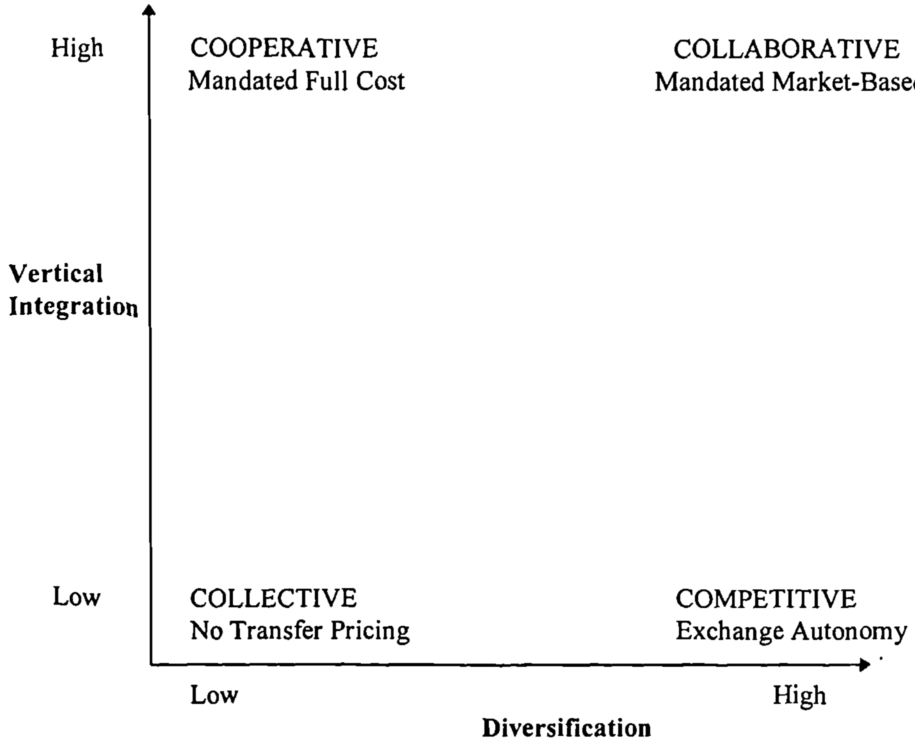

Figure 3-1 Eccles (1985) : Manager's Analytical Plane

3.3.4.3.3 Borkowski

Borkowski has carried out the most recent transfer pricing research using the contingency theory approach. Borkowski (1990) integrated cognitive psychology theory (Birnberg and Shields, 1984 perception/ attention model) and contingency theory (based on Schweikarts' (1985) managerial accounting model) to investigate the environmental and organisational variables that influence the choice of domestic TPM in an organisation[99]. The environmental and internal variables in Jones (1985) are the basis of Borkowski's choice of contingent variables[100] [101] (which are themselves "based on a thorough review of the literature").

Borkowski argued that the results of her 1990 study "support the contingency theory approach to accounting, in which firms choose a method based on what is perceived as optimal[102] in their particular situation"(p78). Then, Borkowsi (1992a) argued that

[99] As described by Borkowski (1992a), "each MNC develops its own different optimal set of accounting and management practices which are situation specific and contingent upon the organisational and environmental characteristics of the MNC's operating milieu" (p181).

[100] See Borkowski (1990) page 83 for her domestic model. Also, Table 1 p84 for identification of some of the previous authors which have used the variables employed in her domestic study.

[101] See Borkowski (1992a) page 183 for her international model. Also, Table 1 p178 for identification of some of the previous authors which have used the variables employed in her international study.

[102] Perhaps 'optimal' needs to be defined more fully as a function of a number of variables/objectives (e.g. profit maximisation; avoiding a transfer pricing investigation; reducing conflict within the organisation).

"the IRS, in allowing an MNC to choose its TPM, indirectly acknowledges, and effectively supports the contingency theory approach" (p181).

However, Borkowski acknowledged that some significant variables might have been overlooked and some complex interaction between variables might have been misinterpreted. In addition, she reviewed the range of theories and surveys in the literature and concluded that no model exists to explains the way in which transfer pricing methods are selected.

Also, Borkowski (1992a) distinguished between domestic and international transfer pricing policies : "Generally, one method is chosen for domestic transfers in order to maximise profit, and another for international transfers to comply with tax and tariff regulations" (p175).

3.3.4.4 Contingency Theory : What are the contingent variables for ITP ?

One of the main limitations of contingency theory is a lack of precision in defining contingency factors (Dent and Ezzamel, 1987). As ITP is multidisciplinary, the immediate questions include what are the relevant contingency factors and how should they be defined? Numerous studies have attempted to specify the relevant variables based on a review of the theoretical and empirical literature (for example Emmanuel and Mehafdi, 1994; Leitch and Barrett, 1992; McAulay and Tomkins, 1992; Al-Eryani, 1987). These studies raise two concerns :

- There are potentially a huge number of contingency factors which might be relevant to ITP;
- There is a likelihood that relevant factors might be overlooked or misspecified.

For instance, Emmanuel and Mehafdi (1994) identified a check-list of interacting variables (Emmanuel and Mehafdi, 1994, table 8-1, pp152-153) and developed an explanatory framework (Emmanuel and Mehafdi, 1994, figure 8-3, p154). Leitch and Barrett (1992) divided the factors affecting transfer pricing into the broad categories: behavioural, economic, sociopolitical, government intervention, taxation, international financial markets, and operational.

McAulay and Tomkins (1992) suggested a series of variables[103] impinging on transfer pricing :

- ***External characteristics*** : uncertainty; nature of markets for intermediate goods; technology opportunities; rate of change; tax and other regulations.
- ***Corporate characteristics*** : ownership; company size; company profits; strategy; diversification policy; degree of interdependence between divisions; degree of desired goal congruence; degree of desired behaviour congruence; degree of Head Office authority; degree of divisional authority.
- ***Administrative characteristics*** : performance measurement appraisal system; determination of profit split; determination of profit or market value; negotiation

[103] Adapted from Spicer (1988).

arrangements; arbitration process; information - cost/ credibility/ understandibility/ existence of asymmetry.

- ***Individual group characteristics*** : opportunistic behaviour; bounded rationality; perceptions of fairness; personal knowledge and experience; personal interpretations of situations and each other; relative power and influence; participation; motivation; control; conflict; bargaining history.
- ***Transfer Characteristics*** : nature of products; existence of market prices; frequency/volume of transfers; value of transfers.

Al-Eryani (1987) summarised the key environmental factors influencing ITP and the sources where these have been cited. 26 factors were analysed for 45 studies (between 1960 and 1985). Table 3-5 illustrates the factors that were covered the most in these studies were :

Environmental Factors	Number of studies (out of 45) using these factors
Minimisation of overall corporate taxes	38
Minimisation of import duties	26
Exchange controls	20
Performance evaluation of foreign affiliates	11
Maximisation of overall corporate profit	9
Antitrust legislation of host countries	8
Devaluation and revaluation of currency	8
Strengthened competitive position of foreign affiliate	8

Table 3-5 Al-Eryani (1987) : Environmental factors (table 2.1 p30-32)

3.4 Income Shifting Evidence

The majority of income shifting studies have been US-based because there appears to be better access to data in the US. A number of (sometimes Treasury) researchers have access to tax data, and the accounting data contains more/better geographic segmental information. This data availability has allowed regression analysis of large databases to test for evidence of income shifting in MNEs.

3.4.1 Grubert and Mutti (1991)

Grubert and Mutti (1991) used 1982 data on a cross-section of 33 countries to address several international taxation issues, including whether MNEs take advantage of tax planning opportunities by shifting taxable income to low-tax countries. Income shifting would be supported by a negative correlation between reported after-tax profit rate and the tax rate. Several regression models were run using different measures of tax (average effective tax rate; statutory tax rate), profitability (book income / sales net of purchases from the parent; book income/equity), algebraic relationship (linear or not), and with and without an adjustment for GDP growth rate.

The main results are "..tax rates are a highly significant determinant of reported profits in all cases....regressions with the statutory tax rate have more explanatory power than those with the average effective tax rate...regressions based on the inverse of the tax rate are more powerful than those with the straight linear version of the tax rate, suggesting that the influence of the tax rate on reported profits is much more pronounced at the low end of the tax spectrum....GDP..is often a significant determinant of US affiliates' reported profitability, but its inclusion does not greatly affect the estimated role of taxes" (p287).

3.4.2 Klassen et al (1993)

Klassen et al (1993) studied geographic income shifting by 191 US MNEs in relation to the world-wide changes in corporate tax rates between 1984 and 1990. Klassen et al concentrated on the changes (rather than a cross-sectional analysis of multinationals) in reported profitability over a period, based on financial statement data, subsequent to a particular tax change. They found that "US multinational firms shifted income to the United States from Canada and from the United States to Europe in 1985 and 1986, consistent with increasing Canadian rates and decreasing rates in Europe" (p142).

3.4.3 Harris (1993)

Harris (1993) compared US MNEs' US and world-wide income and investment activities both before and after the Tax Reform Act (TRA) 1986. The TRA 1986 reduced the corporate tax rate from 45% to 34% and reduced subsidies for capital investment. It might be expected that the effects of these two changes should result in some evidence of income shifting for a number of reasons. First, the reduced corporate tax rate might result in increased post-tax US returns. Second, expenses will be more advantageous if they are moved abroad. Third, investment will be treated more favourably abroad.

The data were collected from two sources - Compustat PC Plus (contained 7593 active firms) and PC Plus Global Vantage (listed 4321 foreign firms) for the years 1984-90. The regressions included one particular variant : 'flexibility' variable based on the flexibility in being able to move certain expenses (interest; research and development; rent and advertising) to other tax jurisdictions. In the US-based tests flexible MNEs shifted more income into the US (and responded quicker) after TRA 1986. In the foreign-based tests, the results supported MNEs shifting income from foreign jurisdictions into the United States in 1987 and 1988.

3.4.4 Harris et al (1993)

Harris et al (1993)[104] found evidence to suggest that US manufacturing companies were engaged in income shifting. Their sample comprised 200 US manufacturing

[104]Harris et al (1993) used a methodology similar to that in Grubert and Mutti (1991) and Hines and Rice (1990).

firms randomly selected from the SIC3000 industry file on Compustat from 1984 to 1988. The Compustat data (which includes the dependent variable - current taxes payable to the federal government net of investment tax credits) is supplemented by company annual reports. The regression analysis included dummy variables for location of subsidiaries plus additional variables available on Compustat - R&D expenses, investment tax credits, interest expense, number of employees.

3.4.5 Jacob (1996)

Following and extending the approach of Harris (1993), Jacob (1996) supplemented the data on taxes paid and geographic profits with information on volumes of intergeographic trade. The study examined two time periods - 206 US MNEs in 1982-84 and 289 US MNEs in 1988-90, and combined data gathered from both Compustat and annual reports. The results for both periods (considering the differentials in corporate tax rates between the US and overseas) "were consistent with global tax minimisation through transfer prices in both periods" (p312).

3.4.6 Collins and Shackelford (1998)

Collins and Shackelford (1998) examined the affects of taxes on cross-border payments of dividends, interest, royalties and management fees, between US MNEs' foreign affiliates. The study used 1990 tax return information (based on Form 5471[105]) for the largest 7,500 foreign subsidiaries (by total assets). Using these data, the authors claim that their study "presents the most direct evidence to date that US multinationals co-ordinate their non-US activities to mitigate foreign taxes" (p172). They claim that the results support this assertion for cross-border payments of dividends, interest, and royalties, but not management fees.

3.5 Survey Evidence

The literature review covers multinational transfer pricing studies and a few seminal domestic studies. Eccles (1985) provided a thorough reviews of the literature in a chapter on "Theory and Practice". Grabski (1985) carried out a comprehensive review of transfer pricing studies that focus on decentralisation and organisational optimisation issues from 1974 to 1983 covering 81 studies, although tax studies and multinational studies are explicitly ignored. Mehafdi's (1990) PhD thesis on "Behavioural Aspects of Transfer Pricing in UK Decentralised Companies" (Appendix E and chapter 4), a domestic study on the influence of particular procedures on managerial behaviour, included an analysis of the academic transfer pricing literature published up until the late 1980s. This review has been improved and updated by Emmanuel and Mehafdi (1994) and Mehafdi and Emmanuel (1997). McAulay and Tomkins (1992)[106] gave a good review of contemporary transfer

[105] US MNEs are required to file a separate Form 5471 to the IRS for each foreign subsidiary. This form discloses information on cross-border payments of dividends, interest, royalties and management fees (but the precise recipient/payer of the flows are not identified).

[106] McAulay and Tomkins identified three particular pieces of work (from the 1980s) which they considered to be essential reference points for future theoretical studies. The three studies, which all

pricing literature. Leitch and Barrett (1992) restrict their literature review to those studies dealing with MNEs.

This section summarises some of the seminal and most recent multinational studies since the early 1970s. Table 3-6 positions studies into Al-Eryani et al (1990)'s framework, which classifies the transfer pricing empirical research into three groups :

- The determination of transfer prices (i.e. the TPM used);
- The transfer pricing behaviour of MNEs in different countries;
- The examination of the influence of different factors, both at home and in the host country, on the selection of different transfer pricing strategies.

The studies reviewed here often cover two or three of these approaches.

	Determination of transfer prices	Transfer pricing behaviour of MNEs in different countries	The influence of different factors on the selection of different transfer pricing strategies.
Bursk et al (1971)	Yes	Yes	No
Arpan (1972a)	Yes	Yes	Yes
Arpan (1972b)	Yes	Yes	Yes
Kim and Miller (1979)	No	No	Yes
Tang and Chan (1979)	No	Yes	Yes
Wu and Sharp (1979)	Yes	No	Yes
Burns (1980)	No	No	Yes
Czechowicz et al (1982)	Yes	Yes	No
Tang (1982)	No	No	Yes
Yunker (1983)	Yes	No	Yes
Mostafa, Sharp and Howard (1984)	Yes	No	Yes
Benvignati (1985)	Yes	No	Yes
Lecraw (1985)	Yes	Yes	Yes
Al-Eryani (1987)	Yes	Yes	Yes
Al-Eryani, Alam, Akhter (1990)	Yes	No	Yes
Johnson and Kirsch (1991)	No	No	Yes
Borkowski (1992a)	Yes	No	Yes
Cravens (1992)	Yes	No	Yes

focused on an organisational theory approach, are Swierenga and Waterhouse (1982) ; Eccles (1985) who provided a comprehensive list of hypotheses which could be further developed; and Spicer (1988) who suggested the use of hypothesis testing of transfer pricing policies using empirical investigations.

Tang (1992)	Yes	No	Yes
Borkowski (1996)	Yes	No	Yes
Cravens and Shearon (1996)	Yes	No	Yes
Borkowski (1997a)	Yes	Yes	Yes
Cravens (1997)	Yes	No	Yes

Table 3-6 Analysis of selected surveys of MNEs

3.5.1 Bursk et al (1971)

Bursk et al identify three major problems that limit the effectiveness of the financial control systems employed by US companies in their foreign subsidiaries :

"1) The lack of goal congruence between the subsidiary and the parent company resulting from the way performance is measured.
2) The obscuring of relevant cost data for marketing decisions through intra-company pricing techniques.
3) The inconsistency between the accuracy of a profit budget goal and the reliance placed on the goal as evidenced by the way the system is administered" (p129).

Bursk et al make an interesting observation about the link between profitability perceptions on the control system. When foreign subsidiaries are profitable, all parties appear to be satisfied with the financial control system; when foreign subsidiaries are not profitable, the financial control system is viewed as inadequate.

41 financial officers replied (of which 34 were complete) from 98 MNEs surveyed, and 53 foreign subsidiaries replied to the survey on foreign operations. These results are purely descriptive with no statistical evaluation. Their exhibit 1 presents the relevance of environmental considerations in different geographic regions in terms of their significance, but it is unclear what (if any) statistical test was used.

With regards to inter-subsidiary pricing, two specific questions were asked. For the basis of pricing, they found that for over 50% of the cases it is based on cost plus profit, 32% on a market measure, and 8% on variable cost. For the method of price-setting, they found that in 50% of the cases it is done by the parent and in 44% it is done by arm's-length bargaining.

3.5.2 Arpan (1972a,1972b)

The stated aim of this study was to identify similarities and differences in ITP systems and to determine underlying causes with the belief that "the nationality of the parent company management was hypothesised to exert the major influence on internal pricing practices" (p2).

Arpan sent an open-ended letter (rather than a questionnaire) to the largest or most representative wholly-owned US-based subsidiary of 145 foreign parent companies. The parent companies were based in 15 different countries and the size of the parent company (in terms of sales) ranged from under $1m to over $500m. In all 60 replies from 15 different countries were received.

Arpan (1972a) tested five hypotheses based on descriptive rather than statistical findings :

No.	Hypothesis	Findings
1	All MNEs face the same environmental factors with respect to ITP	True (for large MNEs)
2	Not all MNEs perceive the importance of problems in the same way	True
3	Differences in perceived importance are a function of different cultural influences	True (major cause - but not the only one).
4	Cultural differences lead to different international intracorporate pricing systems	True (but one of many influences)
5	No single transfer pricing system is optimal for all MNEs	True

Table 3-7 Arpan (1972a) : Hypotheses and findings

Respondents were also asked to rate 9 external variables (on a five point scale) and 10 internal variables (on a two point scale - important; not as important) with regards to the transfer pricing decision. For very large MNEs, no significant differences were found for external variables on a parent nationality basis. Taxes proved to be one of the most important considerations for US, Canada, France and Italy, but not as important for Germany, Scandanavia or England. The main finding for internal variables was that "non-US multinational firms consider only roughly half as many internal parameters as their US counterparts. The parameters that are not considered have to do with transfer pricing's relation to management performance evaluation" (Arpan, 1972b, pp11-12).

The overriding conclusion was that international differences due to parent nationality diminish with the size of the MNE. Furthermore, Arpan cites MNEs' increasing preference for cost-based systems in conjunction with increasing MNE size and proportion of internal transfers.

3.5.3 Kim and Miller (1979)

The objective of this study was to establish a theoretical framework for world-wide transfer pricing for US MNEs with specific reference to subsidiaries in less developed countries (LDCs). Using survey and interview evidence, 30 US MNEs (out of 342 US parents listed in the World Trade Academy Press of 1978) with subsidiaries in at least two out of eight LDCs, rated the importance of 9 variables on the transfer pricing decision (on a scale of 1 to 4). They ranked the average scores of these variables and "profit repatriations" ranked as the most important with tax influences at numbers five and six. From this limited data, they argued that the position in 1979 was that "a decade ago income tax liability was probably the most significant factor, but in international business today it is only one of several factors multinationals should take into consideration in their pricing decisions" (p71).

3.5.4 Tang and Chan (1979)

The objective of this study was first to determine the more important environmental variables considered by large US and Japanese MNEs in formulating their transfer pricing polices and second to find those environmental variables which discriminate between large US and Japanese MNEs.

Tang sent questionnaires to the controller, treasurer, financial vice-president, or secretary of 300 manufacturing and mining companies selected from the largest 1000 US industrial corporations, and to the president of 369 of the largest manufacturing and mining companies in Japan. 76 US and 50 Japanese firms rated the importance of 20 environmental factors (on a five-point scale) in formulating their transfer pricing policies. The initial findings ranked each of these variables according to the mean responses. "Overall profit to the company" ranked highest for both US and Japanese MNEs.

As a first step to distinguish between the two countries, they computed both a Kendall and a Spearman rank correlation coefficient and found moderate correlation between the two sets of ranking, indicating some agreement on relative importance of the environmental variables. As a second step they built a discriminant function based on all twenty variables. The top three discriminators were "the interests of local partners", "devaluation and revaluation" and "antidumping legislation of foreign countries".

3.5.5 Wu and Sharp (1979)

Wu and Sharp aimed to collect empirical data to test which of three theories (economic; mathematical programming; behavioural) are more accepted in the economic world and what the factors are which determine their acceptance or rejection. They conducted two questionnaire surveys - the first to identify transfer pricing criteria, available transfer prices and arbitration methods; the second to rate the influence of 14 variables on the transfer pricing decision. These variables were then ranked and the Kendall coefficient of correlation was used to test the following (null) hypotheses :

No.	Hypothesis	Findings
1	The rankings of motivational criteria for transfers by different industries are unrelated	Rejected
2	The rankings of transfer price systems used by different industries when market prices are available are unrelated	Rejected
3	The rankings of transfer price systems used by different industries when market prices are not available are unrelated	Rejected

4	The rankings of arbitration methods for settling transfer price disputes by different industries are unrelated	Rejected
5a	The rankings of motivational criteria for domestic v international transfers are unrelated	Not Rejected
5b	The rankings of transfer price systems used for domestic v international transfers when market prices are available are unrelated	Rejected
5c	The rankings of transfer price systems used for domestic v international transfers when market prices are not available are unrelated	Rejected
5d	The rankings of arbitration methods for settling transfer price disputes for domestic v international transfers are unrelated	Rejected

Table 3-8 Wu and Sharp (1979) : Hypotheses and findings

For hypothesis 5a, there was a "sharp contrast" between the ranking of motivational criteria for domestic versus international transfer pricing. The top three criteria for ITP are "comply with the foreign tax and tariff regulations", " maximise a firm's overall profits" and "comply with the US tax regulations and IRS rulings". For domestic pricing "comply with the foreign tax and tariff regulations" was ranked at thirteenth most important (out of fourteen).

3.5.6 Burns (1980)

The objective of this study was to improve the understanding of intracompany policies and to explore possible interrelationships in the data. A questionnaire was sent to the senior financial officer of 210 US MNEs to assess the influence of 14 variable (using a five-point scale) on the export pricing decision and select the five most important. 62 MNEs completed the survey and ranked "Market conditions in the foreign country" and "competition in the foreign country" at number one and two most important influences on the export pricing decision. "US federal income taxes" is ranked number four but "taxation in the foreign country" is ranked at number nine.

In addition, Burns identified five factors (each explaining more than 5% of the variance and 80% in total) which were :

No.	Factor Name
1	Internal Foreign Environment
2	Influences on Cash Flows
3	Artificial Barriers
4	Taxes
5	Economic Structure

Table 3-9 Burns (1990) : Factor analysis

Burns hypothesised that there were five dichotomous categories[107] [108] which determine whether the variables are more or less important, and then tested all 14 variables and 5 factors for each partition using Student's t-test. A number of the variables and factors are significant for each of the partitions - significant differences in "US Federal income taxes" , "taxation in the foreign country" and the tax factor are apparent for categories 1,3,4 and 5.

3.5.7 Tang (1982)

The main objective of this study was to identify the environmental factors that British MNEs consider in formulating their transfer pricing policies. Tang sent questionnaires to the managing directors of 290 manufacturing and mining companies selected from the largest 500 UK companies in The Times 1000 Directory. 80 firms returned useable responses of which 47 rated the importance of 20 environmental factors (on a five-point scale) in formulating their transfer pricing policies. Based on the mean responses, "overall profit to the company" was ranked highest followed by "the competitive position of subsidiaries in foreign countries".

Tang also used factor analysis to separate and analyse distinct "clusters". In all six factors explain 54.5% of the total variance of the 20 variables. Table 3-10 shows these factors along with the percentage of total variance explained.

No.	Factor Name	Variance Explained
1	Government restrictions and the needs for cash flows and funds in foreign subsidiary	24.1%
2	Customs duties, antidumping and antitrust legislation	9.5%
3	Inflation and currency fluctuations	7.2%
4	Restrictions on royalty or management fees, and the interest of local partners	5.8%
5	Relationships with host countries and competitive positions of foreign subsidiaries	4.4%
6	Performance evaluation	3.5%

Table 3-10 Tang (1982) : Factor analysis

[107] Those companies with or without transfer pricing adjustments; those in the first 150 companies of the Fortune 500 versus those in the second 350 of the largest firms; those firms with export sales above $25 million versus below $25million; those firms with export sales to subsidiaries above 50% of total exports versus those below 50%; those unable versus able to use a market-based price.

[108] Although one of the advances in this paper was to partition the data into five dichotomous categories, there was no explicit indication of the number of companies in each group for each partition. Perhaps the potential implications of sample size on significance tests meant that the partitions were tailored to fit the data (i.e. ensure that the partition results in about 30 companies in each group). The Fortune 500 was divided into the top 150 versus the rest on the grounds that "approximately half the participants are listed among (the top 150)". On similar grounds gross exports were partitioned at $25m. Perhaps the sample size restricted the scope for the author to partition on purely theoretical grounds.

3.5.8 Czechowicz et al (1982) :

Czechowicz et al (1982) sent out 300 questionnaires and received 88 responses from MNEs with the objective of evaluating the performance assessment of overseas operations (on a four point scale) at the parent level.

Comparing the responses from the 64 US MNEs and the 24 non-US MNEs[109] there appear to be some notable differences. US MNEs prefer cost-plus whilst non-US MNEs prefer market-based (their table 7.1); transfer prices are more likely to be negotiated in non-US MNEs (63% v 38% for US MNEs) and set centrally in US MNEs (41% v 33% for non-US MNEs); in the vast majority of cases transfer prices used for internal purposes are also used for external purposes (their table 7.3); domestic and overseas transfer prices are generally the same (their table 7.4). In the performance evaluation of overseas operations, non-US MNEs favoured pre-tax profit figures (67%) or solely local taxes (29%), whilst US MNEs not only considered pre-tax (47%), local taxes (24%) but also local and parent taxes (27%).

3.5.9 Yunker (1983)

The objective of this study was to shed light on MNE's corporate policy formulation in terms of subsidiary autonomy, performance evaluation and transfer pricing. Surveys were sent to 358 US corporations with international operations from which 52 responses were received. In all the study queried 102 items of which exogenous factors were company characteristics (28 items) and environmental factors (11); and endogenous policy variables were subsidiary autonomy policy (12), performance evaluation policy (19) and transfer pricing policy (32). These variables were later reduced to a set of summary variables to study their relationships. Correlation coefficients were calculated between exogenous and endogenous summary variables to attempt to explain the impact of one on the other.

The transfer pricing variables showed that "increase overall corporate profit" was by far the most dominant general objective of an ITP system, although there "is no evidence of any single predominant motivation for transfer price manipulation" (p57). Market price (followed by cost plus) was the most often used TPM.

3.5.10 Mostafa, Sharp and Howard (1984)

The stated objective was to examine the extent to which the transfer pricing system used by a company can be inferred from certain transfer pricing determinants. They sent surveys to 250 companies (150 MNEs from the Times 1000; 50 large companies in Yorkshire and Manchester area; 50 subsidiaries of the largest British companies). 46 respondents supplied details of TPMs used and rated the importance of 20 determinants (using a six point scale) on the transfer pricing decision , and 33 companies supplied international data. One of their first findings was that "market-priced methods are most frequently used for domestic transfers whereas for international transfers this group is used less than cost-based methods" (p468). They then used MDA to classify all 20 variables for international pricing systems (12 for

[109] The non-US MNEs were located in the following countries :7UK; 8 Sweden; 4 Switzerland; 5 other European countries.

domestic) into four higher level groups of TPM[110] - market price method ; cost-based method ; negotiation ; other - which produced an excellent classification.

3.5.11 Benvignati (1985)

This study[111] differs from most other empirical studies on transfer pricing because it uses confidential corporate data from the US Federal Trade Commission's Line of Business program[112] rather than primary data collected by questionnaire. The main objective of this study was to provide more analysis of the magnitude, uniqueness, method of pricing, and firm and industry characteristics for transfer pricing. 466 companies with 3186 lines of business are analysed.

The series reports each company's fraction of total transfers which use each of four TPMs (market; cost-plus; cost; other). The results are significantly different for foreign transfers compared to domestic transfers - non-market pricing accounts for just over 75% of the former compared to 50% for the latter. Finally a two-way analysis of variance suggested that differences in the market versus nonmarket pricing decision are due to inter-firm differences rather than inter-industry differences.

To test which variables are significant in the market versus nonmarket decision, Benvignati ran multiple regression analysis on the percentage of foreign transfers at market against 12 independent variables. Benvignati found that the higher the level of intra-firm exports the higher the proportion of non-market pricing. In addition, if firms are exporting to branches (rather than subsidiaries) this corresponds to higher levels of market-based pricing.

Of the organisational variables, market-based pricing is significantly related to the size of the firm and also to the number of foreign subsidiaries. Benvignati explains this relationship in terms of "..the greater visibility to government tax officials, their greater propensity to have difficulties with conflicting management objectives and/or their greater administrative costs in keeping 'two sets' of accounting books" (p209).

Two of the main shortcomings of the data are that foreign transfers included only exports and respondents can report only one TPM (selected from market, cost, cost-plus and other). To overcome these shortcomings, Benvignati divided the sample into no transfers, foreign transfers (if foreign transfers exceeded 70% of total transfers) , domestic transfers (if domestic transfers exceeded 70% of total transfers), and combined transfers.

3.5.12 Lecraw (1985)

Lecraw collected data on import and export pricing from 153 subsidiaries of 111 MNEs operating in five countries in the ASEAN region (Thailand, Malaysia,

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[110] Borkowski (1992a) illustrates how important the group definitions are.

[111] Benvignati (1987) used a large subset of this data to test whether US MNEs earn higher rates of profit on domestic undertakings compared to nonMNEs.

[112] One of the main limitations is that the series does not address intra-firm transfers into the US (i.e. imports). For other limitations see Benvignati (1985), p194-195.

Singapore, Indonesia, and the Philippines). This data was used to test hypotheses on the determinants of MNEs' transfer pricing policies and the extent to which non-market transfer prices differed from market prices for imports and exports.

The MDA analysis classified the sample into MNEs using market-based or nonmarket-based pricing (for both import and export pricing behaviour). The significant independent variables, for exports and/or imports, are illustrated in Table 3-11.

Independent Variables	Significant for Import Pricing Behaviour	Significant for Export Pricing Behaviour
Export tariffs	No	Yes
Corporate tax rate differentials	Yes	Yes
Price controls	Yes	No
Capital-profit repatriation controls	Yes	Yes
Country risk (as perceived by managers in subsidiaries[113])	Yes	Yes
Japanese ownership	No	No
Percentage ownership of the subsidiary held outside the MNE	No	Yes
Degree of decentralisation of management control[114]	No	Yes
Import tariffs	Yes	No

Table 3-11 Lecraw (1985) : MDA

Lecraw's (1985) study can be distinguished from other transfer pricing studies by its emphasis on subsidiaries and the disaggregation of their intra-firm transactions into both import and export pricing decisions[115]. This focus provided a richer understanding of transfer pricing within MNEs than many previous studies had published.

3.5.13 Al-Eryani (1987)

Al-Eryani carried out this study to "fill a part of the information gap" (p11) on US MNEs' transfer pricing policies in less developed countries (LDCs) and more developed countries (MDCs); to identify, test and explain similarities and differences in transfer pricing motives; and to test the influence of company size and industry on a transfer pricing model for both affiliates in LDCs and MDCs. Al-Eryani sent questionnaires to 791 MNEs addressed to the person responsible for ITP policies (controllers, treasurers, financial vice presidents) as identified by Dun and Bradstreet's Billion Dollar Directory. 164 US MNEs replied to the survey of which 88 had

[113] On a scale of 1 to 10.
[114] A composite variable constructed from 21 decision variables - see Lecraw (1983) for more details.
[115] Including the proportion of exports to and imports from related parties and the export destination and import source(by country).

affiliates in LDCs and 76 had affiliates in MDCs. The questionnaire asked respondents to rate 34 environmental factors and 15 TPMs using a five-point scale.

The top four ranked environmental determinants for US MNEs operating in MDCs (and LDCs) were:

1 (3) Maximisation of overall corporate profit
2 (1) Compliance with US tax and customs regulations
3 (2) Compliance with the tax and custom regulation of the host country
4 (4) Minimisation of overall corporate income taxes

Six hypotheses are listed under three headings - Environmental (hypotheses 1 and 2); Transfer Pricing Policy (hypotheses 3 and 4); and Company Characteristics (hypotheses 5 and 6). Hypotheses 1,3,5 and 6 were tested using the Kendall rank coefficient; hypotheses 2 and 4 were tested with the Mann-Whitney U Test.

No.	Hypothesis	Findings
1	There is no significant association between the rankings of the overall sets of environmental determinants of ITP method choices by US MNEs with respect to MDC and LDC affiliates.	Significant association in ranking
2	There is no significant difference between the individual environmental determinants of ITP method choices by US MNEs with respect to MDC and LDC affiliates.	No significant differences[116]
3	There is no significant association between the rankings of the overall sets of TPM choices by US MNEs with respect to MDC and LDC affiliates.	Significant association in ranking
4	There is no significant difference between the individual TPM choices by US MNEs with respect to MDC and LDC affiliates.	No significant differences
5	For a given industry membership, there is no significant association between the rankings of the overall sets of TPM choices by US MNEs with respect to MDC and LDC affiliates.	Significant association in ranking [117]
6	For a given company size, there is no significant association between the rankings of the overall sets of TPM choices by US MNEs with respect to MDC and LDC affiliates.	Significant association in ranking

Table 3-12 Al-Eryani (1987) : Hypotheses and findings

Al-Eryani also applied factor analysis to both environmental determinants and TPMs to determine whether factors extracted were similar to the questionnaire layout. Four environmental factors were extracted (political and social; external economic; internal economic; legal) which were similar to those offered in the questionnaire.

[116] One minor exception for the subsidisation of the infant foreign affiliates.
[117] Minor exceptions

Three TPM factors were extracted (economic, mathematical programming and market-based; variable cost and standard full cost-based; actual cost-based) which were very different to the questionnaire's classification scheme.

3.5.14 Al-Eryani, Alam and Akhter (1990)

The main objective of this study was to examine the influence of a series of environmental and firm-specific variables on the transfer pricing strategies (broadly divided into market-based and nonmarket-based) of US MNEs[118]. Al-Eryani et al analysed the responses by factor analysis to identify the key determinants of transfer pricing decisions. Four factors were identified which explained 54% of total variance : legal; political and social; external economic; internal economic.

These four factors plus firm size and location (LDC or MDC) were included in a probit model where the firms are divided into those that use market-based versus nonmarket-based TPMs[119]. Two of these variables were significant - legal factor and size - suggesting that multinationals use market-based prices to satisfy home and host laws and regulations.

In table 3-13 they proposed six different research hypotheses and their influence on the selection of a TPM :

Name	Hypothesis	Findings
Legal	The more important the legal variable to multinationals, the greater the use of market-based transfer pricing by multinationals.	Supported : The legal factor is statistically significant and positively related to market-based transfer prices.
Size	The larger the multinational the more likely it is that it will use a market-based transfer pricing strategy.	Supported : The size variable is statistically significant and positively related to market-based transfer prices.
Political-Social	The more unstable the political and social environment, the less likely it is that multinationals will use a market-based transfer pricing strategy.	Not supported : The political-social factor is not statistically significant.
External economic	The stricter the external economic restrictions (e.g. import restrictions ; tariffs ; inflation) the less likely it is that a multinational will use a market-based transfer pricing strategy.	Not supported : The external economic factor is not statistically significant.

[118] See Al-Eryani (1987) above for details of the sample.

[119] Probit was selected because the dependent variable is bimodal.

Internal economic	Multinationals are less likely to use market-based transfer pricing when internal economic conditions (market share; competitive position) require underpricing.	Not supported : The internal economic factor is not statistically significant
Location	The larger the number of affiliates of a US multinational operating in less developed countries, the less likely it is that a multinational will use a market-based transfer pricing strategy.	Not supported : The LDC variable is not statistically significant

Table 3-13 Al-Eryani et al (1990) : Hypotheses and findings

3.5.15 Johnson and Kirsch (1991)

This study investigated how transfer pricing was carried out in US MNEs because of the growing importance of decentralised enterprises. The prior belief was that decentralised firms (using profit centres) should have a different locus of transfer pricing decisions when compared with centralised firm (using cost centres). They cited two limitations in the literature. First, they argued that most previous studies had concentrated on domestic corporations and "an investigation of the multinational firm was needed" (p554). Second, "there also seems to be a lack of knowledge as to how this is done by US based multinational corporations" (p555).

Questionnaires were sent to a person who was (supposedly) knowledgeable about the transfer pricing policy in the organisastion for 576 US-based corporations identified from the Business Week Global 1000 and Fortune 500 lists. 230 firms responded of which 79 used transfer pricing in an international setting. The study has a number of limitations. First, the policy control section in the questionnaire discussed transfer pricing policies and transfer pricing practices but there was no clear description about what both terms actually meant. Second, it appears that only 5 goals of transfer pricing were offered to the respondents and there is very little introduction to, or discussion, of these goals. Third, the main contribution of the paper is not developed. The authority of managers (subsidiary versus parent) is illustrated for 12 decisions yet none of these are evaluated.

3.5.16 Borkowski (1992a)

This study investigates the motivational criteria driving US-based MNEs to select an ITP method[120]. Based on a selection of seven overall internal variables[121], seven overall external variables[122], and using the TPM as the dependent variable,

[120] In her Table 1 (p178), Borkowski (1992a) identifies 11 factors in determining ITP methods and lists the authors who have used these factors in previous surveys.

[121] MNE size; degree of conflict; transfer pricing requirements; performance evaluation; management compensation; MNE profit orientation; degree of decentralisation.

Borkowski proposed that the choice of an ITP method[123] is not affected by either organisational (internal) or international (external) variables[124].

Questionnaires were sent to the person responsible for international operations at 301 firms (which were in a manufacturing industry, listed on either the Fortune 500 or Business Week 1000, and with international affiliates) and replies were received from 79 firms which transferred products internationally. Of these 79, 51.9% used a version of full-cost, 32.9% used market-based and 15.2% used negotiated price.

The three sets of definitions of international TPM were tested using the Kruskal-Wallis test (for market/negotiated/cost) and the Wilcoxon rank-sum test (for both cost/other and market/other). Several internal and external variables were significant for one definition of the transfer pricing split alone. For the internal variables, only the use of subsidiary net income for performance evaluation was significant for all three definitions of the TPM. The degree of decentralisation was significant for two breakdowns of TPMs.

Three of the external variables deserve special mention. First, tax and tariff requirements were considered much more important by those MNEs using market-based prices - suggesting that those MNEs that were more concerned about tax implications tended to use market-based prices. Two thirds of market-based pricing MNEs select CUP and two thirds of cost-based pricing MNEs select cost-plus. Second, the question on whether MNEs use two sets of books[125] yielded a significant result for the first two definitions - in all 52 of the 79 MNEs used two sets of books.

3.5.17 Cravens (1992) ; Cravens and Shearon (1996); Cravens (1997)

These studies attempted to provide a better understanding of the motivations of MNEs in setting transfer pricing policies using both qualitative and quantitative measures. In particular, "researchers do not have a clear picture of how the multinational firm considers multiple objectives in determining transfer pricing policy" (Cravens, 1992, p49). Cravens stressed the importance of distinguishing between determinants (environmental and organisational) and objectives. Then Cravens explored the causal relationship starting with the extent to which situational determinants influence the transfer pricing objectives which influence transfer pricing policy which influence the financial statements.

Cravens received 82 questionnaire responses out of a sample of 542 US-based MNEs[126] to determine the objectives of their transfer pricing policies, the

[122]Size of transfers; industry; transfer pricing requirements; economic stability; economic favourableness; MNE practices; IRS s482 regulations.

[123] Disaggregated in three different ways - market/negotiated/cost ; cost/other and market/other.

[124]These variables were constructed in a number of different ways. For instance, MNE size was represented by net sales dollars; degree of conflict was measured on a five-point scale; transfer pricing requirements were four factors from a factor analysis of 28 initial variables.

[125]Understood as for internal and external purposes.

[126] Addressed to the named vice-president of international operations, controller, or chief financial officer; or to the title treasurer or senior vice-president.

characteristics of these firms and assess how well these firms achieved their stated objectives.

Cravens tested 5 main hypotheses - two on tax management, two on competitive position and one on internal dimensions (performance evaluation, motivation and goal congruence). All these hypotheses were tested on the basis of objectives rather than pricing method (which distinguishes Cravens from previous surveys) on the grounds that firms following different objectives might still use similar pricing (as there are only a limited number of TPMs to choose from). Hypotheses 1 and 3 were tested using t-tests (and a chi-square goodness of fit test); hypotheses 2,4 and 5 were tested using regression analysis. Table 3-14 illustrates the hypotheses and findings.

No.	Hypothesis	Findings
1	Effective tax rates will not differ for MNEs which use/don't use transfer pricing for tax minimisation.	Not rejected
2	Situational variables[127] cannot be used to explain the tax burden of MNEs using TPMs to minimise taxes.	Level of internal transfer explained a significant proportion of total tax burden
3	Performance measures will be the same for MNEs which use/don't use transfer pricing to improve competitive advantage[128].	Not rejected
4	Situational variables cannot be used to explain the financial performance of MNEs using TPMs to improve competitive advantage[129].	Volume of transfers and foreign sales percentage are significant variables.
5	Situational variables cannot be used to differentiate MNEs which use/ don't use TPMs to achieve internal objectives.	No significant variables

Table 3-14 Cravens (1992) : Hypotheses and findings

Cravens and Shearon (1996) published research focusing on two regression models : the Tax Management Model (broadly hypothesis 2 above) and the Competitive Position Model (broadly hypothesis 4 above). Acknowledged limitations of these models include the lack of available data, the use of proxies, and omitted variables. For instance, internal effects such as motivation, equitable performance evaluation, and goal congruence are mentioned in terms of "it would be interesting to investigate..." (p440).

[127]The situational variables used in this regression analysis were dollar volume of internal transfers; dollar value of foreign sales divided by total world sales; TPM employed; number of countries where the MNE operates; number of subsidiaries; same TPM for domestic and international transfers (1,0); net worldwide income.

[128] The performance measure "Return on Assets" was standardised by dividing by an industry average.

[129] The performance measure "Return on Assets" was standardised by dividing by an industry average.

Cravens (1997) published findings for this study of 82 MNEs stressing that "transfer pricing is also viewed as an effective tool rather than merely a necessity. The conclusion is that transfer pricing should play an active role in business strategy" (p144). In particular, transfer pricing can be used to achieve a variety of objectives, which are well documented by various authors (e.g. Abdallah, 1989; Leitch and Barrett, 1992, to name but two). The three most important objectives are to manage the tax burden, maintain competitive position and promote equitable performance evaluation. In addition, like nearly all studies before it, the study quantifies the number of companies using different methods. However, unlike many previous studies, it recognises that MNEs choose different methods for different reasons and there is "no one correct method" (p138).

3.5.18 Tang (1992)

Tang updated an earlier 1977 study, receiving 143 replies from the largest 500 US industrial companies listed in the 1990 directory of Fortune 500. 80% of these respondents had at least one foreign subsidiary. Since the 1977 study, the respondents stated that market-priced methods are now used more than cost-based methods. In a direct comparison of the 1977 and 1990 rankings of 20 environmental factors considered in formulating transfer pricing policies, "overall profit to the company" remains as the most important environmental variable but "differentiation in income tax rate and income tax legislation among countries" rose from number four to number two.

3.5.19 Borkowski (1996)

Borkowski attempted to consolidate the findings of 21 transfer pricing studies of US MNEs using meta-analysis. The main aim was to analyse whether there were any significant factors across the studies which affected the choice of TPM. According to Borkowski, "the attempt at meta-analysis was marginally successful, at best" (p39)[130]. One of the overriding findings (making it difficult to use meta-analysis) was that there was very limited consistency between these studies in terms of sample size, response rates, variables studied and level of statistical analysis. Once again, these findings suggest that many of the empirical studies over the last 40 years have either been ad-hoc in nature (not attempting to ensure any consistency with previous research) or designed specifically to address shortcomings of previous research.

3.5.20 Borkowski (1997a)

The study investigates whether organisational, environmental and financial factors influence the transfer pricing choices made by Japanese and US MNEs. Survey responses were received from 39 out of 241 Japanese MNEs, and 28 out of 126 US MNEs. The survey data was mainly categorical (5 point Likert scale) and they were

[130] It is arguable whether meta-analysis is appropriate for aggregating a selection of surveys which are already highly aggregated representations of a MNEs' transactions. Also, meta-analysis (in general) does not conduct a critical review of the statistical methods used in the underlying studies.

analysed using nonparametric statistics. Table 3-15 shows 7 hypotheses (stated in null form) and their findings.

She tested 7 hypotheses (stated in the null form)

No.	Hypothesis	Findings
1	There are no differences in TPMs used by Japanese and US MNEs.	Rejected The Japanese MNEs preferred market and negotiated to cost.
2a	There are no differences in organisational variables between Japanese and US MNEs.	Not rejected Significant exceptions : segment profit is a more important performance evaluation tool for Japanese MNEs .
2b	Organisational variables and transfer pricing choice are not related for Japanese and US MNEs.	Not rejected Exceptions : segment profit is a more important performance evaluation tool for non-cost MNEs ; non-cost MNEs are larger than cost MNEs.
3a	There are no differences in environmental variables between Japanese and US MNEs.	Rejected for many variables Differences include stability of economic position; IRS audit experience; practices used to address affects of transfer pricing on reporting and evaluation.
3b	Environmental variables and transfer pricing choice are not related for Japanese and US MNEs.	Not rejected Exceptions : IRS audit experience.
4a	There are no differences in financial variables between Japanese and US MNEs.	Rejected significantly for return on equity and return on assets : US MNEs have higher returns than Japanese MNEs.
4b	Financial variables and transfer pricing choice are not related for Japanese and US MNEs.	Rejected significantly for return on equity and return on assets : cost MNEs (mainly US) have higher returns than non-cost MNEs.

Table 3-15 Borkowski (1997a) : Hypotheses and findings

3.6 Some General Themes in the ITP Surveys

3.6.1 Influence of Taxation

3.6.1.1 Taxation : Important

Many studies have rated tax minimisation as one of the major objectives of transfer pricing (e.g. Conference Board, 1970; Arpan, 1972; and Tang, 1982). Tang and Chan (1979) found that US firms rated taxation as a primary objective of transfer pricing whilst Japanese firms considered it less important. Wu and Sharp (1979) found that complying with foreign tax and US tax regulations were the first and third most important motivations on the transfer pricing decision respectively (with overall profit maximisation the second most important).

Al-Eryani (1987) found that minimisation of corporate income taxes were important determinants of the transfer pricing decision for US MNEs operating in both MDCs and LDCs. In addition, compliance with US and foreign tax regulations were also perceived as important. Al-Eryani et al (1990) suggested that that MNEs use market-based methods to comply with laws and regulations, and refute any charges of price fixing, tax avoidance or similar actions.

BIC (1991) surveyed 96 of Ernst and Young's (mainly US-based) clients and most firms identified tax regulations and competitive pressures as the most significant objectives in setting up a transfer pricing system. Tang (1992) cited that tax considerations are more important than ever[131]. Cravens (1992) found that 40% of her sample ranked 'management of overall tax burden" as the primary transfer pricing objective (21% selected 'maintain competitive market position') [132].

Borkowski (1996) analysed 15 survey studies which considered the impact of environmental factors on the TPM used. According to Borkowski, "all fifteen studies mentioned differences between the parent and subsidiary countries in their tax rates and regulations as an influence, *but varied in how important an influence it was*" (p46).

3.6.1.2 Taxation : Less Important

Over 25 years ago, Arpan(1972a) concluded that "tax considerations are becoming less important in setting intracompany prices" (p71). Also, Kim and Miller (1979) found that restrictions on outflows of foreign capital, not corporate tax considerations, were the main influences in setting US MNE's transfer pricing policies for subsidiaries in developing countries. Abdallah (1989) suggested that tax minimisation is no longer as critical and achieving the company's overall objective should take precedence. Wilson (1993) carried out a case study and interview investigation of 9 US multinationals[133] to determine the importance of tax and non-tax factors on location and sourcing decisions. One of the conclusions suggested was that penalties and audits imposed by tax authorities have reduced the range of transfer prices available.

[131] Comparing the results of his 1990 study with a 1977 study he found that "overall profit to the company" remained the most important of 20 environmental variables whilst "differentials in income tax rates and income tax legislation among countries" moved from fourth to second most important. In the overview he stated that "Now the focus of transfer pricing has shifted from domestic to international and tax issues" (p22).

[132] Grubert and Mutti (1991), Harris et al (1993) and Klassen et al (1993) all found evidence to support income shifting in response to changes in country tax differentials.

[133] Wilson concentrated on pharmaceuticals and semiconductors because these industries tend to operate more often in low-tax countries and are thought to have "sophisticated tax departments".

3.6.2 Country of ownership

A limited number of early transfer pricing studies attempted to evaluate transfer pricing in terms of nationality[134]. Arpan carried out one of the first cross-country comparisons to compare transfer pricing practices between different countries. Arpan (1972a) found that nationality[135] was a good explanation for differing objectives of transfer pricing but not the only one. In this respect "cultural differences in philosophy and objectives....help explain differences in importance perception when different nationality firms operate in the same environment" (p107). However, the sample of 60 companies is spread thinly across a number of countries.

Arpan (1972b) tested the influence of company size by partitioning the sample and concluded that the very large non-US-based companies generally considered the same external variables when formulating guidelines for transfer prices[136] and no significant differences were attributable to parent nationality. However, among the other companies there were distinguishable national differences in the relative importance attached to each of these external variables[137].

Leitch and Barrett (1992) reviewed multinational transfer pricing and hypothesised that "..it would be a mistake to conclude which factors are more important (on the transfer pricing decision) because the level of importance will depend on the specific countries and industries involved" (p52-53). Al-Eryani et al (1990) asserted that there is a difference in TPM between countries but provided no supporting evidence that this difference exists[138].

There is some anecdotal evidence, but little empirical research, on the practices of Japanese companies. Japanese corporation tax rates are so high that one might expect Japanese MNEs to set transfer prices to maximise foreign profits in host countries with lower profits. In actual fact there appears to be some evidence, much of it anecdotal, that Japanese parent firms adopt the opposite strategy of maximising profits in Japan (Khalaf, 1990[139]; Scholes and Wolfson, 1992, p295).

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[134]Tang (1979) found that there were both similarities and differences between the objectives and orientations of transfer pricing systems, and importance of environmental variables between 145 US MNEs and 102 Japanese MNEs.

[135] It is concluded that "American, French, British and Japanese managements seemed to prefer cost-oriented transfer prices, while Canadians, Italians and Scandinavians preferred market prices. No particular orientation or preference along either line was discernible for German, Belgian, Swiss or Dutch multinationals" (p173).

[136] Yunker (1983) found a positive correlation between market-oriented transfer prices and the level of world sales, suggesting that larger companies prefer market measures. Similarly, Benvignati (1985) found that for US MNEs the size of the firm was significantly related to market measures.

[137]See Arpan (1972a) pages 81-89 for more details on discernible cultural patterns.

[138] They asked "why US-based MNEs tend to use nonmarket-based transfer pricing more frequently than market-based pricing as compared to MNEs based in foreign countries"(p423).

[139]Khalaf (1990) quoted an Ernst & Young tax lawyer who believes that "Japanese culture is such that everything goes to making the head office look more profitable"(p175).

Tang and Chan (1979) proposed an explanation for these anecdotal assertions. Using 1977 comparative data on US and Japanese companies they reported some fundamental differences in the nature of each country's multinational ownership structures. In particular, Japanese parents favoured minority positions in their 'subsidiaries' and US parents preferred majority-owned or wholly-owned subsidiaries[140]. If this holds as generally true, one might hypothesise that MNEs with minority positions might prefer pricing policies which generate most profits at home and minimise the profits available to the foreign 'partners'.

Czechowicz et al (1982) considered TPMs in different countries and found that US MNEs prefer cost-plus whilst non-US prefer market-based policies. Lecraw (1985) tested the TPM by nationality and found that Japanese MNEs used non-market prices for both intra-firm imports and exports to a greater extent than US or European MNEs, but the overall conclusion was that "MNEs in the sample charged nonmarket-based transfer prices for intra-firm imports and exports" (p238).

3.6.3 Parent-Subsidiary Relationship

The majority of studies which identified the locus of transfer pricing decision making agreed that it is the prerogative of the parent company (Arpan, 1972a, p109; Arpan, 1972b, - "the setting of transfer prices remains the absolute prerogative of parent company executives, regardless of firm nationality" (p7); and Cravens, 1992, p84). For thirteen studies on British domestic and multinational practices between 1967 and 1984 Mehafdi (1990) found that "..a common feature of most companies is the central control exercised over key operating decisions such as buying / selling externally and setting and reviewing transfer prices" (p6).

In contrast, Hoshower and Mandel (1986) found that divisional managers were responsible for transfer pricing setting (see also Czechowicz et al, 1982; Eccles, 1983). In addition, Borkowski (1996) combined the results of seven studies and concluded that upper management set transfer prices for 39% of the respondents and that divisional management or divisional and upper management set transfer prices for 61% of the respondents.

Linking the parent nationality with the locus of price setting, Arpan (1972b) stated that "English and German owned subsidiaries are not as independent as the French, Dutch, Canadian, and Belgian, while the Italian and Scandinavian owned subsidiaries are the most independent of all" (p6-7). Czechowicz et al (1982) found that transfer prices are more likely to be negotiated in non-US MNEs (63% versus 38% for US) and set centrally in US MNEs (41% versus 33% for non-US). Lecraw found that if a 'degree of centralisation of control' variable was included in the MDA model, the nationality of the MNE was not a significant factor. Lecraw (1985) found

[140] Similarly they reported that the industries in which US and Japanese subsidiaries operated in were very different with the former concentrating on capital intensive and the latter labour intensive activities.

that US-based MNEs tended to be run on a more decentralised basis, with more control over certain decisions resting with the subsidiary, than Japanese-based MNEs[141]. Consequently, it was suggested that the US MNEs would be more likely to use market prices than the Japanese MNEs.

3.7 Case Study Evidence

In contrast to questionnaire surveys and income shifting studies, case studies offer an opportunity to provide practitioners with a "deeper and richer understanding of the social context in which they work and make them aware of the problems, and the possibilities for solutions" (Scapens, 1990, p.278-279). Spicer (1992) pointed out that case studies allow the researcher to explore unanticipated relationships, and Otley and Berry (1994) have argued that there is a "*prime facie* case for the use of case-based research methods in developing a fuller understanding of the relative role of accounting and other controls in the management of organizational performance" (p46).

It can be asserted with strong justification that the main objectives of current research into ITP in MNEs should be with a view to a "deeper and richer understanding" of the subject, to "explore unanticipated relationships", and to take a more holistic approach which considers the contextual setting of intra-group transactions. Given this assertion, it is surprising how few significant case studies have been conducted to understand transfer pricing policies within MNEs.

3.7.1 Meer-Kooistra (1994)

This study attempted to develop an explanatory model relating to the way in which the transfer pricing and co-ordination systems[142] of decentralised firms interacted. The specific research question was "*Which factors influence the way in which internal transactions of goods and services are coordinated by means of transfer pricing systems* ?" (p124). The analytical model was developed with four dimensions[143] and a series of hypotheses based on relations between different influencing factors were tested in four Dutch MNEs.

Meer-Kooistra collected information through interviews and documentary evidence; visited both the headquarters and subunits; and, "in most cases both the internal supplier and internal buyer were contacted" (p138). It was noted that "in one case it

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[141] During one of this researcher's interviews with a Japanese-owned company in the UK, it was stated that the foreign parent sets a non-negotiable transfer price for transfers from the Japanese parent to the European headquarters company (in the UK) but that the European headquarters company sets all the subsequent transfer prices for internal distribution throughout the European network.

[142] Meer-Kooistra (figure 1, p.126-127) divides internal transactions into three stages - contact; contract; control - and then identifies which elements of the transfer pricing system relate to each stage.

[143] The four dimensions were the characteristics of the organisational context; characteristics of the internal transactions; characteristics of the parties concerned; characteristics of the transfer pricing system.

was decided to hive off certain internal activities and henceforth to buy externally" (p138). One immediate question is what was the underlying reason for outsourcing ?

Hypotheses one to three in table 3-16 concerned the degree of decentralised decision making; hypothesis four concerned asset specificity; hypotheses five to seven concerned the influence of the administrative system; hypotheses eight and nine concerned the differences and changes in the transfer pricing system.

No.	Hypothesis	Findings
1	A high degree of asset specificity will mean mandated internal transactions.	This assertion appears to hold subject to one exception.
2a	If there is a high degree of asset specificity, but hardly any information asymmetry between the central management and the decentralised management, the central management may be expected to determine the contract terms.	This assertion appears to hold subject to some fine details for one of the MNEs.
2b	If there is a high degree of asset specificity and also information asymmetry between the central management and the decentralised management, the decentralised management will determine the contract terms.	Mixed evidence
3	If the asset specificity is low, the decentralised management determines the way in which internal transactions will be coordinated.	This assertion appears to hold.
4	The character of asset specificity influences the relation between the internal parties as well as the relation with the external parties.	This assertion appears to hold in various ways.
5	Selecting the transfer price and the other contract terms will link up as much as possible with the way in which the administrative system performs the regular data processing.	This assertion appears to hold.
6 .	The system for portioning out authority and responsibility, the measurement and performance evaluation system, the reward system and the transfer pricing system will be geared to each other as much as possible.	This assertion appears to hold.
7	With high asset specificity and greater information asymmetry between the central and the decentralised management, it is expected that the selling profit centre as	This assertion appears to hold.

	well as the buying profit centre will be responsible for the risks connected with internal transactions.	
8	If in one and the same firm there are differences in the characteristics of the organisational context and/or in the characteristics of the internal transactions, the internal transactions will be coordinated in different ways.	This assertion appears to hold.
9	Changes in the organisational context and in the characteristics of the internal transactions, will cause changes in the transfer pricing system.	This assertion appears to hold.

Table 3-16 Meer-Kooistra (1994) : Hypotheses and findings

3.7.2 Colbert and Spicer (1995)

The aim of Colbert and Spicer's paper was to improve understanding about "which factors are important in the design and implementation of transfer pricing processes and the setting of transfer prices in specific organizational contexts" (p431). The impetus for this study was that the transfer pricing process remains a puzzle :

"There has been considerable academic research published on these related topics, yet it remains a troublesome area for academics and managers alike.......we do not understand many of the factors that condition the way in which managers actually deal with this process" (p423)[144] .

The study developed a theory (see Spicer, 1988) of the transfer pricing process (in terms of transaction costs) [145] and then tested this theory using a multi-case research design investigating internal transfers in four high technology, electronics firms. The rationale for conducting case study research was the need to investigate internal transactions at the subunit level (from the buyers' and sellers' perspectives) rather than at the firm / parent level. The data that was collected was influenced by the developed theory and the data were then analysed using pattern matching (Yin, 1989).

There were two phases of data collection. First, they carried out initial interviews with corporate and/or group level personnel who were familiar with the transfer pricing process. These interviews provided an understanding of the organisational structure and identified particular transfers of goods. Second, they visited and interviewed the

[144] It is precisely this argument in favour of in-depth exploratory work that questions the basis of and rationale for contingency framework studies of ITP.

[145] The main emphasis of the theory relates to asset specificity, which they assert arises "when durable investments are made in relation to a particular transaction and the value of the investment in its next best use is considerably lower" (p425).

buying and selling divisions at both ends of the identified transfers. The data collected included :

- descriptive data about the subunit;
- dimensions or characteristics of the transfer(s)under investigation;
- the sourcing and transfer pricing process relevant to the selected transfers;
- the performance evaluation systems (pp432-433).

Colbert and Spicer develop and test two main theories relating to asset specificity :

Assertion based on the theory developed	Findings
Firms will put institutional arrangements into place to protect their economic interests in investments specialised to internal transfer activity (i.e. asset specificity) and the value of the firms' competitive strategy (p452)	Findings support the theory Selling and sourcing decisions are more constrained at higher levels of asset specificity
The sellers' transfer pricing policy will be related to the extent of asset specificity involved in the transfers. As the sellers' asset specificity increases, market prices will become increasingly less useful and relevant for informing the transfer pricing process and greater weight will be given to manufacturing costs in setting prices	Findings generally support the theory Market prices are more influential for lower levels of asset specificity; manufacturing costs are more influential for higher levels of asset specificity

Table 3-17 Colbert and Spicer (1995) : Hypotheses and findings

Although this research is very influential, Colbert and Spicer do not consider the international dimension of transfer pricing policies. In addition, related to the domestic focus of their study, the subunits investigated comprise divisions. It is possible that the transfer process and transfer pricing might be treated in different ways for divisions as opposed to subsidiaries.

3.8 Concluding Comments

This chapter introduced some of the theoretical foundations used to explain transfer pricing. This was followed by a literature review of income shifting studies, surveys and case studies. Although there is an established transfer pricing literature based on laboratory experiments (e.g. Ackelsberg and Yukl, 1979; De Jong et al, 1989; Chalos and Haka, 1990), they are not reviewed in this study. As outlined by Mehafdi (1990) , "hypothetical and simulated cases, and inductive reasoning can all be beneficial but cannot give a true and fair picture of the realities of the modern corporation" (p71). In fact, when the experiment is based on the performance of undergraduate students "it is hard to generalise the findings to the complexities of the real world" (p80)[146]. Therefore, it can be argued that these studies are not appropriate for understanding ITP in the real world.

The chapter concludes with a summary of the limitations of the various aspects of the literature and lessons for future research

3.8.1 Limitations of Theoretical Studies

The theoretical foundations underlying transfer pricing are subject to numerous limitations :

3.8.1.1 Number of influences

Eccles' synthesis of theoretical influences on transfer pricing and McAulay and Tomkins' synthesis of the considerations involved in the transfer pricing decision give a very good indication of the problem which researchers face. There are so many potential influences on the transfer pricing policy that it is almost impossible to control for and include all these influences when studying ITP.

3.8.1.2 Restrictive assumptions

Typically, theoretical models search for a cure-all universal formula based on neo-classical assumptions (Emmanuel and Mehafdi, 1994). These assumptions underlying economic theories mean that a gap between theory and practice is inevitable. An agency theory of the firm is also unsuitable for improving our understanding of ITP because its "unidimensional explanations of behaviour are, in general, not rich enough to capture the variety of human experience" (Hayes, 1983, p241) and it assumes "resourceful, evaluative, maximising men" (Hayes, 1983, p241). Theories incorporating transaction cost economics ignore the behaviour of the internal customers. Subsequently, "an opportunity for research with practical usefulness has so far been overlooked" (Mehafdi and Emmanuel, 1997, p7).

3.8.1.3 Confounding evidence

Transfer pricing has been tackled using theories relating to market imperfections, FDI, theories of the firm, competitive advantage, contingency theory, and a variety of organisational theories. The main problem is that these studies (together with the survey evidence) often produce confounding evidence which does not further our real understanding of ITP.

[146] Similarly, Luft and Libby (1997) identified a number of weaknesses of traditional laboratory experiments : "subjects may have regarded the situation as a game in which 'it's my turn to make profits this time, but it's your turn to make profits next time';...only outcomes were observed, not process, so no inferences can be drawn about the relative difficulty of arriving at a negotiated price in different conditions; ...there is some reason to question the generalizability of student subject' limited use of market prices in negotiating transfer prices" (pp219-220). They argued that these limitations had been addressed by using experienced managers rather than undergraduate students in the experiment.

3.8.2 Limitations of Income Shifting Evidence

One of the limitations of the findings of these studies is that the explanation for the results is limited (ex-ante) to the influences of tax (i.e. income shifting ; transfer pricing). The studies tend not to consider alternative explanations for observed affects (e.g. corporate strategy; regulatory requirements)[147]. For instance, Jacob (1996) states that "Overall the results suggest that while location decisions may be partially responsible for the earlier findings, there appears to be another effect which is independent of location decisions. This effect is most likely due to the manipulation of transfer prices for tax reasons" (p311). These claims are repeated often : "this result is consistent with global tax minimisation through transfer prices" (p312). Whilst Collins and Shackelford (1998) recognise that there are a large number of non-tax factors affecting intra-group transactions and the existence of a "likely measurement error in our tests" (p172), they still claim that their findings are consistent both with "tax planning permeating the US multinational organisation" (p155) and "treaty shopping" (p172).

A second limitation is the underlying data used as the basis for the empirical studies. The majority of the "income shifting" studies analyse US MNEs. This predominance of US studies demonstrates that there is access to more informative data (both accounting and tax data) in the US compared to many other countries[148]. Unfortunately, although there is access to, and disclosure of, more data this does not mean that the data is suitable for investigating intra-group transactions. For instance, Klassen et al (1993), Harris (1993), Harris et al (1993) use segmental information in the financial statements to try to identify evidence of income shifting[149]. These approaches are all subject to the limitations of accounting data in general and segmental accounting data in particular. Lack of appropriate publicly available data means that accounting data based primarily on unrelated party transactions is used to explain related party transactions. Jacob (1996) does not address the fundamental problem but at least includes a measure of the volume of related party dealings (as shown in the financial accounts).

In the UK, SSAP 25[150] requires companies to disclose geographical information in terms of sales, operating profit and net assets[151]. One of the issues of concern with segmental information is how to ensure comparability and consistency. The guidelines

[147] According to Collins and Shackelford (1998), "Harris is unable to reject that these difference reflect the fact that US multinationals outperformed US domestic-only companies during this period" (p153-154). In other words, income shifting might be one possible (convenient) way to explain observed differences which might be due to a different phenomenon.

[148] "For all countries, however, until full disclosure is made by MNEs regarding cross-border transactions and the subsequent shifting of income and tax liabilities, the extent of profit shifting is difficult to prove" (Borkowski, 1997a, p43).

[149] Collins and Shackelford (1998) refers to these as "somewhat indirect and broad-sweeping approaches" (p153).

[150] For a review of SSAP25 see Emmanuel and Garrod (1994).

[151] The definition of 'net assets' will not necessarily be the same as 'identifiable assets' as required in the US (SFAS 14) or 'assets employed' as required by International standards (IAS 14, Reporting Financial Information by Segment, IASC, August 1981).

on how to aggregate foreign operations into geographic segments are not always very prescriptive. For instance, SSAP 25 gives some subjective guidance on the sort of factors which directors should take into account when defining segments (e.g. nature of the products or services; how the group's activities are organised; etc). These factors help to determine whether a segment is distinguishable, but it must also be a significant segment to require disclosure. Despite the existence of SSAP 25 there are many concerns about the extent of segmental disclosure and its limitations must be recognised. There is a great deal of discretion imparted with the directors concerning the definition of each segment[152]. There is discretion concerning the allocation of common costs to segments on a reasonable basis. There is flexibility in the definition of some of the items to be disclosed (particularly net assets). Garrod (1993) identifies the "three main areas which cause difficulties in the field of segmental reporting (as) ..(i) the identification of reportable segments; (ii) the presentation of segment information; (iii) the method of reporting intra-group transactions" (p110).

Boatsman, Behn and Patz (1993) investigated geographical segment disclosure to test whether they have any impact on equity valuations of US multinationals. The study provides a good critique on the reliability of segmental information and their results suggest that geographic segment disclosures are used to value common stocks, but the information is highly contextual and depends on factors such as the time periods and regions analysed. In contrast, Rennie and Emmanuel (1992) compared the segmental disclosures of seventy UK listed companies for the two periods 1975-76 and 1988-89. For geographical segment disclosure they found "a diverging trend in that the extent of the disclosure of geographic profit has declined and quality as measured by consistency has either improved (comparison with listing of subsidiaries) or remained the same (comparison with Chairman's Review/ Directors' Report)" (p158). In conclusion, Rennie and Emmanuel (1992) argued that "there is some evidence to uphold the introduction of further regulation because voluntary practice in terms of geographic disclosure has not improved" (p159).

Collins et al (1998) use foreign subsidiary tax returns (Form 5471) to collect specific data on dividends, interest, royalties and management fee payments. Whilst this data source overcomes some of the limitations of accounting data, the Form 5471 data is subject to a different set of limitations :

- The information "could be poor because these disclosures do not directly affect the corporate tax liability or because tax payers strategically use the disclosures to minimise the probability of an audit" (p154). This raises many questions. For instance, what is the status of this information if it does not affect tax liability ? How carefully is this data checked by the tax authorities? Do the authors expect this data to be manipulated?
- The Form 5471 does not disaggregate all the flows between different subsidiaries, therefore this (potentially crucial) information is estimated. This broad-brush approach might omit some of the more intricate and important flows between different subsidiaries in the corporate structure. In fact, an individual country's

[152] Davies et al (1994) suggest that at its extreme this level of discretion allows for deviousness in disclosing segmental information.

treaty network might impose the specific routing of flows in an organisation. This complexity is ignored by the model.

- Payments and flows are aggregated at the country level. One of the justifications for this is statistical - "to reduce omitted correlated variables, and thus possibly eliminate some relevant company-level heterogeneity" (p154) This approach (used in other studies) reduces the richness of the data.

3.8.3 Limitations of Survey Research

3.8.3.1 Theory and Practice

The main problem with surveys can be summarised by the fact that over 40 years of intensive research has not improved our understanding of transfer pricing sufficiently - it has merely highlighted the gap between theory and practice (Mehafdi and Emmanuel, 1997). Leitch and Barrett (1992) question the usefulness of the obligatory ranking of transfer pricing objectives (in surveys) because the uniqueness of each MNEs' environment means that any findings are not likely to be more widely applicable.

Cravens and Shearon (1996) question another standard approach of transfer pricing surveys - attempting to identify the reasons for selecting a particular TPM. "Examining various environmental, international and organisational characteristics with the goal of predicting a particular choice of method is of questionable value" (p420). Perhaps the main limitation of this approach is that there are too many potential objectives / variables which are used (often they are aggregated for manageability; often key variables might be misspecified or ignored) to explain why MNEs use one (or more[153] [154]) of a limited selection of TPMs (e.g. acceptable to the OECD). One problem is evident in Al-Eryani's classification into market-based or nonmarket-based pricing. Many MNEs use both methods, or different methods for different types of transaction. Al-Eryani classified according to "frequency of use", therefore the determination of "frequency of use" might be crucial.

The preoccupation with whether firms use cost or market-based TPMs, and whether there is a relationship between a range of variable and these methods (Borkowski, 1992a and 1997a), is not very informative. For instance, what does it mean if the survey findings include two MNEs which both use a cost plus method ?

- Is that full cost or variable cost? Are the cost bases the same?
- Do the MNEs use traditional overhead absorption or activity based costing ?
- What is the 'plus' element (mark-up)? 5%? 10%? 15%?
- Are there different mark-ups for different products / lines of business / countries ?
- How/why are these different mark-ups determined ?
- Can the transfer price ever be negotiated ?

[153] Although the vast majority of the literature does not try to accommodate the (very real) possibility that MNEs operating in a global environment might use more than one TPM and they might change/ modify this method periodically.

[154] In one MNE, Meer-Kooistra (1994) reported that "the three DSM corporate units (in one MNE) in which I did my case research use different transfer pricing systems" (p148).

- Are there any exceptions ? Why are there exceptions? Are these unusual or recurring ?

The usefulness of the main findings of Borkowski's (1997a) study, for instance, are questionable : "contrary to prior findings, Japanese transnational corporations (TNCs) seem to have changed their preferences for ITP methods from cost-based to market-based and negotiated methods" (p25) and "...US MNEs continue to show a slight preference for cost-based over market and negotiated methods" (p42). Is this information useful? Although she provides some very general and tentative explanations, this information does not improve our understanding of ITP, because concentrating on the TPM alone is too crude a measure[155] (see Cravens, 1997, for a further critique on studies which focus on the TPM as the prime determinant).

Borkowski has conducted this particular exercise with enough different countries to allow us to conclude that it does not push forward the frontiers of knowledge[156]. Therefore one can only question the value added of her suggestion that "some extensions of this research include comparisons of additional major trading countries (Canada, Germany and the UK) with Japan and the US to detect any European/ North American/ Asian trends in transfer pricing legislation and MNE behaviour" (Borkowski, 1997a, p43).

3.8.3.2 Negotiated TPM

Another problem relates to the classification of "negotiated" prices as a TPM. A negotiated transfer price could be based equally on cost-based, market-based or a mixture of these methods. Although some previous studies have included negotiation as a method, Eccles (1985) has argued that negotiation is a process not a method[157]. The inclusion of negotiation as a TPM is a weakness that pervades previous studies (Al-Eryani, 1987; Borkowski, 1992; Tang, 1992; Cravens, 1992). Cravens' classification scheme contains a further design problem. The respondents are offered a choice of three methods - cost, market or negotiated - and it is assumed that dual pricing exists when two or more methods are selected. This is problematic on two counts. First, a respondent might tick both cost and negotiated but these could refer to the same transaction. Second, different goods might be transferred using different transfer pricing methods to the same department rather than simply different divisions charging different prices.

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[155] Cravens and Shearon (1996) state that "the lack of significance and consistency in prior studies may be due to the focus on the TPM, rather than considering the outcome of the transfer pricing policy....the objective of transfer pricing relates to an outcome rather than the means by which the objective is achieved, the TPM" (p427).

[156] See also Borkowski (1997b).

[157] A negotiated transfer price is not recognised as an acceptable transfer pricing methodology by either the OECD or the Inland Revenue (as disclosed in informal discussions between this researcher and International Division of the Inland Revenue).

3.8.3.3 Sample Size & Analysis

One of the main limitations of earlier studies is small sample sizes (Kim and Miller, 1979; Burns, 1980; Yunker, 1983; Mostafa, Sharp and Howard, 1984; Hoshower and Mandel, 1986; and Mehafdi, 1990). Many of the earlier studies presented descriptive results which are supported by limited or no statistical analysis[158] (Bursk et al, 1971; Arpan, 1972a and 1972b[159] ; Kim and Miller, 1979; Czechowicz et al, 1982; Hoshower and Mandel, 1986[160]; Mehafdi, 1990[161]; Johnson and Kirsch, 1991). Some of the questionnaire surveys are either too superficial (Hoshower and Mandel, 1986, limited their survey to five questions alone) or too onerous (Bursk et al, 1971, sent out a survey running to 37 pages for company headquarters and 21 pages for foreign operations).

3.8.3.4 Statistical Considerations

Rushinek and Rushinek (1988) observed that "one of the major sources of frustration in studying environmental variables of multinational transfer pricing is the multiplicity of associated variables and the inherent data redundancies"(p95)[162]. Often there is multicollinearity between variables (violating any assumptions of independence)[163] which might bias regressions or multiple discriminant analysis as used in traditional statistical analyses[164]. Cravens (1992) cited intercorrelation as a problem to explain why some expected significant variables were not significant. Similarly, Lecraw (1985) found that multicollinearity could change the interpretation of his results. For instance, when using MDA[165] to identify the factors which influence the transfer pricing policy, Japanese ownership was found to be significant only when a degree of centralisation of control variable was not included. Previous empirical studies of transfer pricing practices in MNEs have struggled to cope with the richness of the data collected and have had to restrict the information content[166].

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[158] Wu and Sharp (1979) claimed that at the time of their study "no prior research which investigated transfer pricing practices based on statistical tests could be found" (p72).

[159] Arpan (1972a) recognised this limitation and explained that "hypotheses formulated for this study were designed to narrow the scope of the research and serve as a basis for drawing conclusions. It was not anticipated that they would be statistically valid in all cases or in all respects" (p106).

[160] Hoshower and Mandel used the binomial distribution to evaluate the responses of 25 MNEs to five question.

[161] Mehafdi stated in the assumptions that "statistical analysis is adequate for testing the hypotheses and inferring conclusions" (p16) but the sample size of 33 is too small to allow rigorous empirical tests and Mehafdi used only correlations and chi-square contingency tables.

[162] Rushinek and Rushinek also cited the problems of skewed variables leading to less effective OLS regression or MDA analysis.

[163] In the explanation of the regression models, Benvignati made numerous references to the existence of multicollinearity (notes 21 and 23).

[164] Al-Eryani et al (1990) used probit analysis and argued that multicollinearity can affect the signs but not the significance testing of individual variables within the probit model (p423).

[165] The choice of MDA has weaknesses. MDA assumes the data are normal; the coefficients are difficult to interpret; and the technique is sensitive to any breakdowns in underlying assumptions.

[166] Howard, Sharp and Mostafa (1982) identified the problem of data overload with many early empirical studies. "A multiplicity of transfer pricing determinants were identified...no attempt had been made in the surveys to study the correlation between these determinants in order to disclose fundamental factors which underlie transfer pricing in practice" (p13).

One approach is the use of factor analysis (Al-Eryani et al, 1990), and another approach is to reduce the number of variables by careful selection[167].

3.8.4 Limitations of Case Study Research

One of the limitations of previous case study research into transfer pricing (Meer-Kooistra, 1994; Colbert and Spicer, 1995) is that they have tested specific hypotheses identified at the outset (as suggested by Yin, 1994). The same limitations apply to both survey and case study hypothesis testing - transfer pricing is a multidisciplinary topic and there are no clear theories which sit easily with all alternative theories.

It might be argued that in-depth *exploratory* case studies are a more appropriate method for understanding transfer pricing. Such an approach recognises that the theoretical and empirical literature is either lacking or too complex and contradictory, requiring a fresh approach to understand the problem domain. Indeed, Colbert and Spicer (1995) recognised that whilst their main focus of investigation was asset specificity, other factors might also influence the transfer pricing policy :

> "Although the relationship between asset specificity reported by component (selling) divisions was an important determinant of resulting transfer prices, in some instances other firm-specific factors appear to account for exceptions to policies based on asset specificity alone. For example, we noted that transfer pricing policies were influenced, in some cases, by market conditions for the transferred component and competitive pressures in end product markets....In addition, organisational history, management style and organisational culture appear to play a moderating role" (p454).

3.8.5 Lessons for Future Research

The focus of study needs to change. Researchers must gain access to companies to understand the ITP process within its context.

3.8.5.1 A different emphasis for ITP research

Emmanuel and Mehafdi (1998) use three criteria to evaluate previous research (focus, organisational context and reliability). These three criteria might also be used in future reşearch to gain a better understanding into ITP :

- **Focus** : Transfer pricing research needs to focus on individual transactions at the sub-unit level. This means that the researcher is able to identify all relevant characteristics of a particular cross-border intra-group transaction and refer to the appropriate buying and selling sub-units.

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[167] Yunker (1983) collected data on 102 items for 52 MNEs , but was unable to evaluate this information in totality. To enable variable reduction she defined a small number of summary policy variables.

- **Organisational context** : It is important to place an intra-group transaction into its context within the MNE. This requires some consideration of the strategic, organisational and behavioural dimensions of the MNE.

- **Reliability** : It is essential to ensure that all aspects of the research are rigorous. Depending on the precise methodology different evaluation criteria might be applicable, but the evidence needs to be reliable.

Meer-Kooistra (1994) carried out case study research in four Dutch MNEs leading to a greater in-depth knowledge about how transfer pricing systems function. Two specific recommendations of this research reiterate the need for more attention to context :

> "Insight into how internal transactions are coordinated requires further research into the entire relation between the parties concerned. Therefore, it is necessary to look at all stages of a transaction and at all elements of a transfer pricing system. Also, it is necessary to look at the context in which transfer pricing systems function, and to take into account the interaction with other coordination rules" (p148-149).

> "Research into the functioning of transfer pricing systems has to take full account of the processes of change and adaptation, or the dynamics of the phenomenon. We need to remember that we are researching a real situation that has developed over the years due to decisions with long-term influence on the activities. Moreover, researching the formal regulations will not suffice. In addition, research into the real procedures is necessary" (p150).

3.8.5.2 A suggested way forward for ITP research

This chapter confirms that ITP is complex, multi-disciplinary and remains a puzzle. The underlying theme has been the recognition that over forty years of theoretical and empirical research has provided us with a limited understanding ITP within MNEs.

Mehafdi and Emmanuel (1997) suggest a possible way forward that is consistent with the evolution of the current research study :

> "To redress the balance in transfer pricing research, we believe that a grounded theory approach using in-depth exploratory and explanatory case studies with pluralistic data collection methods is the way forward. To give an encompassing account of transfer pricing change within single case companies, the case studies will need to be longitudinal. While internal validity seems to override external validity in this approach, we believe that sufficient individual case studies of this kind may in time overcome representativeness and external validity problems" (p31).

Following the literature review, the main research question to be investigated is "How do MNEs formulate their ITP policy?". Chapter 4 evaluates the potential of using an inductive technique to analyse survey responses. Following this, chapter 5 supports Mehafdi and Emmanuel's calls for a grounded theory approach using in-depth (longitudinal) case studies. The subsequent chapters use a grounded theory approach to answer the research question by understanding the ITP process within its organisational context at Trifast plc.

4. RESEARCH METHODS (1) : AN INDUCTIVE APPROACH USING CASE-BASED REASONING (CBR)

4.1 Introduction

This chapter is divided into two main parts. First, the chapter identifies this researcher's assumptions and beliefs about the world which are consistent with the phenomenological paradigm. This paradigm guides the researcher's choice of research methods which are appropriate to the study and analysis of ITP. Second, a (pre-pilot) survey instrument is analysed using case-based reasoning (CBR[168]). CBR is an inductive approach to reasoning and understanding which uses previous experiences (cases) to discover solution strategies. CBR is an inductive artificial intelligence approach which is sometimes categorised as a subset of Machine Learning.

Over the past 15 years, CBR (or classification trees) have been used to explore a variety of financial domains, but this is the first study to use CBR to explore the domain of ITP[169]. Data on transfer pricing were collected from a sample of UK multinational enterprises (MNEs). This chapter illustrates the potential applicability of CBR to explain the relationship between a range of variables and whether or not the company has had a transfer pricing audit.

Initial findings from the study which was carried out over the period 1994 to 1996 suggest that CBR might be as suitable as (or more suitable than) traditional statistical analyses for *understanding and learning* about this problem domain. However, the approach is still subject to the limitations of the underlying survey data. Therefore, despite some interesting insights provided by CBR, chapter 5 argues in favour of adopting a research method (grounded theory) which allows both a richer examination of the context of ITP within a MNE and a more specific focus of enquiry (i.e. analysis of specific cross-border intra-group transactions at the sub-unit level). Chapters 6, 7 and 8 describe the specific grounded theory case study which was conducted from 1996 to 1998.

4.2 Views of the World : Different research paradigms

4.2.1 Introduction to Research Paradigms

Research paradigms represent researchers' philosophies and assumptions about the world and knowledge. Once a researcher has identified these beliefs, it is possible to identify the appropriate research methodologies applicable to that paradigm which determine how the research can be conducted. Although the following sections refer to a number of frameworks (Burrell and Morgan, 1979; Morgan and Smircich, 1980;

[168] Some studies refer to the inductive trees produced by CBR as classification trees (CT).

[169] Kolodner (1993), Marir and Watson (1994) and Watson and Marir (1994) review a range of CBR systems across all disciplines.

Hopper and Powell, 1985; Chua, 1986), much of the literature on research paradigms (including research methodology books and articles) concentrates on distinguishing between two main paradigms : interpretive and functionalist. These two paradigms are referred to by many different (almost interchangeable) names as illustrated in table 4-1 (Leedy, 1997; Hussey and Hussey, 1997).

Interpretive	Functionalist
Qualitative	Quantitative
Subjectivist	Objectivist
Humanistic	Scientific
Phenomenological	Experimentalist
Naturalistic	Traditionalist
Constructivist	Positivist
Postpositivist	Empiricist

Table 4-1 Terminology: Interpretive versus Functionalist

Leedy (1997) provides a general overview of the differences between interpretive and functionalist research[170] in very general terms - purpose, nature of research process, data collection methods, reasoning process and communication of the findings (see table 4-2).

Question	Interpretive	Functionalist
What is the purpose of the research?	To describe and explain To explore and interpret To build theory Process-oriented	To explain and predict To confirm and validate To test theory Outcome-oriented
What is the nature of the research process ?	Holistic Unknown variables Flexible guidelines Emergent design Context-bound Personal view	Focused Known variables Established guidelines Static design Context-free Detached view
What are the methods of data collection?	Informative, small sample Observations, interviews	Representative, large sample Standardised instruments
What is the form of reasoning used in analysis ?	Inductive analysis	Deductive analysis
How are the findings communicated?	Words Narratives, individual quotes Personal voice, literary style	Numbers Statistics, aggregated data Formal voice, scientific voice

Table 4-2 Characteristics of Quantitative and Qualitative Approaches (adapted from Leedy, 1997, Table 5.1)

170 See also Easterby-Smith et al (1991) (their figure 3.2 Key features of positivist and phenomenological paradigms (p27)) and Putnam (1983) (pages 40-46) for a distinction between these two paradigms.

Leedy (1997) also gives some general indications about which approach a researcher should consider using :

Use this approach if :	Interpretive	Functionalist
1. You believe that:	There are multiple constructed realities	There is an objective reality that can be measured
2. Your audience is:	Familiar with/supportive of qualitative studies	Familiar with/supportive of quantitative studies
3. Your research question is:	Exploratory, interpretive	Confirmatory, predictive
4. The available literature is:	Limited or missing	Relatively large
5. Your research focus:	Involves in-depth study	Covers a lot of breadth
6. Your time available is:	Relatively long	Relatively short
7. Your ability /desire to work with people is:	High	Medium to low
8. Your desire for structure is:	Low	High
9. You have skills in the area(s) of:	Attention to detail and inductive reasoning	Statistics and deductive reasoning
10. Your writing skills are strong in the area of:	Literary, narrative writing	Technical, scientific writing

Table 4-3 Appropriate Approach (Leedy Table 5.2)

From this section it is apparent that different approaches are appropriate to different circumstances. Blumer (1978) expresses why the functionalist approach is not always the most appropriate approach to adopt: "In this respect it differs from the somewhat pretentious posture of the research scholar who under established scientific protocol is required, in advance of his study, to present a fixed and clearly structured problem, to know what kinds of data he is to collect, to have and hold to a pre-arranged set of techniques and to shape his findings by previously established categories" (p39) [in Tomkins and Groves, 1983, p363].

4.2.2 Seminal work on Research Paradigms in the Social Sciences

This section considers the initial work by Burrell and Morgan (1979) and subsequent refinements to their framework by Morgan and Smircich (1980), Hopper and Powell (1985) and Chua (1986). Since these initial papers on research paradigms, several authors have considered the specific application of research methods and methodologies to management research (Easterby-Smith et al, 1991) and accounting and finance research (Ryan et al, 1992).

4.2.2.1 Burrell and Morgan's (1979) four paradigms

Burrell and Morgan (1979) characterise four paradigms for the analysis of social theory - radical humanist, radical structuralist, interpretive, functionalist. These paradigms are analysed in terms of two key dimensions : the subjective-objective dimension and the regulation-radical change dimension (with regard to the nature of society). Burrell and Morgan's four paradigms are illustrated in Figure 4-1:

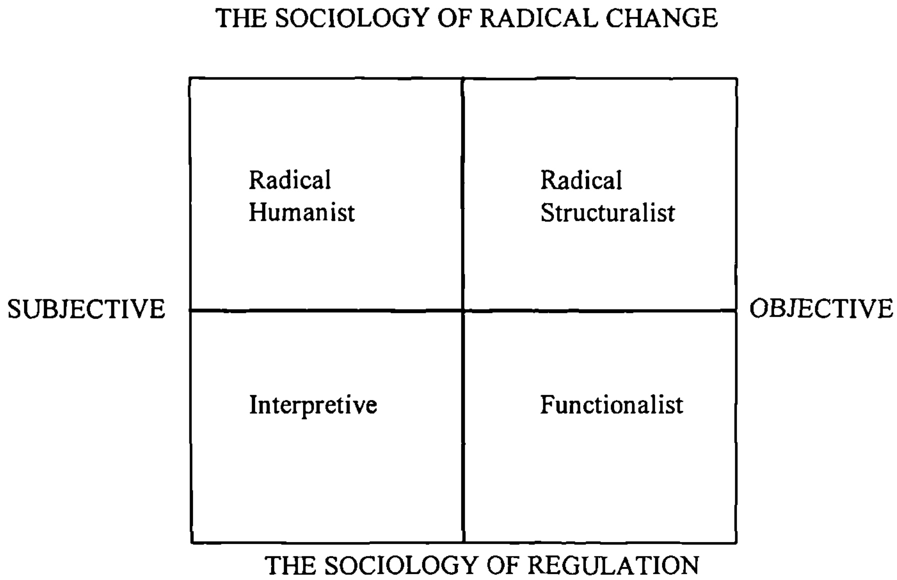

Figure 4-1 Burrell and Morgan's Four Paradigms

4.2.2.1.1 Subjective-Objective Dimension

The subjective-objective dimension can be conceptualised using four sets of assumptions on ontology, epistemology, human nature and methodology. These assumptions relate to views on the nature of the social world. As a continuum, these assumptions can be described as follows :

The subjectivist approach		The objectivist approach
Nominalism	ONTOLOGY	Realism
Anti-positivism	EPISTEMOLOGY	Positivism
Voluntarism	HUMAN NATURE	Determinism
Ideographic	METHODOLOGY	Nomothetic

Ontology

The ontological debate concerns the view about the external social world and how reality is observed. Reality of an objective nature (realism) assumes that the social world imposes itself on individual consciousness. Reality of a subjective nature (nominalism) assumes that the social world is a product of individual consciousness.

Epistemology
The epistemological debate relates to how the world can be understood and communicated in terms of knowledge. Knowledge of an objective nature can be acquired. Knowledge of a subjective nature must be personally experienced. Furthermore, epistemological assumptions relate to the form knowledge takes and whether or not it is true. Positive epistemologies seek regularities and causal relationships to explain and predict the social world. Anti-positivists (or relativists according to Putnam) argue that the 'observer' is not a valid point of reference for understanding human behaviour. It is only possible to understand the social world from the viewpoint of those directly involved in an activity.

Human Nature
The human nature debate considers the relationship between humans and their environment. Either humans respond to the external world (determinism) or humans act in a free-willed fashion (voluntarism).

Methodology
The methodology will depend on the previous three assumptions, because it relates to the way in which one gathers valid evidence to investigate the social world. The nomothetic approach stresses technique and scientific rigour using quantitative techniques such as surveys and questionnaires. The ideographic approach requires first-hand knowledge of the subject matter and concentrates on getting involved with the everyday tasks. Putnam (1983) distinguished the two methodologies : "Nomothetic analysis focuses on an examination of regularities and relationships that lead to universal laws, while ideographic explanation centers on reasons why individuals create and interpret their world in a particular way" (p41).

4.2.2.1.2 Regulation-Radical Change Dimension
Regulation emphasises the unity and cohesiveness of society, and the need for regulation in human affairs. Radical change views society in terms of conflict, domination and contradiction.

4.2.2.2 Other sociological paradigms
Some commentators have modified Burrell and Morgan's classification. Hopper and Powell (1985) reduced the four paradigms to three by combining the two radical paradigms. Putnam (1983) questioned Burrell and Morgan's two-dimensional framework, but accepted the distinction between interpretive and functionalist. Putnam identified naturalistic interpretivists (accepting organisation reality without question) and critical interpretivists (uncover distortions and seek to rectify them). Also, Putnam distinguished interpretivists and functionalists in terms of unitary or pluralistic views of the organisation - where functionalists adopt a unitary view of the pursuit of common interests and goals, and interpretivists are more likely to adopt a pluralistic view of an organisation consisting of diverse groups and purposes.

Chua (1986) offered a different set of assumptions as an alternative to the Burrell and Morgan framework. Chua cited three main criticisms of the Burrell and Morgan framework. First, their assumptions were presented as strict dichotomies. Second, their framework encourages a relative (to a person's nature and situation) view of truth and reason. Third, the creation of two radical paradigms is questioned. Chua's classification of assumptions is :

A. Beliefs about knowledge
    Epistemological
    Methodological

B. Beliefs about physical and social reality
    Ontological
    Human intention and rationality
    Societal order/ conflict

C. Relationship between theory and practice

Chua contrasts the dominant assumptions of mainstream accounting (functionalists) with interpretive in Figure 4-2 :

MAINSTREAM ACCOUNTING	INTERPRETIVE PERSPECTIVE
A. Beliefs about knowledge	
Theory is separate from observations that may be used to verify or falsify a theory. hypothetico-deductive account of scientific explanation accepted.	Scientific explanations of human intention sought. Their adequacy is assessed via the criteria of logical consistency, subjective interpretation, and agreement with actors' common-sense interpretations.
Quantitative methods of data analysis and collection which allow generalisation favoured.	Ethnographic work, case studies, and participant observation encouraged. Actors studied in their everyday world.
B. Beliefs about physical and social reality	
Empirical reality is objective and external to the subject. Human beings are also characterised as passive objects; not seen as makers of social reality.	Social reality is emergent, subjectively created, and objectified through human interaction.
Single goal of utility-maximisation assumed for individuals and firms. Means-end rationality assumed.	All actions have meaning and intention that are retrospectively endowed and are grounded in social and historical practices.

Societies and organisations are essentially stable; 'dysfunctional' conflict may be managed through the design of appropriate accounting control.	Social order is assumed. Conflict mediated through common schemes of social meetings.
C. Relationship between theory and practice	
Accounting specifies means, not ends. Acceptance of extant institutional structures.	Theory seeks only to explain action and to understand how social order is produced and reproduced.

Figure 4-2 Chua's comparison of the functionalist and interpretive paradigms

Morgan and Smircich (1980) outlined a set of basic assumptions that underlie the subjective-objective dimension to produce six classifications along this axis. Each of these dimensions is described in terms of the core ontological assumptions, assumptions about human nature, basic epistemological stance and research methods. Towards the subjective end of the spectrum, is reality as symbolic discourse. The ontological assumptions are that the social world consists of symbolic relationships and meanings which are sustained through human action and interaction. The epistemology for this dimension "does not hold that the findings thus obtained would be universally generalisable, but it does regard them as providing nonetheless insightful and significant knowledge about the nature of the world. Such knowledge is inevitably seen as being relative and specific to the immediate context and situation from which it is generated, building what Glaser and Strauss call 'substantive theory'"(p497). As the ontological assumptions shift from objective towards subjective, the appropriate research methods shift from traditional scientific methods towards research methods which allow the researcher to investigate from within.

Tomkins and Groves (1983) provided an excellent explanation of the six categories of ontological assumptions and arguments for the need for more interpretive research (see responses by Abdel-khalik and Ajinkya, 1983; Morgan, 1983; and Willmott, 1983). Covaleski and Dirsmith (1990) presented a network of basic assumptions characterising the subjective-objective debate which was a refined version of the six basic ontological assumption sets of Morgan and Smircich (1980).

4.2.3 The assumptions and beliefs relevant to the current research

The majority of previous ITP research is positioned in the functionalist paradigm and this research has used questionnaire survey methodologies to test specific hypotheses. The assumptions and beliefs underlying the current research are more consistent with the interpretive paradigm. The ontological assumption is that reality is subjective and multiple as viewed by participants to the research. The epistemological assumption is that the researcher does interact with the subject of the research (Hussey and Hussey, 1997, p48). The purpose of the current research is to explore, interpret and build theory using inductive analysis (see Leedy, 1997). Dent and Ezzamel (1987) support the need for a rich, contextual analysis of organisations. They argued that there is a "desperate need to improve our understanding of the way in which organisational activities evolve over time and how organisational processes interact to shape these activities. Only such a total approach will explain why and how accounting is intertwined with organisational functioning" (p109).

The assumptions and beliefs of the researcher shifted further towards the interpretive end of the spectrum as the research progressed. This chapter describes how a questionnaire survey (associated with the functionalist paradigm) was analysed using an inductive technique (associated with the interpretive paradigm) not by testing ex-ante hypotheses. The following chapter describes how grounded theory was used to interpret the perceptions of numerous managers working in one MNE to develop a substantive theory based on conceptually rich data. The grounded theory approach is consistent with Tomkins and Groves' (1983) description of Blumer's (1978) call for more naturalistic research based on "exploration" followed by "inspection" (p363). Exploration is a flexible approach to analysis which yields a better understanding of the domain in terms of the research question, relevant data and important relationships. Inspection is a natural progression which requires deeper enquiry (from multiple perspectives) of the issues identified during exploration.

4.3 A New Inductive Approach to Analysing ITP Survey Data

4.3.1 Introduction to Case-Based Reasoning (CBR)

It has been suggested that CBR is one possible technique for analysing experience-rich domains when there is no model. Riesbeck and Schank (1989), generally recognised as the originators of CBR, claim that this concept comes closest to how human learning and reasoning operates. Given that people learn and reason from past cases, CBR allows the storage of cases relating to specific problems which have been solved already so that current problems can be solved based on previous experience . In addition, as more and more solved cases are added to the case library, this provides a fuller understanding of problem solving. CBR facilitates 'knowledge discovery', which involves the extraction of information which was previously unknown and possibly useful (Frawley et al, 1991).

Kolodner (1993) cites a number of advantages of using CBR. Many of these advantages are relevant to the current understanding of ITP :

- "Case-based reasoning allows the reasoner to propose solutions to problems quickly, avoiding the time necessary to derive those answers from scratch;
- Case-based reasoning allows a reasoner to propose solutions in domains that are not completely understood by the reasoner;
- Case-based reasoning gives a reasoner a means of evaluating solutions when no algorithmic method is available for evaluation;
- Cases are useful in interpreting open-ended and ill-defined concepts;
- Cases help a reasoner to focus reasoning on important parts of a problem by pointing out what features of a problem are the important ones" (p25-26).

One also needs to be aware of some of the limitations of CBR[171]. It is important to assess and control the types of information that is contained in the cases. For instance, the data types (numeric versus Boolean versus symbolic versus text) and their definition might influence the way cases are represented and retrieved inductively. It is also important to consider how many cases need to be collected to provide a valid case library. Too few cases might mean that some important domain knowledge is not represented. Too many cases might mean that the information content of the most relevant cases is blurred by information contained in less relevant cases.

CBR has been used to analyse financial data such as top management fraud (Curet and Jackson, 1995) [172], predicting stock market behaviour (Braun and Chandler, 1987)[173] , predicting loan defaults and bankruptcies (Messier and Hansen, 1988)[174], and estimating Standard & Poor's bond ratings (Buta, 1994[175]). In addition, there have been a number of recent comparative studies which compare the classification accuracy of classification trees with several different techniques, (Elliott and Kennedy, 1988; Liang et al, 1992; King et al, 1995)[176]. In addition, some studies have restricted the comparative analysis to a selection of different inductive algorithms alone (McKenzie and Forsyth, 1995) [177].

Elliott and Kennedy (1988) reviewed a number of statistical techniques (including MDA, classification trees (CT), probit and logit) that have been used to classify observations in the accounting literature. Elliott and Kennedy considered two particular studies which used classification trees - one on bank loan classifications (Marais, Patell and Wolfson, 1984) and one on bankruptcy prediction (Frydman, Altman and Kao, 1985). Their review argued that "the studies conclude that the classification accuracy of the CT technique is as good as the accuracy of other techniques" (p218). However, Elliott and Kennedy compared the different methods to a particular problem concerning management's choice of accounting methods and found that the "CT technique was dominated by other techniques" (p234).

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[171] See Marais et al (1984), pages 99-105 , for more details on the limitations of CBR.

[172] This study analysed the data with the Remind software , which uses the CART (Classification and regression trees) induction algorithm.

[173] This study used ACLS (Analog Concept Learning System) software - the program was developed from Quinlan's ID3. The ID3 (Interactive Dichotomiser Mark 3) algorithm was developed by J Ross Quinlan to induce the most efficient set of rules from a set of cases (see Quinlan, 1984 and 1986).

[174] This study used an induction technique attributable to Quinlan.

[175] This study used Remind.

[176] See these comparative studies for more information on each technique including the relative merits/limitations, best types of data, and the precise methodologies underlying them. For instance, the classification tree techniques and neural networks do not make any assumptions about the data distribution (e.g. normality) and they are probably more appropriate when the data includes nominal variables which make a linear model inappropriate. "..previous findings may be interpreted as indicating that probit is better if the data are dominated by non-nominal variables, and ID3 is better if the data are dominated by nominal variables" (Liang et al, 1992, p324).

[177] McKenzie and Forsyth (1995) compare 12 induction algorithms (referred to as 'classification by similarity' (CBS) algorithms).

Liang et al (1992) compared one induction algorithm (ID3[178]) with probit and neural networks for the choice between LIFO and FIFO for accounting for stock. They also suggested that other induction algorithms could be useful for other areas of accounting research.

One influential comparative study was carried out by King et al (1995). The study compared sixteen algorithms (six from symbolic data, eight from statistics and two from neural networks) on twelve large real-world classification problems (including 2 from the finance field). One of the conclusions of this study was that symbolic algorithms (CBR techniques) were more appropriate for domains in which ease of use and human understandability are viewed as the more important attributes.

Balancing the various advantages and disadvantages of CBR / CT, one of the main reasons for using this technique to analyse ITP in the current study is that it is an inductive technique which is suitable for domains that are not fully understood. Elliott and Kennedy (1988) recognise this aspect of CT :

"..the strengths of the CT technique are its ability to identify relationships between categories and explanatory variables and to construct classification models. The CT technique cannot be used for hypothesis tests of the contribution of the explanatory variables" (p218).

4.3.2 Induction Using CBR: An example[179]

To demonstrate how induction works with CBR, ReMind was used to produce a decision tree for the following hypothetical example. The objective was to discover whether there is a relationship between a set of companies' levels of internal transfers (as a proportion of total turnover), their levels of turnover, and whether or not the company had been subject to a transfer pricing audit. The example consists of 25 hypothetical companies, each with a unique combination of proportion of internal sales and level of turnover. The five categories of turnover range from £100m to more than £5bn, and the five categories of internal transfers range from less than 1% to more than 50%. Table 4-4 shows which of these combinations have been investigated by the tax authorities in relation to their transfer pricing policy.

On initial inspection of table 4-4 a number of observations emerge about the characteristics of the companies which have been subject to a transfer pricing audit. The most striking observation is that all those companies with high proportions of internal transfers have been audited. Similarly, there appears to be a relationship between the level of turnover and tax authority interest. However, induction allows these relationships to be formalised and offers a means for handling the relationships between numerous variables and an outcome variable (similar to the dependent variable, and in this example it is whether or not there has been a transfer pricing audit). Furthermore, the inductive approach is similar to the approach adopted by a

[178] See Quinlan (1984, 1986).

[179] In this study, the ReMind CBR shell (using the CART algorithm) is used to carry out induction. See Breiman et al (1984) for more on CART.

human tackling this very simple hypothetical example - trying to formulate a set of rules which will classify correctly each of (or the majority of) the 25 data points in the solution space.

Turnover (£m)						
>£5000	No	Yes	Yes	Yes	Yes	
£1000-5000	No	No	Yes	Yes	Yes	
£500-1000	No	No	Yes	Yes	Yes	
£250-500	No	No	No	Yes	Yes	
>£100	No	No	No	Yes	Yes	
	<1%	1-10%	10-25%	25-50%	>50%	**Internal transfers**

Table 4-4 Incidence of transfer pricing audits

Figure 4-3[180] illustrates the decision tree which is produced using induction. Working across the decision tree, the top node is the key discriminator (based on the way in which it can split the cases into two branches). In this example the cases are divided into those with internal sales greater than 10% and those with internal sales less than 10%. The upper branch of the decision tree consists of 10 cases (with only one instance of an audit) and the lower branch consists of 15 cases (13 of which have been subject to an audit). The analysis is refined by further clustering of the cases. When the upper branch is then classified on the basis of turnover, those 8 cases with turnover below £5bn have not been audited (see the shaded area in table 4-5). When the lower branch is classified according to internal transfers again, all 10 cases with transfers exceeding 25% can be seen to have been audited (see the shaded area in table 4-6).

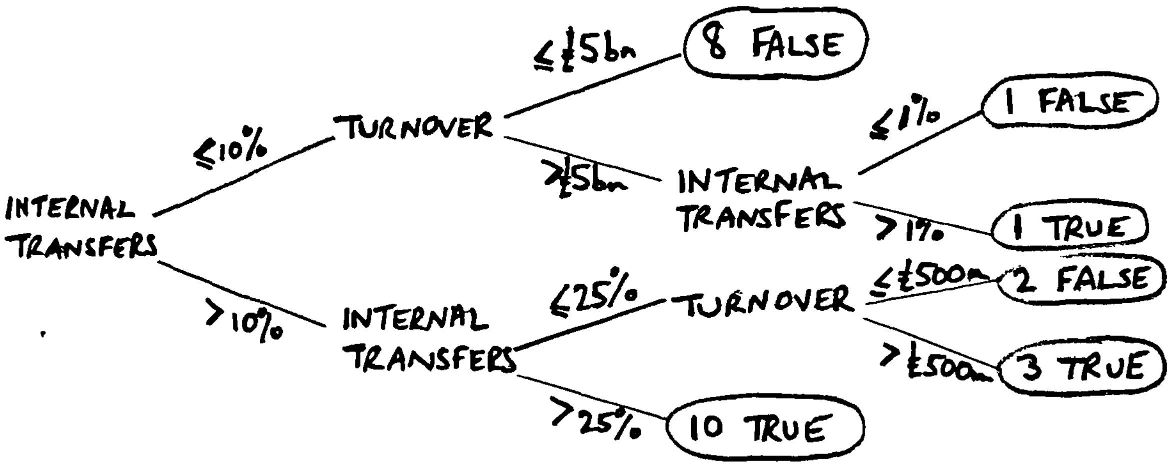

Figure 4-3 Full decision tree

[180] This figure is reproduced from Curet and Elliott (1997).

Turnover (£m)					
>£5000	No	Yes	Yes	Yes	Yes
£1000-5000	**No**	**No**	Yes	Yes	Yes
£500-1000	**No**	**No**	Yes	Yes	Yes
£250-500	**No**	**No**	No	Yes	Yes
>£100	**No**	**No**	No	Yes	Yes
Internal transfers	<1%	1-10%	10-25%	25-50%	>50%

Table 4-5 8 cases not subject to a transfer pricing audit

Turnover (£m)					
>£5000	No	Yes	Yes	**Yes**	**Yes**
£1000-5000	No	No	Yes	**Yes**	**Yes**
£500-1000	No	No	Yes	**Yes**	**Yes**
£250-500	No	No	No	**Yes**	**Yes**
>£100	No	No	No	**Yes**	**Yes**
Internal transfers	<1%	1-10%	10-25%	25-50%	>50%

Table 4-6 10 cases subject to a transfer pricing audits

Figure 4-3 (and tables 4-5 and 4-6) demonstrate that it is possible to classify 18 of the cases (over two thirds of the sample) after just two splits. The final 7 cases can be classified after one further split (i.e. after 3 levels of discriminators). For the remaining two cases on the upper branch, the audited company is identified as having internal transfers exceeding 1% whilst the company which was not audited has internal transfers of less than 1%. However, it is more difficult to characterise companies towards the end of the decision tree following a greater number of splits.

The power of induction is for handling not just two 'independent' variables (as illustrated in this example) but a solution space including numerous additional parameters. For instance, if the data included additional information on transfer pricing methods, number of foreign subsidiaries, types of internal transfers, and profit levels, it would be very difficult to identify any causal relationships based on observation alone. There is no doubt that induction and clustering offer the user a (new) approach to identifying relationships and solving problems.

Perhaps CBR offers a framework for exploring and understanding the domain of ITP.

4.3.3 The Applicability of CBR to Transfer Pricing

Leitch and Barrett (1992) argue that surveys, economic models and traditional linear- and goal-programming approaches all offer some benefits to understanding transfer pricing but all suffer limitations. Consequently, they advocate that a "new search process is needed to help the decision maker formulate criteria for optimising organisational objectives. Managers must have the ability to study and learn more about the environment and the tradeoffs between objectives and constraints before they can intelligently manage their transfer-pricing and related ownership, location, and internationalisation decisions" (p85).

They argue in favour of some sort of iterative process which could respond to the following scenario : "Each transfer pricing situation is quite different, and accordingly, a learning process must take place prior to the ultimate assignment of any set of weights that reflect feasibility, tradeoffs, and learning considerations" (p86).

Rushinek and Rushinek (1988) observed that "one of the major sources of frustration in studying environmental variables of multinational transfer pricing is the multiplicity of associated variables and the inherent data redundancies" (p95). Often there is multicollinearity between many of the variables (violating any assumptions of independence) and the variables themselves exhibit skewed (rather than normal) distributions. These violations may bias some multivariate statistical analyses (Hair et al, 1995). In addition, previous empirical studies of transfer pricing practices in MNEs have struggled to cope with the richness of the data collected from surveys and have had to restrict the information content[181]. One approach is the use of factor analysis (Burns, 1980; Al-Eryani et al, 1990) and another approach is to reduce the number of variables by careful selection (Yunker, 1983). Other studies have also used probit (Al-Eryani et al, 1990) and regression analyses (Cravens, 1992).

There has been some support for using CBR to evaluate survey data (Morgan and Bond, 1989; Curet, 1995). Morgan and Bond (1989) advocated using CBR techniques to analyse and understand market research data in a number of domains. They identified some of the shortcomings of both statistical and inductive (CBR) analyses, but concluded that "it seems possible that the deterministic, statistically based modelling we are used to (and have used for years) may have to make room for the new 'rule of thumb' heuristic procedures" (p398).

Morgan and Bond (1989) used survey data as training cases to identify patterns of rules which map the independent variables to the dependent variable. One of the problems with ID3 is that it assumes that there is no noise in the data and "towards the end of the induction run, has a tendency to proliferate rules to account for relatively small numbers of observations" (p387). Therefore the rules at the extremities of the decision tree might not provide any additional information. This leads to questions about what represents the optimum level of 'rule pruning' towards the bottom of the decision tree.

[181]Howard, Sharp and Mostafa (1982) identified the problem of data overload with many early empirical studies. "A multiplicity of transfer pricing determinants were identified...no attempt had been made in the surveys to study the correlation between these determinants in order to disclose fundamental factors which underlie transfer pricing in practice" (p13).

Transfer pricing is a difficult problem area, for which expertise exists mostly in the form of cases rather than plans and operations which can be converted easily into rules. In the context of transfer pricing, the existence of numerous competing objectives makes it difficult to develop a coherent set of rules. Therefore, the inductive reasoning of CBR might present a viable medium for learning about transfer pricing decision making within an organisation.

4.4 Questionnaire Survey : Introduction

The pre-pilot study consisted of a series of interviews with selected transfer pricing specialists; design of an ITP questionnaire survey (see Appendix 5 for a copy of the survey questionnaire); and evaluation of the questionnaire responses using CBR.

4.4.1 Theoretical sensitivity

Prior to the questionnaire survey, a series of seminars were attended and semi-structured interviews were undertaken with a cross-section of interviewees during 1994.

ITP seminars attended included :

- Ernst & Young seminar;
- OECD seminar;
- Inland Revenue seminar.

Interviews were conducted with :

- Transfer pricing specialists at 2 of the 'Big 6' accounting firms and at 2 medium-sized accounting firms;
- 1 representative from the Inland Revenue's International Division who was also a member of the OECD working party on transfer pricing;
- 1 representative from the CBI's tax department;
- Chairman of the Unitary Tax Campaign;
- 2 analysts;
- 4 tax managers in large MNEs (3 UK groups and 1 UK subsidiary of a Japanese group).

The objective of these interviews was to learn about the domain of transfer pricing and identify those factors which were considered important in the transfer pricing decisions by these interested parties.

4.4.2 Overview of the Questionnaire Design

This section considers the limitations of questionnaires, how to ensure a good response rate using the Total Design Method (TDM)[182], and the scale of the questions.

[182] Collier and Wallace (1992)

4.4.2.1 Limitations of Questionnaires

Although questionnaires have many drawbacks, most previous ITP research has relied on this method for obtaining transfer pricing data[183] [184] [185]. Three of the main disadvantages of questionnaires and potential solutions are shown in the table 4-7 :

Limitations	Solutions
Lack of control over who completes the questionnaire (Bourque and Fielder, 1995).	The risk of the wrong person completing the questionnaire can be reduced by identifying the name and address of the most appropriate tax manager.
Bias in favour of people who are most interested in the research topic or with a vested interest (Donald, 1960).	It is possible to test for the occurrence of nonresponse bias by comparing the responses of those who respond immediately with those who respond to the follow up survey[186] (Oppenheim, 1966; Fowler, 1988).
Item nonresponse when respondents fail to answer individual questions.	Item nonresponse can be reduced by thorough testing of the survey instrument in the pilot stages.

Table 4-7 Limitations of Surveys & Potential Solutions

4.4.2.2 Total Design Method (TDM)

The survey was administered according to Fink (1995a)[187] and focusing on four factors identified by Collier and Wallace (1992) as part of the Total Design Method (TDM). Collier and Wallace's (1992) TDM arguably improves the response rate for mail surveys[188] [189]. The four factors and how they were incorporated into the questionnaire design are presented in table 4-8 :

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[183] Emmanuel and Mehafdi (1994) observed that "in most empirical studies the data were obtained via mail questionnaires - a data collection method not always flawless - it remains the case that the published surveys are virtually the only available insights on company practice" (p35).

[184] Cravens acknowledged similar limitations in the use of survey data for transfer pricing, including a lack of available data, the use of numerous surrogates and proxies, difficulties in confirming the validity of responses and a general observation that "any primary data source is subject to bias" (p137).

[185] Borkowski (1996) strongly supported questionnaire surveys for this type of research : "Survey research is an excellent method of assessing the transfer pricing practices of MNCs when undertaken according to stringent guidelines, and given a sufficient response rate to insure minimal response bias" (p51).

[186] Tang and Chan (1979) used a chi-squared test of homogeneity to test for non-response bias (between those that responded to the first letter and those that responded to the second letter). According to this test there was not a significant non-response bias.

[187] Fink (1995a) discussed the steps that needed to be followed when conducting a survey : Identify the survey's objectives; Design the survey; Prepare the survey instrument; Pilot-test the instrument; Administer the survey; Organise the data; Analyse the data; Report the results.

[188] Conant et al (1990) reviewed the literature and reported that only incentives and follow-ups have consistently increased response rates to mail surveys.

[189] Yu and Cooper (1983) reviewed 497 response rates found in 93 articles. The results are interesting but they did not distinguish between different subject matter (e.g. varying levels of confidentiality or sensitivity) or different respondents (e.g. students versus managing directors). Both monetary and nonmonetary incentives improved response rates (as did preliminary notification, personalisation, and

TDM Factors	Design steps taken
Reward	Respondents were promised (and received) a copy of the results.
Trust[190]	The survey was sponsored by Systems Union in conjunction with the London Business School; Confidentiality and anonymity was guaranteed.
Reduction of costs	Stamped addressed envelopes were included in the survey pack.
Survey administration	The appropriate contact name was identified via telephone calls, covering letters were included and a subsequent follow-up mailing was sent to non-respondents.

Table 4-8 TDM Factors

4.4.2.3 Scale of Questions

Many of the questions in the survey instrument use a 5-point Likert scale to rate the respondents' views. Fink (1995b) contended that "Self-administered questionnaires and telephone interviews should probably use 4 or 5-point rating scales...conclusive evidence supporting odd or even scales is unavailable" (p53). In fact, the majority of the transfer pricing studies in the literature review did use either a 4-point scale (Kim and Miller, 1979; Czechowicz et al, 1982) or a 5-point scale (Arpan, 1972a; Tang; Al-Eryani, 1987), and Cravens (1992) selected even a 7-point scale. Alternatively, in some other fields there is some precedent for using a 6-point scale to ensure that respondents cannot adopt a neutral stance by selecting 3 as a matter of course (Ashton, 1974; Curet et al, 1996). However, the danger here is that respondents are precluded from selecting a neutral stance if it is appropriate.

Many previous empirical studies tested for statistical significance using both parametric and non-parametric results. Gibbons (1993) has argued that parametric testing is not appropriate in the case of Likert scales because the assumption of normal distribution cannot hold for 3-, 5- or 7-point scales. Instead, the median (rather than the mean) is a better way to summarise positional information such as the Likert scale. The strength of non-parametric tests is that they assume that the distributions of two populations are the same shape rather than normally distributed. Furthermore, Newbold (1991) argued that "..at least in samples of moderate size, tests such as the Wilcoxon and Mann-Whitney are only a little less powerful than the competing t-tests when the population distributions are normal.. Moreover when the population distribution differs from the normal, nonparametric tests can have more power than the corresponding normal-theory tests" (p.428-429).

follow-up letters). For the studies reviewed, questionnaire length, cover letters, assurances of anonymity, deadlines and postage provided did not have a significant effect on response rates.

[190] Collier and Wallace (1992) suggested that sponsorship by reputable institutions is a very important consideration for potential respondents.

4.4.3 Design of the Survey Instrument

The questionnaire included some of the issues and concerns raised in interviews and some questions which were consistent with previous empirical studies. The survey instrument considered recent changes in rules governing the tax treatment of transfer pricing[191]; problematic internal transactions; attitudes towards different tax administrations; and, selected information disclosed in the financial statements.

The initial survey instrument was reviewed and pilot-tested by two tax managers in companies to comment on the content validity (Litwin, 1995). Following their comments, further modifications were made. The sample was selected from the Company Analysis database (a global accounting database) according to two criteria:

1. The company belongs to one of chemicals; electrical; electronics; or pharmaceuticals industry sectors. These industries are perceived to be targets for investigation : "British Multinationals are being targeted by the Inland Revenue in a bid to recover more than £1 billion in tax believed to have been underpaid in the past decade. The Revenue has identified pharmaceutical, electronic, chemical and oil groups as its most fruitful targets." [192]
2. The most recent annual turnover exceeds £100 million.

Using the telephone details provided by Company Analysis, each of the sample companies was telephoned to identify the name and address of the UK tax manager. Then, a survey was sent to that person along with a covering letter. Non-respondents to the first mailing were telephoned about the survey and a second follow-up survey (with s.a.e) was sent to these people.

The questionnaire consisted of three sections :

- *Section 1 - Organisational Characteristics* : This included annual sales, level of internal trade, and descriptions of the company's operations[193].
- *Section 2 - Transfer Pricing* : This included OECD and US developments, problematic internal transactions, transfer pricing methods used, determinants of the transfer pricing method, incidence of transfer pricing audits and adjustments, APAs and segmental analysis.
- *Section 3 - Advance Corporation Tax* : This included surplus advanced corporation tax[194] (ACT) and foreign income dividends (FIDs) [195]. Depending on the corporate

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[191] The focus of the questionnaire was OECD (1994) and US (1994).
[192] 9 October 1994, Sunday Times, Frank Kane, Deputy City Editor
[193] Using descriptions from Emmanuel and Mehafdi (1994).
[194] "The advent of a single European market has focused attention on the structure of international tax incentives for the location of multinational business. Multinationals that channel foreign income through the United Kingdom have been likely to suffer double taxation in the form of surplus advance corporation tax when they subsequently distribute the income to a foreign parent" (Higson and Elliott, 1994, p81).
[195] "The FID proposal in the budget appears to eliminate the tax disadvantage by the risk of surplus ACT to the international firm locating in the United Kingdom" (Higson and Elliott, 1994, p94).

structure, UK versus non-UK profits, and the level of dividend distributions, the existence of surplus ACT and/or FIDs might impact on ITP decisions.

4.4.4 General Characteristics of the Respondents

24 completed surveys[196] were returned out of 108 surveys sent out (representing a 22.2% response rate)[197]. Tables 4-9, 4-10 and 4-11 give some general organisational information on annual sales, proportion of internal trade and the nature of the company's operations for this sample of respondents.

Table 4-9 shows the distribution of the sample by annual sales[198]. The sample contains a higher proportion of smaller companies and there is only one company with annual sales exceeding £5000 million.

Total Annual Sales	Number of companies
Less than £100m	0
£100m - £250m	11
£250m - £500m	4
£500m - £1,000m	4
£1,000 - £5,000m	4
Over £5,000m	1

Table 4-9 Size of Companies

Table 4-10 describes the proportion of internal trade between divisions as a percentage of total company sales[199]. The majority of the companies have internal trade between 1% and 25% of total sales, although two companies have internal trade of less than 1% and two companies greater than 50%. Emmanuel and Mehafdi (1994) described seven studies which analyse companies in terms of internal trade as a percentage of total company sales. They concluded that "..very few companies have amounts of transfers of more than 30% or 40%" [200] [201] (p 45-46).

[196] 21 of these were UK parent companies and 3 were foreign-owned UK holding companies. 14 were chemicals or pharmaceuticals; and 10 were electricals or electronics.

[197] In all 32 were returned of which 6 contained apologies and 2 were from subsidiaries of US parent companies. One of these stated that "as a wholly owned subsidiary of an American parent we do not have local responsibility for transfer pricing". The other stated "as a 100% owned subsidiary of a US company our transfer pricing is determined by the parent company. The policy reflects a need to be consistent on a world wide basis and is based on a full cost plus formula".

[198] Survey instrument question 1

[199] Survey instrument question 2

[200] Comparing the characteristics of the 24 companies in this sample with the 33 companies in Mehafdi's sample looking at domestic transfer pricing (the results for Mehafdi, 1990, are in parentheses), 54.2% (55%) had internal trade less than 10%, 33.3% (21%) had internal trade between 10-25%, and 12.5% (24%) had internal trade of more than 25%.

[201] Vancil (1979), in a survey of transfer pricing policies using 313 questionnaires from 239 manufacturing firms, found that the average level of intra-firm transfers was 13% of total sales for large industrials.

Table 4-11 disaggregates internal trade by the size of the companies. The main feature of this table is that two of the larger companies are responsible for the two instances of internal trade exceeding 50% and that two of the smaller companies account for the two instances of internal trade below 1%.

Level of Internal Trade	Number of companies
Less than 1%	2
1% - 10%	11
10% - 25%	8
25% - 50%	1
Over 50%	2

Table 4-10 Level of Internal Trade

	Level of internal trade				
Total Annual Sales	Less than 1%	1%-10%	10%-25%	25%-50%	Over 50%
£100m - £250m	1	5	4	1	-
£250m - £500m	1	1	2	-	-
£500m - £1,000m	-	2	2	-	-
£1,000 - £5,000m	-	3	-	-	1
Over £5,000m	-	-	-	-	1

Table 4-11 Level of Internal Trade and Turnover

Table 4-12 focuses on a number of aspects of company operations (where 1=not at all appropriate and 5= Very appropriate). Table 4-12 shows that on average the sample of companies did not perceive themselves as vertically integrated [202] [203], although they did view their operations as technologically sensitive producing speciality products with no intermediate market. Also, appropriate to an international transfer pricing study, most of the companies did not view themselves as having a predominantly UK presence (only one company considered that a predominant UK presence was a very appropriate description).

Table 4-12 also partitions the sample into those companies with internal trade either greater or less than 10% of annual sales. The set of companies with higher levels of internal trade are more vertically integrated, more technologically sensitive and their products are more specialised with no intermediate market. In addition, these companies appear to be less reliant on their UK presence.

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[202] Plasschaert (1994) noted that the incidence of inter-group transactions are likely to be more substantial in those MNEs which are vertically-integrated.

[203] Warr (1989) claimed that vertically integrated MNEs are able to shift profits from host countries to the parent using transfer pricing.

Corporate Operations	Level of internal trade Mean		All companies Mean[204]
	Less than 10%	Over 10%	
Vertically integrated	1.9	2.4	2.1 (21)
Technologically sensitive	3.4	4.0	3.7 (22)
Speciality products with no intermediate market	3.0	4.2	3.5 (22)
Predominantly UK presence	2.1	1.7	1.9 (22)

Table 4-12 Company operations by level of internal trade

4.5 Questionnaire Survey : Univariate Results

4.5.1 Recent Transfer Pricing Developments : Introduction

At the time of the survey, the OECD (1994) and US (1994) transfer pricing rules signified a move towards international consensus. The improved consensus centres on the agreed compromise between the US and the OECD on the subject of CPM. OECD (1994) permitted its use in exceptional circumstances, whereas US (1994) relaxed the emphasis on the role of CPM and allowed greater flexibility in the use of comparables.[205]

There are a number of areas which might prove to be controversial when tax authorities apply the new rules in practice,

CPM - The overriding concern was how OECD (1994) and US (1994) would be put into practice. For instance, regardless of the move towards consensus, would the US tax authorities make more use of transaction-based methods or continue to use CPM on the pretext that there is insufficient good quality data to support any other method[206] ?

Burden of Proof - The extent to which the new rules will result in a shift of the burden of proof (regarding what is arm's length) from tax authorities to taxpayers .

Documentation - The requirements pertaining to documentation and functional analysis appear to be added compliance burdens. These tasks appear to extend beyond mere business requirements to tax compliance requirements which are essential for supporting pricing decisions and avoiding penalties.

[204] The number of respondents to each question is in parentheses.

[205] In addition, the OECD has reaffirmed its commitment towards the ALP;(re-)expressed a preference for transaction-based methods over profit-based methods; introduced the concept that a range of arm's length prices (rather than one single price) may exist; and rejected global formulary apportionment.

[206] ICAEW (1995) stressed that CPM might be used by some tax authorities more often than is anticipated and that CPM cannot be viewed as an arm's length method.

Following the survey, Part II of the OECD's draft proposals (OECD, 1995a) set out some guidelines for documentation and played down the burdens of documentation requirements[207] yet it is still apparent that concerns about added burdens do need to be addressed[208]. ICAEW (1995) proposed a very sensible approach to documentation requirements - "In the summary, we feel it would be appropriate to note that a taxpayer should not normally be required to produce any material amount of documentation which would not be prepared as a matter of course by a reasonably prudent businessman for the purpose of running his business" (para 52).

Arbitration - In those instances in which double taxation arises due to international differences in the interpretation of an arm's length price, how will the instances of double taxation be resolved[209] ? Without commenting on the efficiency of existing competent authority procedures[210], the rules on arbitration still need to be updated fully.

OECD (1995a) provided sketchy coverage of this issue and agreed that further work is needed: "..It seems appropriate to analyse again and in more detail whether the introduction of a tax arbitration procedure would be appropriate to international tax relations. Therefore, the Committee on Fiscal Affairs has agreed to undertake a study of this topic and to supplement these Guidelines with the conclusions of that study when it is completed" (para 281).

4.5.2 Recent Transfer Pricing Developments : Results

Tables 4-13 and 4-14 describe the responses to questions about US (1994) and OECD (1994). Responses to these questions were limited. The mean scores in Table 4-13 indicate that both the US rules and the OECD proposals are likely to have some effect on relations with tax authorities. They also indicate that neither the OECD nor the US rules invoke strong views as to whether they are satisfactory or not.

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[207] Paragraph 309 of Part II stated that "..documentation requirements should not impose on taxpayers costs and burdens disproportionate to the circumstances" and para 310 suggested that "Tax administrations and taxpayers alike should commit themselves to a greater level of cooperation in addressing documentation issues in order to avoid excessive documentation requirements."

[208] Expectations about required levels of documentation still need to be fully clarified. Para 310 of Part II agreed that more investigation is necessary : "..The Committee on Fiscal Affairs intends to study the issue of documentation further to develop additional guidance that might be given to assist taxpayers and tax administrations in this area."

[209] One report stated that a Japan-US tax commission agreed on a transfer-pricing tax penalty for the Japanese subsidiary (AIU Insurance co) of a US parent (American International Group Inc). The Japanese tax authorities returned Y4bn of a Y8bn penalty tax charge and it is assumed to be the first time that this commission (under the terms of the US/Japan DTT) has reached an agreement concerning transfer-pricing abuse.

[210] Within the European Union, the Arbitration Convention (signed on August 20 1990 by the then Members) entered into force on January 1 1995. The objective is to eliminate double taxation by ensuring that contracting states compensate for each other's adjustments. When competent states are unable to settle disputes by mutual agreement, an Arbitration Commission must be set up to resolve the dispute. However, it is suggested that the amount of money being disputed would have to be extremely substantial to warrant such action. This Convention has since been extended for a further 5 year period.

Question	Survey question number	Scale	US (1994) Mean[211]	OECD (1994) Mean
What effect are these rules likely to have on your relationship with tax authorities ?	4a,5a	1=None at all; 5 = Very significant	3.3 (15)	3.3 (15)
Are you satisfied with the rules ?	4b,5b	1=Very dissatisfied; 5=Very satisfied	2.8 (13)	3.2 (11)

Table 4-13 US and OECD rules.

Table 4-14 records the responses to four specific questions about the latest transfer pricing regulations[212]. These questions on the affects of recent developments are based on anecdotal evidence. There is some support for the argument that documentation requirements are becoming more onerous and transfer pricing developments shift the burden of proof to the taxpayer. One company visited by the researcher was considering the introduction of a standard form for documentation in all countries to support transfer pricing. Another company stressed the importance of breaking down the assumptions and adopting a risk-reward approach to supporting the pricing method.[213]

In addition, the application of CPM to services is viewed as a very probable problem area.

Question	Scale	Mean[214]
The OECD now allows the use of CPM in exceptional circumstances - this is not a good move for international agreement	1=Strongly disagree ; 5=Strongly agree	3.4 (14)
The burden of proof for determining an ALP will shift from the tax authority to the taxpayer	1=Strongly disagree ; 5=Strongly agree	3.9 (15)
Requirements for documentation and functional analysis place added onerous burdens on the taxpayer	1=Strongly disagree ; 5=Strongly agree	4.3 (15)
The real problems will arise when applying CPM to the transfer of services	1=Strongly disagree ; 5=Strongly agree	4.3 (11)

Table 4-14 Changes in rules

211 The number of respondents to each question is in parentheses.

212 Survey instrument question 6.

213 Citing one example, consultants were employed to carry out a functional analysis to support an intra-company transaction. After 4 months of database work the consultants returned an ALP range of between 4% to 14% with a median level of commission of 8%. This particular analysis was carried out purely to support a pricing decision for tax purposes.

214 The number of respondents to each question is in parentheses.

Some specific comments were made in the survey and in the interviews. For the US rules there were comments on both the positive aspects ("Position clarified"; "Sets out major methods of transfer pricing", "Priority of methods removed", "Less emphasis on profit sharing based methods") and the negative aspects ("Documentation burden"; "Too demanding - profit comparison wrong"; "more onerous proof requirements"). The OECD proposals encouraged several comments about areas of satisfaction ("Preference for transaction based methods against profit comparison methods"; "Generally fair"; "Mainly in line with earlier guidelines") and areas of dissatisfaction, including the fact that the proposals did not rule out CPM (this was one of the recurring themes in the pre-pilot interviews).

4.5.3 Existing Practice

Many existing studies have shown that multinationals do not restrict their practice to one transfer pricing methodology alone[215] with both cost-based (in particular full cost and full cost plus) and market-based pricing used in equal abundance. In one particular study, Yunker (1982) classified a series of transfer pricing methods into techniques for underpricing[216] or overpricing[217] [218].

4.5.3.1 Internal transactions

Table 4-15 reviews responses to two specific questions which attempt to identify those internal transactions which are most contentious in the eyes of the tax administrations[219] [220].

Question (i) asks:
"When determining a transfer price for internal transactions, which areas do you consider that the tax authorities are likely to question you on?" (1=Very unlikely; 5=Very likely)[221].

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215 Mostafa, Sharp and Howard (1984) claimed that "for the modern diversified company the range of its activities means that it is unlikely that a single or a few transfer pricing methods are appropriate to all its needs" (p465).

216 e.g. Actual unit variable cost plus fixed mark-up; Standard unit variable cost plus fixed mark-up; Actual unit full cost; Standard unit full cost; Actual unit variable cost; Standard unit variable cost; Marginal cost; Free transfer.

217 e.g. Market price; Adjusted market price; Negotiated Price; Actual unit full cost plus fixed mark-up; Standard unit full; Cost plus fixed mark-up.

218 Lin, Lefebvre and Kantor (1993) evaluated the financial determinants which favour attempts to underprice or overprice.

219 EIU (1994) identified some specific problem areas in practice. In particular, problems include intercompany pricing, royalties, interest charges and expense allocation (both general expenses and management fees) between US and foreign affiliate companies.

220 One of the tax managers who evaluated the survey instrument in earlier iterations suggested the inclusion of 2 questions on internal transactions (questions 7 & 8).

221 Survey instrument question 7.

Question (ii) asks:
"In terms of setting a transfer price for internal transactions, which areas do you find it hardest to defend when challenged ?" (1=Very easy; 5=Very hard)[222].

The most likely areas of questioning by the tax authorities included management fees, expense allocation, intra-group transfers of technology and royalty evaluation. None of the transactions are viewed as very difficult to defend if challenged, and only management fees, service fees and intra-group transfers of technology and other intangibles suggest some degree of difficulty.

	Qu (i) Mean	Qu (ii) Mean
Management fees	4.1	3.7
Expense allocation	3.9	2.9
Intra-group transfer of technology	3.8	3.3
Royalty evaluation	3.7	2.8
Interest paid on intra-group loans	3.5	2.0
Service fees	3.5	3.4
R & D	3.5	2.9
Commissions	2.8	2.7
Interest expense allocation	2.8	2.5
Information technology expenditure	2.5	2.3
Permanent establishments	2.5	2.5

Table 4-15 Internal transactions

4.5.3.2 ALP methods used by each company

Most of the pricing methods suggested in the survey are used by at least one of the sample companies. Table 4-16 reports results on three aspects of these pricing methods:

Column 1 asks:
"What is the likelihood that the following ALP methods might be used in your company?" (1=never; 5=always)[223].

Column 2 records the number of companies that nominate each ALP method as the most applicable[224].

Column 3 records the number of companies that nominate each ALP method as one of the top three most applicable methods[225].

Four ALP methods stand out as the most often used or the most applicable to the industry. Columns i), ii) and iii) suggest that resale minus, market-based current

222 Survey instrument question 8.
223 Survey instrument question 10.
224 Survey instrument question 11.
225 One company suggested that share of profits is the most applicable method to their business.

price and full cost plus are the three most popular and applicable methods[226]. In addition, columns i) and iii) illustrate the importance of negotiated prices; but this is not one of the OECD's accepted methods - it is a process. The structure of this question in the survey follows Emmanuel & Mehafdi's (1994) analysis of multinational transfer pricing practices. The results are consistent with their review of findings and suggest that companies do use a combination of cost-based (where one might expect cost plus methods to be more applicable to manufacturers), market-based (where one might expect resale price methods to be more applicable to distributors, wholesalers and resellers) and negotiated prices.

	Qu (i) Mean	Qu (ii) Times	Qu (iii) Times
Variable cost	1.8	1	2
Variable cost plus	2.3	2	4
Full cost	2.4	1	4
Full cost plus	2.8	4	12
Resale price	2.1	-	2
Resale minus	2.7	6	13
Market-based : current price	2.5	5	8
Market-based : adjusted	2.5	-	4
Negotiated[227]	3.1	-	8

Table 4-16 Pricing Methodologies

4.5.3.3 What are the important factors in setting a transfer price ?

Table 4-17 reports the perceived importance of a number of factors in setting a transfer price.

Column 1 asks:
"How important are the following factors in the determination of a transfer price?" (1=Very Unimportant; 5=Very important)[228].

Column 2 records the number of companies that nominate each factor as <u>the</u> most important[229].

Column 3 records the number of companies that nominate each factor as <u>one of the top three</u> most important factors[230].

226 Although for the pharmaceuticals industry Collins (1993) suggested that "cost-based methods would very rarely be used..the method used for determining transfer pricing by a Group is thus more likely to be some variant of the resale-minus or possibly a 'fourth method'"(SP 26).
227 Note that negotiated prices are not one of the OECD's accepted methods.
228 Survey instrument question 12.
229 Survey instrument question 13.
230 One company stated that tax efficiency was the most important factor.

The mean values for column (i) of Table 4-17 suggest that of the survey instrument alternatives, there are no dominant factors which appear particularly important in the determination of an arm's length price. Instead most of the factors appear to have some influence on the arm's length price. Columns (ii) and (iii) suggest that the competitive position of the foreign subsidiary, the provision of a fair return on assets to the subsidiary and local market conditions are ranked as the more important of the identified factors in determining an ALP.

	Qu (i) Mean	Qu (ii) Times	Qu (iii) Times
Local market conditions	3.4	3	11
Provide a subsidiary with a fair return on assets	3.3	4	7
Intra-group negotiations between group members	3.1	-	7
Restriction on the repatriation of profits and dividends	3.1	1	5
Competitive position of foreign subsidiary	3.1	5	9
Aggressiveness of tax authority	3.1	2	6
Stability of transfer price over time	3.0	1	4
Motivate local management	2.8	2	6
Subsidiary performance evaluation	2.7	1	1
Need to provide adequate contribution to R&D costs	2.7	2	5
Government price controls	2.4	-	3
Protection against foreign exchange losses	2.3	-	-

Table 4-17 Important Factors in Setting a Transfer Price

4.5.4 Perceptions on tax authorities : Introduction

On anecdotal evidence, multinationals are prepared to pay their 'fair share' of taxation on the proviso that they do not suffer double taxation and they do not incur unexpected penalties[231] [232]. Giovannini et al (1993) observed that some countries add to MNEs' scope for global tax savings by setting up attractive tax structures [233]. These structures are designed to encourage MNEs to locate some/all of their operations within the tax jurisdiction of that country. However the general response

[231] CFE (1995) commented that penalties should only be levied when the taxpayer's actions were not in good faith, and that they should not be generally applicable because transfer pricing inherently involves subjective judgments.

[232] Zach (1993) reported that Patricia Scott, director of taxation and treasury with Thorn-EMI says that "Ideally what you want is a tax regime where you have clear conceptual legislation, with tax authorities which take a sensible, flexible and commercially-minded approach" (p15).

[233] "Within Europe, a number of countries have vied with each other to attract headquarters operations. A number of countries including France, Germany, Luxembourg, Belgium, Netherlands and the UK have all offered so-called 'cost-plus' arrangements......The manner in which the arrangements are provided varies enormously" (Jonathan Schwarz, Financial Times 20 May 1994).

by competing tax authorities to any likelihood of erosion to the tax base is to impose strict limitations to the values of intermediate goods or impute their own values [234].

4.5.5 Perceptions on tax authorities : Results

4.5.5.1 Inland Revenue transfer pricing audits

The need for certainty is emphasised by the incidence of transfer pricing audits [235] [236] [237] in the sample. Eight of the companies indicated that they have been subject to a transfer pricing audit by the Inland Revenue (and one by the IRS) in the last 5 years[238]. Management fees was cited as the most common subject of an audit, but R&D allocation, royalties, intellectual property transfer and technology were also mentioned. Only two companies have been subject to an IR adjustment (at the time of the survey) - one was a "minor pricing adjustment agreed in negotiation" and the other concerned perceived "underpricing of purchases from an overseas subsidiary".

4.5.5.2 Advance Pricing Agreements (APAs)

The availability of Advance Pricing Agreements (APAs) varies across countries. In the US the APA program was established by the IRS on March 1 1991 under Revenue Procedure 91-22; in Japan there is a similar process except that the ruling can be either verbal or written; The Netherlands have introduced a process for obtaining advance agreement for transfer pricing policies; and the UK is consulting on a formal procedure.

In the US, Birnkrant et al (1993) extolled the virtues of negotiating APAs and Freed and Hayes (1995) maintained that the costs associated with completing and monitoring APAs are lower than the costs associated with transfer pricing disputes. In contrast, Picciotto (1992) contended that an APA "requires the same level of disclosure as, and entails a similar burden to, a contested audit" (p784). Ruding (1994) stated that "the process of getting an APA is rigorous, time consuming and expensive, but the rewards can be dramatic for some taxpayers" (p619). CFE (1995) suggested that APAs might be used in a wide range of circumstances by taxpayers to ensure certainty.

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[234] Other typical responses are to impose restrictions on the financial structure of foreign subsidiaries (i.e. thin capitalisation rules) or to deem interest payments to be distributions.

[235] Transfer pricing audits are becoming more common occurrences throughout the world. Richards (1994) described the increase in both the incidence of audit in Australia and the ATO's expectation that MNEs need to be audited.

[236] Ernst and Young (1995a) also found that 49% of the 210 companies in their sample were currently being investigated for transfer pricing issues.

[237] One view that was quite common in the interviews was that the tax inspectors do not have detailed knowledge about the type of information which is available within an organisation. Part of the problem is that the information systems used for internal management accounts are typically based on pre-tax product lines, but financial accounting and taxation requirements need information by geographic split.

[238] The following tax authorities were also involved in the disputed cross-border transactions - 2 French, 2 German, 2 US, 1 Australian and 1 Pakistan.

To ascertain the importance of APAs companies were asked to rate just how important they considered the possibility of obtaining such an advanced pricing ruling. Only one company considered this as very important (overall mean = 2.6 where 1=very unimportant and 5=very important) and this was the only company which had tried to obtain such a ruling in the past.

4.5.5.3 Perceptions on other tax authorities

One of the areas of concern that was raised in pre-pilot interview was that transfer pricing rules are consuming an ever-increasing amount of managers' time in organisations (especially in aggressive tax jurisdictions). It is not just the tax departments but also operations departments which have to provide documentation of business decisions with which the tax department can support pricing decisions if questioned on tax grounds.

These beliefs prompted two questions about satisfaction with the approach to transfer pricing and documentation requirements for a number of different tax jurisdictions. As expected there was virtually no response for China and Russia, limited response for Germany and Japan, and most response for the UK and USA. The results suggest that companies are generally more satisfied with the UK approach compared to the US approach (3.4 for the UK and 2.6 for the USA where 1=Very dissatisfied and 5=Very satisfied) and the documentation requirements needed to justify an ALP are viewed as onerous in the USA (3.0 in the UK and 4.2 in the US, where 1=not at all onerous and 5=very onerous).

4.5.6 Disclosure in the Annual Report and Accounts : Introduction

The UK rules on segment disclosure were very general until the advent of SSAP 25[239][240]. The London Stock Exchange has required the disclosure of international segment information since 1965, the Companies Act 1967 (s17) required the disclosure of turnover and profit/loss by line of business, and the Companies Act 1981 incorporated the EUs 4th Directive (1978) requirement. SSAP 25 requires UK companies to disclose geographical information in terms of sales, operating profit and net assets. However the exposure draft (ED45) which preceded SSAP 25 proposed that much more information should be disclosed in the annual report and accounts (notably for inter-segment pricing). This proposal met with much opposition and consequently this feature was not embodied in SSAP 25. Most of the opposition centred on confidentiality of data and the potential for misunderstanding by users of the accounts.

Three specific responses in the ASC's "Comments Received on ED45 Segmental Reporting" claimed that:

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[239] For a comparison of SSAP 25 with equivalent standards which have been adopted in other countries see Emmanuel and Garrod(1994).

[240] For an empirical analysis of segmental disclosure practice by UK MNEs see Rennie and Emmanuel (1992).

"Your proposals regarding return on capital employed and disclosure of the basis of inter-segment pricing would undoubtedly exacerbate for us and other multinationals the difficulties we are experiencing with (tax) authorities worldwide. It would highlight very specifically the profits being generated in individual geographical segments and lead to a whole series of misunderstandings about the nature of our business. External commentators already significantly misunderstand the geographical information presented in published accounts and this additional data would be fruitful ground for further confusion" (Fisons p79-80).

"The requirement to disclose the basis of transfer pricing between geographical segments could be commercially prejudicial. Such information, once in the public domain, would be available to competitors, regulatory bodies, government departments, central banks, taxation authorities and customers. In a multi-national group such as ours the potential repercussions in many different countries could be enormous since such data may easily be misunderstood or misinterpreted" (Smith & Nephew plc p96).

"The disclosure of intersegment pricing information could result in Inland Revenue queries and investigations" (Glen Dimplex Limited p83).

Appendix 6 illustrates the disclosure of inter-segment pricing for a selection of pharmaceutical companies for their 1993 and 1994 annual reports (the majority of which were included in the initial sample of companies to which surveys were sent). Only 7 out of 18 companies disclosed information on inter-segment pricing, but these disclosures were generally rather bland and uninformative.

4.5.7 Disclosure in the Annual Report and Accounts : Results

The respondents were asked how they thought tax authorities use this published inter-segment data, whether tax departments within a MNE participate in the definition of segments, and whether more inter-segment data should be disclosed. Although interview evidence suggested that the IR might use the data disclosed in the annual report and accounts as a starting point in discussions, the survey results do not provide strong evidence of this. Similarly, in interview discussions with the IR it was intimated that the location of assets and profits might be used for case selection. From survey results the tax department's input into the definition of segments is limited (2.3 for geographical segments and 2.3 for business segments; where 1=never and 5=always) and the IR's reference to these segments during negotiations is not common (1.7 for geographical segments and 1.6 for business segments; where 1=never and 5=always).

The evidence on inter-segment pricing policy and inter-segment transactions is very clear-cut. The results are similar to the feedback to ED45 with 19 (out of 20 companies) answering that inter-segment pricing should not be disclosed and 18 (out of 22 companies) answering that the level of inter-segment transactions should not be disclosed. Confidentiality was the most common reason for non-disclosure ("Wouldn't want to give competitors sensitive information"; "Price sensitive /

Competitive disadvantage"), but also "there are all sorts of reasons why prices are distorted for internal purposes making the figures misleading to an outsider". However one respondent contended that this information "should be disclosed if numbers are unclear or misleading without an explanation."

4.5.8 Important objectives of an international system of transfer pricing rules

When asked what the most important objectives of an international system of transfer pricing rules are, companies require equitable treatment ("Avoiding multiple taxation of profits"; "Level playing field"; "Consistency"; "Fairness"; "To adhere to the arm's length transaction principle"), but also recognise the requirements of tax authorities ("To prevent wholesale tax avoidance"; "Maintenance of national tax income"). However there must be a balanced approach to transfer pricing requirements so that companies can carry out their normal operations with limited interference ("Recognition of commercial reality"; "Ability to remit dividends").

4.6 Questionnaire Survey : CBR Results

The threat (and incidence) of transfer pricing audits is becoming more of an issue for MNEs. In the sample, eight companies indicated that they have been subject to an IR transfer pricing audit in the last 5 years. Also, from the selection of determinants suggested in the survey, the univariate results do not reveal any dominant factors which appear particularly important in the determination of an ALP (see table 4-17 for the list of factors).

Given the concerns about transfer pricing audits, one relevant focus of investigation is whether audited companies have a particular profile. What are the characteristics (in terms of organisational factors; pricing methods; objectives of pricing policy; etc) of companies which have been audited compared to those which have not been audited? Is it likely that similar companies will be audited in the future?

4.6.1 Variables

The results described here use ReMind to produce decision trees. The main objective of this approach is to discover using ReMind's induction process whether the following factors have any influence on whether or not companies have had a transfer pricing audit.

- Organisational factors (table 4-18)
- Internal and external factors (table 4-19)
- Pricing (table 4-20)
- UK tax authorities (table 4-21)
- Dividends (table 4-22)

Related to the main *objective* of this analysis is an attempt to gauge whether CBR offers a viable approach to gain a better understanding of ITP.

4.6.1.1 Organisational Factors

Variable	Scale	Code	Name
Annual Sales	6 categories	01	Sales
Proportion of internal trade	5 categories	02	Internal trade
Vertically integrated	1=not at all appropriate 5= very appropriate	03a	Vert
Technologically sensitive	1=not at all appropriate 5= very appropriate	03b	Tech
Speciality products with no intermediate market	1=not at all appropriate 5= very appropriate	03c	Spec
Predominantly UK presence	1=not at all appropriate 5= very appropriate	03d	Pred

Table 4-18 Organisational Factors

4.6.1.2 Internal and External Factors

Table 4-19 describes the internal and external factors offered in the survey instrument. These were rated from 1=very unimportant to 5=very important in the determination of a transfer price. For the analysis, the 5-point Likert scale was reclassified as low (1,2), neutral (3) or high (4,5).

Variable	Scale	Code	Name
Provide a subsidiary with a fair return on assets	Low/Neutral/High	120a	Roa
Subsidiary performance evaluation	Low/Neutral/High	120b	Eval
Motivate local management	Low/Neutral/High	120c	Mot
Competitive position of foreign subsidiary	Low/Neutral/High	120d	Comp
Local market conditions	Low/Neutral/High	120e	Cond
Intra-group negotiations between group members	Low/Neutral/High	120f	Neg
Protection against foreign exchange losses	Low/Neutral/High	120g	Fx
Government price controls	Low/Neutral/High	120h	Gov
Stability of transfer price over time	Low/Neutral/High	120i	Stab
Need to provide adequate contribution to R&D costs	Low/Neutral/High	120j	R&D
Restriction on the repatriation of profits and dividends	Low/Neutral/High	120k	Repat
Aggressiveness of tax authority	Low/Neutral/High	120l	Tax

Table 4-19 Internal and External Factors

4.6.1.3 Pricing factors

The survey asked three specific questions on the pricing method used, identifying an arms' length transaction and on advance pricing agreements (APAs):

Variable	Scale	Code	Name
The transfer pricing method (TPM) nominated as the most applicable arm's length pricing method for each company.	Cost-based, or Market-based[241]	11d	TPM
Is it possible to identify a comparable arm's length transaction in your industry?	1 = Not at all 5 = To a great extent	09	ARM
How important do you consider the possibility of obtaining an advanced pricing ruling ?	1= Very unimportant, 5=Very important	19	APA

Table 4-20 Pricing Factors

4.6.1.4 UK tax authorities

The survey asked two specific questions on the UK's tax authorities approach to transfer pricing and documentation:

Variable	Scale	Code	Name
How satisfied are you with the UK's approach to transfer pricing issues?	1=Very dissatisfied 5=Very satisfied	17e	UK1
How onerous are the documentation requirements needed to justify an arm's length pricing structure in the UK ?	1=Not at all onerous, 5=Very onerous	20e	UK2

Table 4-21 UK Tax Authorities

4.6.1.5 Dividends

The survey asked two specific questions on surplus ACT and foreign income dividends (FIDs)[242]:

Variable	Scale	Code	Name
Does your company have a stock of surplus ACT ?	Yes/No	26	DIV1
To your knowledge might your company distribute FIDs in the future?	Yes/No	28	DIV2

Table 4-22 Dividends

[241] Arpan (1988) suggested that "cost-based prices have one distinct advantage over market-based prices: flexibility. Because any cost element that enters into the computation of the base price can be changed as well as the percentage mark-up, it is much easier to change a transfer price based on cost than one based on market" (p164).

[242] See Higson and Elliott (1993,1994) for further information on the importance of dividends.

4.6.2 Transfer pricing audit based on all factors

The decision tree in figure 4-4[243] provides a multidimensional explanation of the characteristics of those companies which have been the subject of a transfer pricing audit versus those which have not. The following explanations are apparent :

- All three MNEs with internal trade exceeding 25% of company turnover had been audited.

- Those MNEs with internal trade less than 25% of turnover could be partitioned according to the importance attached to intra-group negotiations when setting transfer prices. Those MNEs in which negotiation was of low importance in determining the transfer price were not audited (seven MNEs in total).

- Six of the remaining MNEs, for which negotiation was of medium or high importance, considered it possible to identify a comparable arm's length transaction to a medium or high degree. All six of these MNEs were not audited.

- Finally at the bottom of the decision tree, five of the remaining eight MNEs that could identify a comparable arm's length transaction only to a low degree were audited.

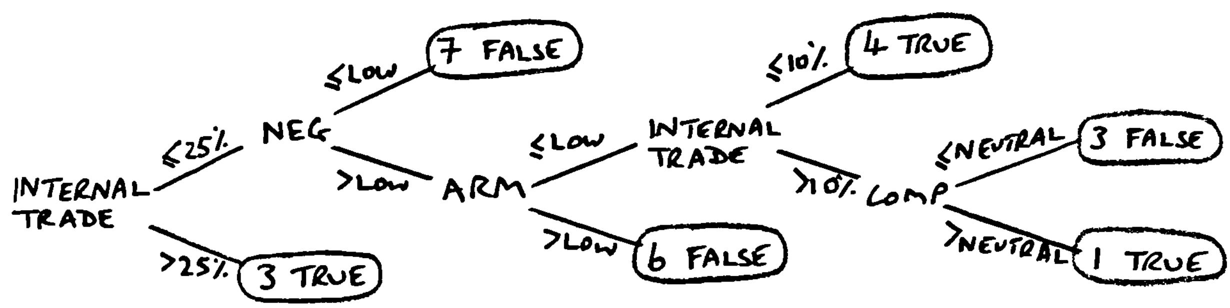

Figure 4-4 Transfer pricing audit decision tree

Figure 4-4 suggests that the vast majority of the factors illustrated in table 4-18 to 4-22 do not appear to be important discriminators for the current sample. In fact, none of the variables in tables 4-20 to 4-22 were included in the decision tree. Using CBR's induction technique, it appears that the UK tax authorities are more likely to audit either companies with high levels of internal transfers or companies that use negotiation to set their transfer prices and have no obvious comparable arm's length transactions. The cases at the bottom of the decision tree are less easy to interpret and the 'rules' generated are likely to be less reliable (Morgan and Bond, 1989).

[243] This figure is reproduced from Curet and Elliott (1997).

These results appear feasible. A sensible strategy for tax authorities might first be to audit those MNEs with high proportions of internal transactions. Second, the Inland Revenue does not regard 'negotiation' as an accepted transfer pricing methodology. Therefore, those MNEs which use negotiation and do not have access to comparables might be more likely to set transfer prices which do not reflect the arm's length principle. It could be argued that the Inland Revenue would not know whether a MNE uses negotiation prior to conducting an audit. However, in some cases the corporate structure and locus of decision making in MNEs or industry practice might suggest that negotiation is used. In other cases, the Inland Revenue might establish its use via informal discussions with a MNE.

4.6.3 Evaluation of the CBR results

The main objective of this analysis was to evaluate the potential of using CBR to understand ITP. Underlying this objective was a desire to identify a better means of understanding ITP than that offered by the statistical multivariate analysis of survey findings. In totality, the findings of 40 years' of surveys have provided decision support of limited applicability. Although the analysis consists of 24 cases only - too few to allow cluster verification to be performed - it "provides sufficient data and interpretation to suggest that CBR's inductive retrieval process is a suitable technique for exploring a larger sample of cases" (Curet and Elliott, 1997, 103-104). In addition, the limitations at the bottom of the decision tree might be resolved with a larger case library.

4.6.4 Attempt to confirm the CBR findings

The analysis of transfer pricing audits using CBR was sent to transfer pricing specialists in the Australian Taxation Office (ATO) for their comments on both the findings and methodology itself. Two members of the International Taxation Division e-mailed their comments :

4.6.4.1 Respondent 1

"Thank you for your ... paper which I found very interesting. I think the key determinants in audit selection are :

1) the level of factual knowledge about the company by the revenue authority, and
2) the strength or otherwise of the authorities case selection procedures.

We believe cases are potentially more 'worthy' where the level of related dealings are high and the profit performance is low.

Enclosed is a 79 page Ruling where our views on the matter are explained."

4.6.4.2 Respondent 2

"I am one of the economists in the International Taxation Division in Sydney. I primarily provide advice in relation to transfer pricing issues. "Respondent 1" passed me a copy of your article on transfer pricing....I found it quite useful and we have circulated it to a number of other ATO staff."

4.6.5 CBR provides a better understanding of relationships but still not a full understanding

McAulay and Tomkins (1992) highlighted the lack of current knowledge about transfer pricing : "It is shown that little which is unequivocal is known about transfer pricing and that the choices made by managers with regard to transfer pricing are little understood, both with regard to the factors which drive choice and the differences between choice in practice and theoretical interpretations. *It is suggested that progress in the area will require a richer understanding of the realities confronting practising managers*" (p101, italics added).

In relation to transfer pricing investigations in this study, CBR provides a means to understand of the relationships between corporate profiles and factors underlying pricing decisions. One of the arguments in favour of CBR is that statistical techniques used in previous transfer pricing studies would not be able to provide a similar degree of explanation in terms of patterns and relationships in a multidimensional search space.

The main disadvantage of the CBR study is that the underlying data is survey data. This means that the fundamental limitations of survey data identified in the previous chapter still apply. In particular, the focus of the analysis is at the group level rather than the individual cross-border transaction level (Colbert and Spicer, 1995; Mehafdi and Emmanuel, 1997), and surveys are inadequate for collecting rich, contextual information associated with in-depth studies.

The following chapter argues that a grounded theory case study is the most appropriate method for providing a deeper understanding of ITP in MNEs. Chapters 6 to 8 describe how the grounded theory approach is used to address the main research question "How do MNEs formulate their ITP policy?" in the specific case of Trifast plc.

5. RESEARCH METHODS (2) : GROUNDED THEORY

5.1 Introduction

This chapter explains why a grounded theory approach is appropriate for investigating and understanding ITP. First it introduces grounded theory and its development. Next it describes some general features of grounded theory and techniques for conducting grounded theory research. In particular, it describes the framework for applying Strauss and Corbin's (1990) approach and how to ensure that 'good' research is generated. Then the chapter considers grounded theory case studies. Finally, there is a literature review of previous grounded theory studies in accounting and management, lending further support for using a grounded theory approach in the current study.

Parker and Roffey (1997) are eloquent about the benefits of using grounded theory studies to understand specific phenomenon in accounting and management :

"Grounded theory studies can help accountants, auditors, managers and policy-makers discover what is happening, *how* things are done, *why* and *when* organisation members do what they do, and how component parts (people, organisational units, etc) interact. Such knowledge is invaluable in applied research where changes in environments (socio-economic, political and institutional), policies, operating systems, organisational structures and activities are anticipated. The grounded theory researcher can utilise technical sensitivity and creativity to develop a structure for interpreting the phenomenon, and use this analysis as a framework for planning and implementing change" (p241).

5.2 The Development of Grounded Theory

The development of grounded theory is considered in terms of an overall introduction, prior knowledge, and its relationship with symbolic interactionism.

5.2.1 An introduction to grounded theory

Easterby-Smith et al's (1991) analysis of the main strength of interpretive studies in general is equally applicable to grounded theory in particular. They stated that interpretive studies have "the ability to look at change processes over time, to understand actor's meanings, to adjust to new issues and theories as they emerge, and to contribute to the evolution of new theories" (p145).

Grounded theory is one methodological approach for generating theory such that the theory emerges from a study and is grounded in the empirical data of that study[244] (Strauss and Corbin, 1990). Grounded theory recognises symbolic interactionism

[244] "The research product constitutes a theoretical formulation or integrated set of conceptual hypotheses about the substantive area under study. That is all, the yield is just hypotheses!" (Glaser, 1992, p16).

(accounting for meanings and interpretations) and it offers a systematic framework for analysing a phenomenon[245] (and often enormous volumes of data), producing a rich understanding of that phenomenon, and developing an emergent theory.

Bartlett and Payne (1996) argue that "grounded theory provides a powerful and robust method for constructing theory. In contrast with assumptions to the contrary based on a naive conception of science, it is consistent with the search for justified belief in knowledge claims and constitutes not only good, but valuable science. It enables researchers to generate theory which is true to the data and, because of its emphasis on inductive logic, closes the theory-data gap" (p325).

5.2.2 Prior Knowledge

Glaser and Strauss (1967) 'discovered' grounded theory, but since the initial study two schools of grounded theory have emerged, as described by each of the originators (Barney Glaser and Anselm Strauss)[246] [247]. One of the main differences relates to the extent to which grounded theory is inductive[248]. There have been a number of commentators who have claimed that Glaser and Strauss (1967) overemphasised the need for the researcher to enter the research with minimal initial knowledge or theories[249] (Strauss and Corbin, 1994). Linked to the issue of prior knowledge, Strauss and Corbin (1990) have argued that the actual research question can be predetermined, whereas Glaser has argued that the research question can be specified only after entering the research site (Parker and Roffey, 1997, p221).

Strauss and Corbin (1994) stressed the importance of extant (grounded) theories and theoretically sensitised researchers. They argued that "researchers carry into their research the sensitising possibilities of their training, reading, and research experience, as well as explicit theories that might be useful if played against systematically gathered data, in conjunction with theories emerging from analysis of these data" (p277). Morse (1994) is a strong advocate of learning about the research topic so that the researcher can place the study into its theoretical context and does not have to reinvent the wheel. Similarly, Bartlett and Payne (1996) believe that the researcher should review the published literature relevant to the study.

[245] Turner (1983) believed that grounded theory "is well suited.. to the analysis of data collected within organisations by means of participant observation, direct observation, semi-structured or unstructured interviews or case-studies" (p335).

[246] "To me..Strauss and Glaser present fundamentally different methods" (Stern, 1994, p221) ; See also Locke (1995).

[247] Parker and Roffey (1997) illustrate a fuller comparison between Glaser (1992) and Strauss and Corbin (1990) (in their table II, p221).

[248] Silverman (1993) argued that " 'Grounded theory' has been criticised for its failure to acknowledge implicit theories which guide work at an early stage" (p47).

[249] In relation to case study research, Scapens (1990) stated that it was impossible for a researcher to commence the study unencumbered by prior theory because one cannot deny previous experience. Similarly, Humphrey and Scapens (1996) have argued that this approach is liberating, and recommended "setting researchers free to use existing theories, metaphors and prior cases to enhance their understanding of accounting practice and to develop new theory through case studies" (p100).

However, the researcher must be able to separate the literature from the data. Strauss and Corbin (1990) argued that in conjunction with prior knowledge "we have to challenge our assumptions, delve beneath our experience, and look beyond the literature if we are to uncover phenomena and arrive at new theoretical formulations" (p76). Morse reiterated that the literature should be kept "'in abeyance' and at all times separate from the data to prevent this information from contaminating the data or the researcher's perspective" (Morse, 1994, p26-27).

In response to Strauss and Corbin's (1990) shift away from Glaser and Strauss's (1967) original assumptions, Glaser (1992) appears to have taken an even more extreme view: "The dictum in grounded theory research is: There is a need not to review any literature in the substantive area under study" (p31). Although Glaser acknowledges that some aspects of theoretical sensitivity are acceptable[250], he is forceful in his views on the literature (although not necessarily in the underlying reasons) : "There is a need not to review any of the literature in the substantive area under study" (p31); "The researcher should not worry about covering the literature in the same field before his research begins, since it will always be there. It does not go away!" (p32).

Interestingly, one researcher who had used grounded theory in a number of different projects argues that "there is no orthodoxy in grounded theory, and I do not think that it is necessary or desirable that such an orthodoxy should develop" (Turner, 1983, p347).

5.2.3 The Link with Symbolic Interactionism [251] [252] [253]

Puxty (1993) contrasts interpretive studies with positivist studies on the basis that the social world can only be understood through an understanding of how people understand each other's behaviour. For instance, interpretive studies reject positivist contingency-type approaches that require the observation and measurement of contingencies followed by the observation and measurement of human behaviour. Instead, interpretive studies emphasise "the understandings of the situations by the actors in the situations themselves" (p59). Puxty also claims that symbolic interactionism is the theory which has influenced the most interpretive studies in accounting.

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[250] "Professional experience, personal experience, and in depth knowledge of the data in the area under study truly help in the substantive sensitivity necessary to generate categories and properties, provided the researcher has conceptual ability" (Glaser, 1992, p28).

[251] Marshall and Rossman (1995) described the research interest in symbolic interactionism as "understanding how individuals take and make meaning in interaction with each other. The emphasis is on the pressures of meaning-making in social organisation" (p2).

[252] Russell (1996) describes symbolic interactionism as envisaging "a dynamic social world in which people act on the basis of the meanings of objects in their world, and where these meanings are constructed through situationally specific interpretation and social interactions" (p5) and focusing on "the actor's self-interpreted actions and meanings" (p6).

[253] "Symbolic interaction purports that meaning is socially constructed, negotiated, and changes over time. Therefore the interview process seeks to elicit a participant's story, and this story is told sequentially as the events being reported unfolded" (Morse, 1994, p39).

Chenitz and Swanson (1986) describe symbolic interaction as a theory about human behaviour, in particular the way in which people define events or reality and the way in which they act in relation to their beliefs (p4). They referred to Blumer's (1969) 3 premises:

- "human beings act toward things on the basis of the meanings that the things have for them" (p2)
- "meanings of such things is derived from, or arises out of the social interaction that one has with one's fellows" (p2)
- "these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters" (p2).

A number of authors have argued that grounded theory is based on a symbolic interactionist perspective on research (Stern, 1994; Artinian, 1986; Chenitz, 1986 ; Chenitz and Swanson, 1986). However, one of the implications of using a symbolic interactionist perspective is that "..meanings are derived through social interaction. Hence, to understand meaning, behaviour must be observed in context" (Chenitz, 1986, p46). Many grounded theory studies use interviews rather than observation as the primary source of data[254]. Parker and Roffey (1997) distinguished between symbolic interactionism and grounded theory research on precisely these grounds :

> "Grounded theory research methods take symbolic interactionist methods into account. However, whereas 'interactionists regard (observation of) human interaction as their basic source of data' (Denzin, 1989), grounded theory generation includes additional data sources such as interviews[255], written reports and documents that relate to the research phenomenon" (p217).

5.3 Grounded Theory Analysis

This section reviews field research techniques and some of the general features of grounded theory.

5.3.1 Field Research Studies

Parker (1994) stated that "..field research offers the researcher the opportunity to select the most appropriate focus of enquiry, given the existing state of knowledge about the phenomenon under scrutiny" (p213). He consolidated some of the previous descriptions of field research. For instance, according to Ferreira and Merchant (1992), there are five defining elements to field research :

1. The researcher has direct, in-depth contact with organisational participants (e.g. through interviews and direct observation of organisational activities). These contacts are the primary source of research data.

[254] "Observational data is not enough. The researcher should provide interviews along with the observations so the analyst can get at the meaning of what is observed. Observations do not in and of themselves have the meaning or the perspective in them of the participants" (Glaser, 1992, p49).

[255] Guba and Lincoln (1981) stated that "it is our belief..that interviewing - whatever the form it might take, but particularly the unstructured interview - is the backbone of field and naturalistic research and evaluation" (p154).

2. The study focuses on real tasks or processes (not upon the researcher's artificially created situations).

3. The research design is not completely structured - it evolves as field observations proceed.

4. The resulting data presented includes relatively "rich" (i.e. detailed) descriptions of organisational contexts and practices.

5. The resulting publications are primarily addressed to the academic research community (but also accessible to practitioners).

All five of these elements are potentially true for a grounded theory study of ITP.

5.3.2 General Features of Grounded Theory

Parker and Roffey (1997) make some excellent observations about grounded theory research including theoretical/ methodological characteristics, the role of the researcher, and the relationship of the emergent theory with other theories.

5.3.2.1 Theoretical / Methodological Characteristics

Parker and Roffey (1997) attempt to position grounded theory research into its theoretical / methodological context on Laughlin's schema. Laughlin (1995) proposes a three dimensional model (theory; methodology; change) - with each dimension having high, medium and low levels. 'Theory' relates to the levels of prior theorising ; 'methodology' relates to the level of theoretical closure on investigation methods; 'change' relates to the levels of critique in terms of the status quo and the need for change. Parker and Roffey argue that the Strauss and Corbin (1990) grounded theory approach might be classified as 'low' in terms of prior theorisation, 'medium' in terms of research methods, and they don't consider the change dimension.

5.3.2.2 Role of the Researcher

"Grounded theory research, however, implicitly or explicitly recognises the capacity for participation in the research act itself to change the nature of the phenomenon, thus providing a catalyst for subsequent modification of the event by directly affecting causal links" (Parker and Roffey, 1997, p217). Cottingham and Hussey (1996) recognised that it is inevitable that a researcher will undertake the research with a set of beliefs, but as long as potential prejudices are acknowledged they are no longer a bias (p159). Humphrey and Scapens (1996) have argued that although it is possible to design the study to reduce researcher bias, the case study is, by nature, a subjective interpretation of the subject matter. Furthermore, "a different researcher might well obtain a different set of findings, but this would not be the same case study, for the researcher is not a neutral observer, but an active participant in the construction of the case study" (p98). Bearing this in mind, they have argued that the acceptance of theories emerging from case studies depend less on "a process of absolute, objective verification" and more on the powers of persuasive argument and what is generally acceptable to the academic community's dominant views.

5.3.2.3 Its Relationship with other Theories

Parker and Roffey (1997) have suggested that emergent theories (from grounded theory studies) can be 'fitted' in with the existing theories in the literature to improve our understanding of a particular subject matter. The findings of the study might have broader implications and apply to other contexts in addition to the specific case (p241). For instance, after Slagmulder (1997) developed a theory from the field research, the extant literature was positioned with respect to the theory (p131). "We conclude that the extant literature, even though it does not offer much more than fragmented insights, provides additional validation for the theory. These insights have enabled us to position and explain earlier writings within a grounded theoretical framework" (p132).

5.4 Strauss and Corbin (1990)

Strauss and Corbin's (1990) approach to grounded theory incorporates theoretical sensitivity, theoretical sampling, three stages of coding (open, axial and selective coding), and constant comparison of the data. The three coding procedures underlying the grounded theory approach should be sufficiently rigorous so that the validity of the data interpretation increases (Parker and Roffey, 1997). The overall framework is consistent with Berry and Otley's (1996) views that an appropriate research design ensures that data collection addresses the research questions.

5.4.1 Theoretical Sensitivity

In the Strauss and Corbin (1990) framework, theoretical sensitivity refers to the way in which a researcher's knowledge and experience helps the researcher to understand and interpret the data. Yin (1994) commented on the role of 'theoretical sensitivity' in relation to case studies but this viewpoint is equally pertinent for grounded theory : "Budding investigators think that the purpose of a literature review is to determine the *answers* about what is known on a topic; in contrast, experienced investigators review previous research to develop sharper and more insightful *questions* about the topic" (p9).

Strauss and Corbin (1990) described a number of ways in which the technical literature can be used in grounded theory :

1. To stimulate theoretical sensitivity - some concepts may appear repeatedly in the literature which the researcher can investigate to see whether / how they apply in the context under consideration
2. As secondary data sources to provide quotations and avenues of investigation.
3. To stimulate questions - the literature might provide an initial list of questions which might change after the initial interviews.
4. To direct theoretical sampling and where to go to develop the theory.
5. As supplementary validation of the accuracy of the findings.

5.4.2 Theoretical Sampling

Theoretical sampling[256] is an essential element in the grounded theory approach. Rather than random sampling of participants within an organisation (for example), it is "sampling on the basis of concepts that have proven theoretical relevance to the evolving theory" (p176) and the nature of the sampling varies for each of the three stages of coding. First, the intention of sampling is to discover as many categories as possible which might be related to the phenomenon; second the sampling is designed to uncover and validate any relationships between the categories; third, the sampling is very deliberate to allow the researcher to verify the story line, the relationships between categories and fill in any 'gaps'. The effectiveness of the theoretical sampling will influence the quality of the study and the emergent theory. Also, "..unlike the sampling done in quantitative investigations, theoretical sampling cannot be planned before embarking on a grounded theory study. The specific sampling decisions evolve during the research process itself" (p192).

5.4.3 Open coding

"The process of breaking down, examining, comparing, conceptualising, and categorising data" (p61). Strauss (1987) states that the purpose of open coding is to "*open up* the inquiry" (p27). Strauss and Corbin (1990) describe open coding as a three stage process :

1. The initial step is to conceptualise the data. This means that every discrete incident in the data is given a name. This analysis can be done on a word-by-word , a line-by-line or a sentence-by-sentence basis.
2. The second step is "the process of grouping concepts that seem to pertain to the same phenomena is called categorising" (p65). Each of these categories is named - these names can originate from academic, professional or technical literature, or they can be "in vivo" codes which are catchy and summarise what the category stands for.
3. These categories are then developed in terms of properties and dimensions. "Properties are the characteristics or attributes of a category, and .. dimensions represent locations of a property along a continuum" (p69). This additional development provides a richer understanding of the relationships between different categories and how they might fit together. At this stage, these categories (and associated findings) are provisional and help to sensitise the researcher.

There are some techniques which help open up the researcher's way of thinking about the phenomena, including basic questioning (Who? When? Where? What? How? Why?), temporal questioning (frequency; duration; rate; timing), 'flip-flop' technique (considering opposites), and 'red flags' which require further consideration (e.g. if an interviewee states that something never happens or always happens - are there any conceivable exceptions?).

[256] Chenitz and Swanson (1986) stated that theoretical sampling "is based on the need to collect more data to examine categories and their relationships and to assure that representativeness in the category exists" (p9).

5.4.4 Axial coding

"A set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by utilising a coding paradigm involving conditions, context, action/interactional strategies and consequences" (p96). In Strauss and Corbin's (1990) paradigm model, a main category (phenomenon) is specified and the various features of that category (other categories which relate to the main category) are referred to as sub-categories. The paradigm model consists of :

Causal conditions->phenomenon->context->intervening conditions->action/interaction strategies->consequences

- *Causal / antecedent conditions* : The events / incidents that result in the phenomenon. Strauss (1987) gives some good guidance on discovering conditions, interactions and consequences by looking for cues (e.g. the words 'because', 'since', 'as', 'on account of.') (p28)
- *Phenomenon* : The main category is the central idea or event.
- *Context* : The context is the specific set of properties/dimensions that relate to the phenomenon.
- *Intervening conditions* : These are the broader context relating to a phenomenon - those that facilitate or constrain action/interaction. "These conditions include time, space, culture, economic status, technological status, career, history, and individual biography" (p103).
- *Action/interaction strategies* : "Grounded theory is an action/ interactional oriented method of theory building.....which is directed at managing, handling, carrying out, responding to a phenomenon as it exists in context or under a specific set of perceived conditions" (p104). There are a number of key elements of action/interaction, some of which are very pertinent to the current study
    - Processual - sequences, movements, or changes over time[257];
    - Purposeful/ Goal Oriented - reactive/proactive strategies and tactics to handle the phenomenon.
    - Failed action/ interaction - when action is not carried out when it should be.
    - Which intervening conditions facilitate or constrain the action/interaction?
- *Consequences* : The outcome or consequence of the strategies for action/ interaction. Strauss (1987) gives some guidance on discovering consequences of actions by looking for cues (e.g. phrases like 'as a result of', 'because of that', 'the result was', 'in consequence') (p28).

Although there is continual interplay between open and axial coding, there are a number of distinct steps which underlie axial coding :

- Relating categories and sub-categories in terms of the paradigm model;
- Returning to the data to verify that these relationships do exist;

[257] Cottingham and Hussey (1996) supported the processual view : "grounded based theories usually examine the corrective actions which are stimulated in response to a specific phenomenon, and how these actions change or manage the phenomenon. The grounded theory question will, therefore, tend to be oriented towards action and process" (p163).

- Searching for more and more properties / dimensions of categories to ensure a rich description;
- Investigating variations in relationships and exceptions.

The dominant purpose is to identify relationships in the data which trade-off the demands for complexity versus the general applicability of the emergent relationships : "The idea is to have a theory that is conceptually dense and that has specificity, plus enough theoretical variation to enable it to be applied to many different instances of any given phenomenon" (p109).

5.4.5 Selective coding

Strauss and Corbin (1990) describe selective coding as "the process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development" (p116). Selective coding generates a 'story line' - which conceptualises the core category. The selective coding is a more abstract type of axial coding which describes the main phenomenon and relates other categories to the core category. Corbin (1986) stressed that at this stage the theory "should consist of categories that are dense with concepts and saturated to the point that a range of variation can be accounted for, verified by hypothesis testing, and integrated, that is, woven together" (p101).

Strauss and Corbin describe selective coding as a five step process :

1. *Explicate the story line* : A single core category, relating to the central phenomenon, must be selected. The researcher must then conceptualise a descriptive story line based on the central phenomenon.
2. *Relate other categories to the core category* : Other categories are related to the core category in a paradigm model.
3. *Relate categories at the dimensional level* : Patterns are uncovered in the form of relationships between properties and dimensions of categories. These patterns give the theory specificity.
4. *Validate those relationships against the data* : To ground the theory it needs to be validated against the data to see how well they fit.
5. *Fill in categories which may need further refinement and development* : It is then possible to go back to the categories to fill in anything that is missing and add to the conceptual density of the theory.

Strauss and Corbin (1990) stress that the distinction between the three types of coding are artificial and that "in a single coding session, you might quickly and without self-consciousness move between one form of coding and another, especially between open and axial coding" (p58).

5.4.6 Similarities with Morse (1994)

Morse (1994) identified four cognitive processes that are integral to all qualitative methods - comprehending, synthesising, theorising, and recontextualising. It can be argued that these four cognitive processes are broadly similar to the procedures associated with Strauss and Corbin's (1990) grounded theory approach :

* Comprehending - interviews.
* Synthesising - coding ; memoing ; analysing negative cases ; theoretical sampling.
* Theorising - development of typologies ; model/theory development.
* Recontextualising - development of substantive theory ; development of formal theory.

5.5 What is a 'good' Grounded Theory?

Locke (1996) suggested that "a grounded theory must have a number of characteristics: It must *closely fit* the substantive area studied, be *understandable* to and *useable* by those in the situation studied, and be sufficiently *complex* to account for a great deal of variation in the domain examined" (p240). Locke also stressed the importance of embracing all the main features of a methodology if that methodology is to be used. For instance, in the case of grounded theory the researcher needs to actually use its main operations and be explicit about decisions such as theoretical sampling and the emergence of categories. In particular, this means that in the case of Strauss and Corbin (1990) the researcher must be aware about the different stages of coding and the associated types of theoretical sampling.

As part of the grounded theory approach, triangulation is essential to ensure a rich emergent theory. It "can also capture a more complete, holistic, and contextual portrayal of the unit(s) under study....triangulation may be used not only to examine the same phenomenon from multiple perspectives but also to enrich our understanding by allowing for new or deeper dimensions to emerge" (Jick , 1979, pp603-604).

Salafatinos (1996b) argued that the research design (a grounded theory case study) maximised validity and reliability. In particular, Yin's qualitative criteria (construct validity, internal validity, external validity and reliability) were all considered and satisfied : "The criteria for qualitative case study research was satisfied by employing grounded theory procedures as defined by Strauss and Corbin (1990)" (p501). Similarly, Parker and Roffey (1997) asserted that a grounded theory approach satisfies the characteristics of rigorous case study research (p243).

5.5.1 Generalisability

It is important to understand that the objective of a grounded theory study (and indeed most interpretive research) is not to generalise the results. Generalisability is a recurring theme that divides the interpretative and functionalist research paradigms. Strauss and Corbin (1990) address the issue (as have numerous other researchers working in the interpretive paradigm) :

> "In grounded theory...our concern is with the representativeness of concepts in their varying forms. In each instance of data collection, we look for evidence of its significant presence or absence, and ask why?....In terms of making generalisations to a larger population, *we are not attempting to generalise as such but to specify.* We specify the conditions under which our phenomena exist, the

action/interaction that pertains to them, and the associated outcomes or consequences. This means that our theoretical formulation applies to these situations or circumstances but to no other. When conditions change, then the theoretical formulation will have to change to meet these new conditions" (p190-191)[258].

Berry and Otley (1994) stressed that single organisation case studies undertaken from an insight stance will lose some generality, but that "this is not the prime concern of researchers using this approach" (p50). In a later paper, Berry and Otley (1996) reiterated that for qualitative research in general the prime output is usually theoretical and its level of generalisability can only be determined by more quantitative and generalisable approaches. Therefore, qualitative research provides insights which might provide only a broad level understanding for different contexts.

Similarly, Spicer (1992) addressed the generalisation of case-study research because "it is one which causes most mistaken criticism of the case research method in accounting...The objective of explanatory case research is not to draw inferences to some larger population based on sample evidence, but rather to generalise back to theory...An attempt to match the pattern of observations made in the case back to those suggested by theory" (p12).

Yin (1994) considered the issue of generalisation and drew a distinction between statistical (used for surveys) and analytic (used for case studies) generalisation[259]. The former is when an inference is made about a population based on the empirical data collected from a sample; the latter is when a previously developed theory is used as a template with which to compare the empirical results of the case study (pp30-32). Furthermore, the scientific terminologies are not appropriate and confuse the issue : "this analogy to samples and universes is incorrect when dealing with case studies" (p36).

Finally, Tomkins and Groves (1983) evaluated Morgan and Smircich's (1980) continuum and made the following observations about reality as a symbolic discourse : "one must commence from specific, real-world situations; the main intention is to answer the question 'what is going on here', not to provide generalisable conclusions for wide segments of society. If individual definitions of situations and responses do prove to be widespread across locations and time, then general formal theories may be formulated" (p370).

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[258] Dr Sheila Payne, a proponent of grounded theory research at the School of Occupational Therapy, University of Southampton, has suggested that 'plausibility' rather than 'generalisability' is a more appropriate requirement of a grounded theory study.

[259] Scapens (1990) distinguishes theoretical and statistical generalisations, and suggests that these different viewpoints also distinguish between exploratory and explanatory case studies respectively. See Llewellyn (1992) for a critique of this distinction.

5.6 A Grounded Theory Exploratory Case Study

Leedy (1997) provided a contrast between case studies[260] and grounded theory research. For other distinctions, Stern (1994) distinguished between ethnography, phenomenology and grounded theory[261]; Parker and Roffey (1997) distinguished between positivist, hermeneutic and grounded theory approaches.

Question	Case Study	Grounded Theory
What is the purpose of the research?	To examine a single 'case' in-depth in order to understand the person or phenomenon	To derive a theory that links participants' perspectives to general social science theories
What is the nature of the research process?	Studies on bounded cases Focus on natural context	Studies 'process' Focus on interactions
What are the methods of data collection?	Interactive fieldwork Formal and informal interviews Some use of quantitative measures	Draws from historical records, interviews, observations Variable, multiple 'units'
What are the methods of data analysis?	Interpretational-search for themes Structural-search for patterns in discourse Reflective-rich portrayal of participants' views	Concept oriented Open, axial, selective coding Constant comparative method
How are the findings communicated/	Analytical (objective) narrative Reflective (literary) narrative	Analytical story

Table 5-1 Characteristics of Case Studies versus Grounded Theory (Extract from Leedy, 1997, Table 7.2 p166).

There is some overlap between Leedy's distinguishing characteristics of case studies and grounded theory. In the instance of a grounded theory study within a single company, it is possible to merge the two sets of characteristics for the research purpose, the nature of the research purpose and the methods of data collection. The actual method of data analysis used for a grounded theory study (certainly as provided by Strauss and Corbin, 1990) gives the researcher an explicit framework with which to code the data and develop an emergent theory. Finally, the emergent grounded theory is usually communicated in terms of an analytical story (based on the codes , their relationships with each other in paradigm models, and the strongest story line).

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260 Otley and Berry (1994), Llewellyn (1992) and Scapens (1990) have all noted that case study research is a method rather than a methodology.

261 "Ethnography starts with a given theoretical perspective, often based on much preceding work carried out by previous anthropologists. Phenomenology incorporates existential philosophy to interpret data. Grounded theory incorporates symbolic interactionism and the researcher 'enters the scene bereft of preformed theory'" (p215).

5.6.1 Exploratory Case Studies

Yin (1994) contrasts the role of theory development for case studies and grounded theory. For the former, he argued that theory development is an essential part of the design phase (regardless of the purpose of the case study), whilst theory development is an emergent process in grounded theory. Exploratory case studies appear to be the exception to this rule and reflect the point of similarity between grounded theory and case studies: "For yet other topics, the existing knowledge base may be poor, and the available literature will provide no conceptual framework or hypotheses of note. Such a knowledge base does not lend itself to the development of good theoretical statements, and any new empirical study is likely to assume the characteristic of being an 'exploratory' study" (p27-28).

For exploratory case studies, Yin still believes that the researcher should explicitly state the subject, purpose and evaluation criteria of the study (closer to Strauss and Corbin, 1990, than Glaser and Strauss, 1967). In relation to management accounting practice, Scapens (1990) argues that exploratory case studies allow a preliminary investigation into particular accounting practices. These studies "are intended to generate ideas and hypotheses for rigorous empirical testing at a later stage" (p265). There also appears to be a place for grounded theory exploratory case studies when, for example, little theory is available : "Here an 'exploratory case' could be used to begin the process of theory development" (p273). Parker and Roffey (1997) also support the application of grounded theory to case study research.

5.6.2 Criteria for Evaluating Interpretative Research

One of the standard criticisms of qualitative research is the lack of scientific rigour. However, Sandelowski (1986) and Guba and Lincoln (1981) argue that qualitative research should be judged on qualitative not quantitative grounds. The standard criteria for evaluating the research design are summarised by Yin (1994)[262]

- "**Construct validity** : establishing correct operational measures for the concepts being studied.
- **Internal validity** : establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships.
- **External validity** : establishing the domain to which a study's findings can be generalised.
- **Reliability** : demonstrating that the operations of a study - such as the data collection procedures can be repeated, with the same results" (p33).

However, Guba and Lincoln (1981) identify four qualitative evaluation criteria which can be differentiated from the standard quantitative evaluation criteria outlined by Yin (above).

[262] See Yin (1994) Figure 2.3 and pages 32-38 for information on case study tactics to satisfy each of these criteria.

5.6.2.1 Truth value

Truth value - credibility rather than internal validity, since the research acknowledges multiple realities. Credibility exists when the researcher's interpretations are recognised by the participants to the study. One practical means for enhancing credibility is to allow the participants to comment on both the intermediate summaries and the research report itself. Of course the researcher must also recognise that there are "many reasons why a source group (or individual members of it) might reject - find noncredible - the data and interpretations that an evaluator presents" (Guba and Lincoln, 1981, p110). Nonetheless, Guba and Lincoln argued that "this process of going to sources ..is the backbone of satisfying the truth-value criterion" (p110).

5.6.2.2 Applicability

Applicability - fittingness rather than external validity/ generalisability. Fittingness relates to the degree to which the findings apply to other contexts and how useful / meaningful these results are to non-participants to the study. Guba and Lincoln question the usefulness of generalisations. Instead they argued that researchers should "think in terms of working hypotheses and of testing the degree of fit between the context in which the working hypotheses were generated and the context in which they are to be next applied" (p122).

5.6.2.3 Consistency

Consistency - auditability rather than replicability. Auditability relates to the clarity of both the way in which the research has evolved or proceeded and the way in which decision making has informed the research findings. Guba and Lincoln argued that replicability is not a relevant feature of research which employs an open-ended approach and believes in the phenomenon of multiple realities. Instead, auditability requires that "the work of one evaluator can be tested for consistency by a second evaluator, which, after examining the work of the first, can conclude 'Yes, given that perspective and those data, I would probably have reached the same conclusion'" (p123-124). But this sits uneasily with Humphrey and Scapens' (1996) views on multiple realities and interpretations which were considered earlier[263] .

5.6.2.4 Neutrality

Neutrality - confirmability rather than objectivity. Confirmability refers to whether the findings reflect the reality of the case study and whether the data itself is confirmable. In contrast to the requirements of objectivity, "the concept of confirmability has another important virtue: it shifts the burden of proof from the investigator to the information itself" (p126). Triangulation and continual comparison and interrogation of the data appear to be relevant for improving confirmability.

Miles and Huberman (1994) consolidate different views on how to judge good qualitative research into 5 headings (their p277-280):

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[263] As quoted earlier, "a different researcher might well obtain a different set of findings, but this would not be the same case study, for the researcher is not a neutral observer, but an active participant in the construction of the case study" (Humphrey and Scapens, 1996, p98).

- **Objectivity / confirmability** : this relates to "relative neutrality and reasonable freedom from unacknowledged biases - at the minimum, explicitness about the inevitable biases that exist".
- **Reliability / dependability / auditability** : this relates to whether the "process of the study is consistent, reasonably stable over time and across researchers and methods".
- **Internal validity / credibility / authenticity** : "Do the findings of the study make sense? Are they credible to the people we study and to our readers?"
- **External validity / transferability / fittingness** : Do the findings of the study 'fit' and can they be transferred to other contexts?
- **Utilisation / application / action orientation** : How useful/ beneficial is the study's findings to both the researcher and the participants?

In addition, other researchers have suggested their own criteria for judging a 'good theory'. Eisenhardt (1989) suggested a combination of elements for evaluating a good theory. Is it "parsimonious, testable, and logically coherent"? (p548). Is it grounded in the data ? Does it provide new insights? Lincoln and Guba (1985) refer to credibility, transferability, dependability and confirmability. Strauss and Corbin (1990) refer to the validity, reliability and credibility of the data; the adequacy of the research process; and the empirical grounding of the research findings (p252).

5.6.3 Other Approaches to Inductive Theory Building

Eisenhardt (1989)[264] described an inductive process for developing theory from cases based on numerous iterations[265], with close links to the data, and which is particularly relevant to new topics. Eisenhardt's process of building theory from case study research is informed by three main sources of literature : Glaser and Strauss (1967)[266] ; Yin (1984) ; and, Miles and Huberman (1984). There are some notable similarities between Eisenhardt's approach and Strauss and Corbin's (1990) approach. For example, Eisenhardt favours an initial (broad) definition of the research question to be able to manage the volumes of data; theoretical sampling is used; there is an overlap between data collection and data analysis; the emergent theory is compared to / positioned within the existing literature; and, theoretical saturation signals that the study is reaching a conclusion.

Eisenhardt makes some very interesting references to the earlier literature:

- She distinguished her work from the earlier grounded theory literature : "To a large extent, Glaser and Strauss (1967) focused on defending rather than on how actually to do it. Thus, while these previous writings provide pieces of the process, they do not provide (nor do they intend to provide) a framework for theory building from cases as developed here" (p546). This assertion is true to a degree, but since then Strauss and Corbin (1990) have provided a reasonably user-friendly framework for how to conduct grounded theory.

[264] Table 2 in her paper presented some examples of inductive case research from the organisational literature (Eisenhardt, 1989, p535).
[265] Scapens (1990) also advises that a researcher must be prepared to iterate through a series of steps when conducting a case study (p273).
[266] Eisenhardt (1989) pre-dates Strauss and Corbin (1990).

- She is more concerned with developing "testable hypotheses and theory which are generalisable across settings" (p546). This contrasts with Strauss and Corbin who are less interested in generalisability and more interested in producing a rich description / understanding of the particular case.

Overall, the spirit of Eisenhardt's description of processes for building theory from case studies is similar to Strauss and Corbin's (1990) approach. Although there are some distinctions, these approaches could be viewed broadly to be in harmony.

5.6.4 Limitations of Inductive Theory Building

Many of the limitations of inductive theory building also pertain to qualitative studies in general. As well as the difficulties associated with evaluating whether a grounded theory is 'good' (and identifying the criteria themselves), there are a number of recurring difficulties and limitations in the literature :

- It is often difficult to arrange an appropriate level of access to an appropriate organisation (Hussey and Hussey, 1997);
- It is a very time consuming approach for both the researcher and the participant organisation (Hussey and Hussey, 1997; Berry and Otley, 1996; Cottingham and Hussey, 1996; Bartlett and Payne, 1996);
- It is often costly for both the researcher and the participant organisation (Berry and Otley, 1996);
- It can be hard work (Bartlett and Payne, 1996);
- It can be difficult to draw up the appropriate 'boundaries' for the unit of study (Hussey and Hussey, 1997; Scapens, 1990);
- It requires the interpretation of multiple realities which might lead to a loss of objectivity and validity (Lyles and Reger, 1993; Scapens, 1990);
- There might be confidentiality constraints placed by the organisation on the information which can/ cannot be disclosed (Scapens, 1990);
- It generates huge volumes of data which are difficult to manage and might lead to too complex theories, whereas a lasting theory might be based on a greater degree of simplicity (Hussey and Hussey, 1997; Cottingham and Hussey, 1996; Eisenhardt, 1989);
- It might generate a theory which is too idiosyncratic or too 'modest' to be useful (Eisenhardt, 1989).

5.7 Literature Review of Grounded Theory Studies in Accounting & Management

This section reviews a number of recent examples of grounded theory studies in accounting and management. Table 5-2 summarises the research question, rationale for using grounded theory, and the unit of study for a selection of these studies.

Study	Research question	Why grounded theory?	Unit of study
Gibbins et al (1990)	To explain and predict corporate financial disclosures.	Limited coverage in the literature.	20 interviews in 20 organisations ; document review.
Lyles and Reger (1993)	To understand better the phenomenon of interest: influence relationships and autonomy in joint ventures.	Limited coverage in the literature; complexity of the influencing relationships in joint ventures.	50 interviews in one joint venture; document review (over 32-year history).
Browning et al (1995)	To capture the development of co-operation between competitors belonging to an industry consortium.	Wanted a rich understanding of the research question.	66 interviews in an industry consortium; observation; document review.
Cook and Barry (1995)	To understand small business owners' conceptual frameworks - in particular in relation to government interaction.	Limited coverage in the literature; complexity of the phenomenon; wanted a rich understanding; little existing theory.	31 interviews in 27 firms; observation; document review.
Ropo and Hunt (1995)	To investigate the processes through which entrepreneurship evolves and the organisational and individual aspects which are involved.	Previous research has been limited to a static, discrete perspective; this research evaluates the subject from a processual, holistic perspective.	5 interviews in each of 2 banks (cases) + document review.
Cottingham and Hussey (1996)	To investigate the extent to which auditors perceive that the potential for misleading accounts will be reduced by an accounting standard on related party disclosures.	Limited coverage in the literature; To facilitate conceptually rich interpretations and develop a substantive theory.	Interviews; observation; document review.
Rieple and Vyakarnam (1996)	To understand how managerial ruthlessness contributes to the successful implementation of an organisation's strategy.	Limited coverage in the literature; complexity of the phenomenon.	1.Interviews with 27 managers in 15 UK companies; document review. 2. In-depth study : interviews with 30 managers in 1 company.
Salafatinos (1996b)	To understand the change process which takes place within the business organisation as a result of the implementation of innovative accounting techniques such as ABC.	Complexity of the organisation; lack of control over variables; to provide a structure to handle the amount of data; to develop a substantive theory.	One company over a 15 month period - using participation; observation; interviews; questionnaire; document review.
Slagmulder (1997)	To gain better insights into the control strategies of firms with regard to strategic investments in manufacturing plant and equipment.	Scarcity of in-depth research; No consideration of wider organisational context; The research is exploratory - it is difficult to identify hypotheses / relevant variables.	Combined exploratory and explanatory case studies : 68 interviews at 10 research sites document review.

Table 5-2 Summary of Grounded Theory studies in Accounting and Management

5.7.1 Gibbins et al (1990)

Gibbins et al (1990) argued that there is very little research literature regarding disclosure practices in organisations (who makes the decision ? how is responsibility delegated ? what issues are considered ? what is the role of external parties in the disclosure process ?). They conducted 20 interviews (11 with firms and 9 with external consultants (e.g. lawyers, auditors)) which first addressed the range of informants' disclosure experiences, and second considered the process related to one particular disclosure experience. They use these 20 interviews to develop a theoretical framework - 5 categories of variables were identified which influenced the disclosure outputs. In addition, some secondary data (including business periodicals indexes, press releases) were used to make some illustrations.

5.7.2 Lyles and Reger(1993)

Lyles and Reger (1993) used grounded theory to explore how the joint venture management influenced its parent firms and stakeholders. The reason for using grounded theory was because "given the rudimentary level of research in this area, it is more important to understand better the phenomenon of interest, influence relationships and autonomy in joint ventures, than to test narrowly constructed hypotheses" (p389). The researchers examined the 32-year history of one joint venture. A triangulation of data methods was employed in this study, using interviews (with over 50 managers), publicly available data (for example annual reports), and company archival data (for example minutes of board meetings).

The researchers found that causal mapping provided a successful methodology for investigating and understanding a complex phenomenon. The study provided a theoretical grounding and identified some important variables which could act as a foundation for future research into joint ventures - an area of increasing importance (p397).

5.7.3 Orlikowski (1993)

Orlikowski (1993) adopted grounded theory to investigate "What are the critical elements that shape the organisational changes associated with the adoption and use of CASE[267] tools ?" Grounded theory was used to develop a framework because of the possibility that "contradictory results evident in the CASE literature likely reflect the fact that differences in intentions, processes, and contexts around the adoption and use of CASE tools are largely overlooked by research that seeks invariant outcomes from CASE tools" (p333).

Orlikowski declared that her research would incorporate three main features to describe and explain the phenomenon :

- Inductive - grounded theory is an inductive, theory discovery methodology which both develops the theory and grounds the analysis on empirical observations.
- Contextual - "a major premise of grounded theory is that to produce accurate and useful results, the complexities of the organisational context have to be incorporated

[267] Computer-aided software engineering (CASE).

into an understanding of the phenomenon, rather than be simplified or ignored" (p311).

- Processual - according to Glaser and Strauss (1967), grounded theory generates theories of process, sequence, and change relating to organisations, positions and social interaction.

Orlikowski collected data from multiple sources, including interviews, document review and observation. The research consisted of a sequential field study of 2 companies (cases). The data collection, coding and analysis was open-ended in the first company, allowing a more targeted and refined approach in the second company (based on the emerging themes). Orlikowski argued that grounded theory allowed her to examine critical organisational elements that were absent in the existing CASE literature, generating a framework that should be useful to both researchers and practitioners.

5.7.4 Browning, Beyer and Shetler (1995)

Browning, Beyer and Shetler (1995) carried out a grounded theory analysis of SEMATECH (a consortium in the semiconductor manufacturing industry) using interviews, observation, review and archival data. In particular, qualitative methods were used "to capture the development of co-operation in this organisation in the rich detail that only accounts of the organisational founders and early participants could provide" (p119). The authors used the 66 (transcribed) interviews (with both "current and founding leaders") as the primary source of data, and archival and observational data were used for verification purposes and to place the interview data into context. During interviews, "the few apparent discrepancies of fact that arose were reconciled through additional interviews with the original informants involved" (p121). The archival data appeared to be in the form of both reviewing the organisational archives from the files of key executives and on-line LEXIS computer search; the observation appeared to be in the form of observing 15 SEMATECH meetings.

The transcripts were coded using an emergent open coding scheme. The number of codes were : 130 (open) reducing to 24 (Axial) and then 17 (Selective). The core categories that emerged were (1) early disorder and ambiguity (2) emergence of moral community (3) structuring of activities.

Validity was achieved by ensuring that reported data was consistent across informants and sources. In addition, the authors' statements and interpretations were assessed for accuracy by submitting them to SEMATECH's standard document review process - the article was read by the current CEO, the director of communications, the librarian, the archivist, and the key informant.

5.7.5 Cook and Barry (1995)

Cook and Barry (1995) selected grounded theory for familiar reasons : "the complexity of the phenomenon, the paucity of work in this area, and our wish to obtain a fine-grained understanding of small business owners' conceptual frameworks..more specifically, the highly complex nature of small business/government interaction argued for a method that would allow us to incorporate our understanding as they unfold and changed over time" (p320). They used a cross site approach with 2 researchers in multiple sites. 31 interviews (with CEOs) were conducted with 27 firms, plus 3 government officials; 9 trade association meetings were observed; examination of more than 150 public documents, position papers, internal memos, newspaper clippings. Triangulation was stressed as important. The codes were classified as either *received* (from literature/interviewee's categorisation schemes) or *emergent*.

Three faculty colleagues, experts in qualitative research, examined the fieldnotes to provide checks on themes and coding schemes - "there were no appreciable differences in data pattern identification between the researchers and these colleagues" (p324).

5.7.6 Ropo and Hunt (1995)

Ropo and Hunt (1995) investigated the processes through which entrepreneurship evolves and the organisational and individual aspects which are involved. They used processual grounded theory to ground their entrepreneurial theory in two Finnish banks which were subject to changes in the structure of the banking sector. The reason for using cases is that the authors believe that "to investigate a process within a real-life context across time, case studies are especially important" (p96). The cases consisted of unstructured or semi-structured interviews with 5 people in each bank, plus other documents (archival, confidential memoranda, in-house evaluations). Triangulation of both data sources and data collection methods were used in the study. The coding categories were named by looking at both the data and the literature on entrepreneurship The study makes two contributions to the literature. First it builds a "new and different entrepreneurial framework" (p106) based on the 2 cases. Second, the authors argue that their research emphasises a new perspective which might inform the general development of entrepreneurship.

5.7.7 Cottingham and Hussey (1996)

Cottingham and Hussey (1996) used grounded theory to investigate standard setting with regards to related party transactions. Their main research question was : "To what extent do auditors perceive that the potential for misleading accounts will be reduced by an accounting standard on related party disclosures?"(p163). The study used data from a number of different sources including manuscripts (published regulations e.g. ED46, IAS 24; letters; archival manuscripts; newspapers); participant and non-participant observation; and interviews.

Although the grounded theory had not been finalised at this stage, the authors contended that "the experience of the current research illustrates the power of the methodology in developing and interrelating concepts.....it is hoped that the application of a grounded theory approach to the research into related party regulation, as described in this paper, will encourage both qualitative research and, more particularly, grounded theory based research in accounting" (pp170-171).

5.7.8 Rieple and Vyakarnam (1996)

Rieple and Vyakarnam (1996) used grounded theory to investigate managerial ruthlessness because a theory-building approach was appropriate due to both the limited literature and the complexity of the subject matter. The study is based primarily on interviews with managers, supplemented by other data, and the researchers then interpreted the participants' accounts of the subject.

The research was carried out in two parts. The first part served to "develop theoretical concepts about some of the issues previously identified from the literature, add new ones which did not appear to have been sufficiently recognised previously, and identify core phenomena which warranted being investigated further" (p21). 27 people (chief executives, human resource directors, senior managers) were interviewed from 15 British companies. The second part consisted of a more in-depth study of one of the participating companies from which 30 managers were interviewed. The first few interviews yielded 1500 distinct categories, which were reduced to 30 (on saturation) relating to the core concept : ruthlessness.

They found that "the qualitative nature of this study has been an important way of developing insight into what appears to be a little understood phenomenon. Very little information on the subject of ruthless managerial behaviour has been found within the literature, and yet it was a consistent theme to emerge from the subject companies" (p23).

5.7.9 Salafatinos (1996a,1996b)

The purpose of the research was reported in slightly different terms in Salafatinos (1996a) and Salafatinos (1996b). Salafatinos (1996a) stated that "the purpose of the research was to uncover practical implementation problems with activity based costing (ABC) and to construct conceptual models which can be applied more generally in other cases" (p249). Salafatinos(1996b) stated that "the goal of this thesis is to advance the understanding of the change process which takes place within the business organisation as a result of the implementation of innovative accounting techniques such as ABC" (p477). Nonetheless, the main emphasis of both sources was to improve understanding about the implementation of an ABC accounting system.

The duration of the single company case study commenced when the company decided to implement ABC and finished 15 months later with the completion of the project. The data were collected in three stages (p257-258):

- An initial understanding of the business was provided by a company tour, looking at financial reports, and through semi-structured interviews with selected managers.
- The researcher was involved with the implementation process and collected data from meetings, documents, and discussions about implementation issues.
- The researcher applied the grounded theory coding procedures to the data. 47 labels were originally identified at the open coding stage, but these were reduced to 5 core categories[268].

[268] These 5 categories alone were illustrated with properties and dimensions. However, it is unclear how the 5 open codes in his table 12.1 (Salafatinos, 1996a, p290) relate to the 5 open codes in fig 13.5 (Salafatinos, 1996a, p342).

5.7.10 Slagmulder (1997)

Slagmulder (1997) carried out a field study to "gain better insights into the control strategies of firms with regard to strategic investments in manufacturing plant and equipment" (p103). The rationale for using grounded theory is that there has been a scarcity of in-depth research of capital investment processes in the accounting literature. Most research has "concentrated on the techniques used for project selection and has largely ignored the broader managerial and organisational context in which these decision processes are embedded" (p104). Furthermore, the research question "becomes progressively more narrowed during the research process as new concepts and their relationships are discovered" (p107). She used a field research strategy which combined exploratory and explanatory case studies that were based on 68 field interviews and company documents at 10 research sites.

A case study protocol was established (according to Yin) which included a summary of substantive issues being studied, a structure of the field procedures (site visits/ individuals to be interviewed), case study questions, analysis plan, guide for case study reports. Therefore, the methodology combined aspects of both a grounded theory approach and a case study approach.

To reduce researcher bias and increase construct validity, all relevant documents were reviewed by the interviewees. The coding method started with open coding at the paragraph level, followed by a line-by-line basis. Three independent coders were asked to code selected paragraphs (on a main concept per paragraph basis) in three selected cases to ensure consistent, replicable code. Also, the coder's code-recode reliability was assessed by performing coding on a case for a second time three weeks later.

5.8 The Application of Grounded Theory to ITP

Chapter 4 described how one inductive technique (case-based reasoning (CBR)) was used to analyse survey results. Although the richness of the findings generated by CBR were limited to the data content of the survey instrument, the technique did help to enhance theoretical sensitivity. In particular, CBR offered a first opportunity to stimulate the inductive process and to think about relationships in the data (Strauss and Corbin, 1990, pp76-77)[269]. Following this first attempt to employ inductive reasoning, the researcher has shifted towards a belief that an inductive, theory generating, grounded theory case study is the optimum way to gain a better insight into ITP[270].

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[269] Although none of the relationships were used as a basis for either the pilot interviews or the main grounded theory case study.

[270] Note an even more extreme shift in methods and methodologies. Covaleski and Dirsmith (1990) described an earlier study of theirs (Covaleski and Dirsmith, 1983) which used grounded theory to study nursing managers' budgeting efforts (after starting with a functionalist perspective). To carry out this shift in research method, they "relaxed the categorisations of (their) data suggested by the orthodox theory of budgeting, listened more to what (their) subjects were telling (them) during interviews, examined the direction and strength of (their) regrouped quantitative observations without regard to (their) a priori theories, and began to understand the upwardly directed, advocacy dimension of budgeting" (p555-556).

As part of an exercise to validate the survey instrument used in the earlier chapter, two tax managers in large MNEs made some interesting observations which support a more in-depth study. The first extract demonstrates the problems faced by respondents when trying to apply the questions to their part of the organisation. The first and the second extracts question the availability of internal trade data centrally. Both extracts can be addressed by a study which focuses on intra-group transactions at the sub-unit level.

Tax manager A

"I would imagine any company ought to be in a position to answer most questions that are relevant to it, but that few will be able to give you an answer on the percentage of total trade represented by the internal market. This may be partly due to not keeping the data and *partly to confusion as to the entity to respond with. That is, are we looking at the UK group, an individual company, the European division, etc etc. I really don't know how you tackle this although it may help to ask respondents to specify the subgroup in relation to which they are responding*" (italics added).

Tax manager B

"I do not think a lot of companies will have the accounting systems in place to provide the information you require. I went to an HMIT consultation session last week for plcs on the impact on transfer pricing of self-assessment and one HMIT person said they were thinking of asking for disclosure of the total figures of intragroup trade split, possibly between countries or between goods, services, etc. The response from most attendees was that this information would not be readily available from existing accounting systems - but possibly these people were not representative of a larger sample."

The review of the existing literature and theoretical bases of ITP provides a compelling argument for an in-depth interpretive study of the phenomenon. The literature tends to focus on the parent company and does not attempt to study specific transactions between specific subunits. The theoretical explanations of ITP are either incompatible, ignore important contextual variables, or are overly reliant on assumptions which simply separate practice from theory.

An in-depth exploratory case study of one organisation appears to be the most appropriate method to study ITP in its natural context and capture the richness and complexity of intra-group transactions within a MNE. In particular, an inductive, theory generating approach might further help to narrow the gap between theory and practice, possibly producing both informative and useful results : "Still, even at the stage of initially obtained results of field-based research, observations and analysis may yield insights that can better inform management and accounting policymakers and practitioners" (Parker, 1994).

The review of previous grounded theory studies suggests that grounded theory provides a rigorous framework for designing and analysing a longitudinal exploratory case study of ITP within one MNE. The studies reviewed in the previous section have used grounded theory for a variety of reasons including limited coverage of the subject in the literature , complexity of the phenomenon, a need for a rich understanding, and little existing theory. In the case of ITP, there is over 40 years of literature and theory **but** this knowledge-base is still lacking; the phenomenon is hugely complex and multidisciplinary; and there is definitely a need for a richer understanding of how ITP actually operates in the context of a MNE. Finally, as discussed in chapter 4, the functionalist paradigm cannot provide this rich understanding: "Grounded theory practitioners argue that studies which begin with pre-defined operational variables developed from positivist hypotheses exclude the possibility of identifying either new 'variables' or *categories* of data, or a more *meaningful* (as distinct from *statistically significant*) analysis of the relationships and patterns between variables" (Parker and Roffey, 1997, p227).

5.9 Next steps

Given the justification for using a grounded theory approach, the following chapters describe how the Strauss and Corbin (1990) framework was used to conduct an exploratory case study in Trifast plc - a medium-sized MNE which manufactures and distributes industrial fastenings. This researcher supports the Strauss and Corbin (1990) stance towards the desirability of prior knowledge and theoretical sensitivity, and the researcher believes that they provide a helpful framework for a researcher wishing to use grounded theory in practice[271].

Finally, based on prior knowledge and theoretical sensitivity, the research question to be pursued is "How do MNEs formulate their ITP policy?" This research question fits with Strauss and Corbin's (1990) assertion that "..the main purpose of using the grounded theory method is to develop theory. To do this, we need a research question[272] or questions that will give us the flexibility and freedom to explore a phenomenon in depth. Also underlying this approach to qualitative research is the assumption that all of the concepts pertaining to a given phenomenon have not yet been identified, at least not in this population or place; or if so, then the relationships between the concepts are poorly understood or conceptually undeveloped" (p37). Furthermore, this opening research question is not necessarily the research question which will be followed throughout the grounded theory case study. Strauss and Corbin (1990) recognise that the research question might change as the study progresses : "while the initial question starts out broadly, it becomes progressively narrowed and more focused during the research process, as concepts and their relationships are discovered to be relevant or irrelevant" (p38).

[271] Parker and Roffey (1997) suggest that Strauss and Corbin's (1990) practical and procedural advice about how to handle large volumes of data is one major advantage of their approach (p223).

[272] Asking an initial research question is a further point of difference between the Strauss and Glaser schools of thought. Glaser (1992) argues that "To repeat, the research question in a grounded theory study is not a statement that identifies the phenomenon to be studied. The problem emerges and questions regarding the problem emerge by which to guide theoretical sampling" (p25).

6. INTRODUCTION TO TRIFAST PLC

6.1 Introduction

After studying the theoretical frameworks and previous literature relating to ITP it became apparent that an interpretive approach was the most appropriate for understanding and learning about ITP in MNEs. Following an attempt to use CBR to analyse survey data, grounded theory appeared to be a more appropriate, rigorous method for facilitating inductive, theory generating research. Of the two different 'schools of grounded theory' (Glaser versus Strauss), this study adopts the Strauss & Corbin approach because it recognises the desirability of a prior knowledge of the literature and the subject (described as "theoretical sensitivity"[273]) and because it provides better guidelines on the ways in which to conduct and evaluate grounded theory research. Part of the initial theoretical sensitivity[274] involved understanding the subject better and appreciating the complexities of ITP in MNEs. This was achieved by attending a number of ITP seminars hosted by a range of interest groups[275] and by conducting a series of interviews[276] with international tax managers in the (then) 'Big 6' accounting firms, international tax inspectors, interest groups, and managers responsible for transfer pricing in both UK and non-UK MNEs.

This chapter introduces Trifast plc, a manufacturer and distributor of industrial fastenings, which is the company selected for the grounded theory study of ITP. In particular, this chapter describes the criteria for case selection, the structure and history of the group, the 'units' analysed, the five cross-border intra-group transactions selected for analysis, the interviews conducted throughout the grounded theory study, the key results of the group over the last five years, and a brief analysis of the market for industrial fasteners. Chapter 7 describes the grounded theory study; chapter 8 grounds the theory in the data[277]; and chapter 9 sets out the resultant hypotheses[278].

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[273] "..the unquestionable fact (and advantage) that trained researchers are theoretically sensitized" (Strauss and Corbin, 1994, p273).

[274] A full log of contact during the initial and ongoing theoretical sensitivity is provided in appendix 7.

[275] As part of their grounded theory study, Cook and Barry (1995) used a range of data sources including : 31 interviews (with CEOs) were conducted with 27 firms, plus 3 government officials; 9 trade association meetings were observed; examination of more than 150 public documents, position papers, internal memos, newspaper clippings.

[276] Some of these contacts have been willing to meet on more than one occasion to discuss the researcher's evolving understanding of transfer pricing issues.

[277] "Grounded theory is a general methodology for developing theory that is grounded in data systematically gathered and analyzed" (Strauss and Corbin, 1994, p273).

[278] "Regardless of the level of theory, there is built into this style of extensive interrelated data collection and theoretical analysis an explicit mandate to strive toward *verification* of its resulting hypotheses (statements of relationships between concepts). This is done *throughout the course* of a research project, rather than assuming that verification is possible only through follow-up quantitative research" (Strauss and Corbin, 1994, p274).

6.2 The Case Study Company

6.2.1 Criteria for Case Study Selection

Following the pilot interviews (described in chapter 7), theoretical sampling was used to identify one company which would allow a thorough investigation of the way in which the ITP policy is formulated and implemented, and the affect the ITP has on various sub-units within the organisation. The four main criteria for selection of an appropriate MNE were:

6.2.1.1 Transactions :

The MNE must have a range of cross-border intra-group transactions to consider and it should be possible to interview managers at 'both ends' of these transactions. Ideally the number and range of cross-border transactions should be rich yet manageable.

6.2.1.2 Policy makers

It must be possible to speak to the people within the MNE who are responsible for implementing the TPP. These people are likely to be able to articulate the complete decision process and identify the individuals and 'units' within the organisation affected by the policy.

6.2.1.3 Timeliness

The MNE needs to be in the process of considering their TPP and the affects of that TPP. This would allow a longitudinal study of a change environment embracing both the initial implementation of the TPP, the affects of that policy and any subsequent refinements or modifications to the original policy.

6.2.1.4 Size of the MNE

Perhaps in small and medium-sized MNEs the business focus and accounting issues figure more prominently in the decision process than in larger MNEs (in which the ITP policy might be implemented by a specialist tax department or their external advisors). Similarly, both the Treasury's Spend to Save initiative and the advent of Corporate Tax Self-Assessment are likely to affect small and medium-sized MNEs disproportionately (because the larger MNEs will probably have been involved with the tax authorities on ITP issues) either because they have cross-border transactions for the first time or because they have been viewed as insignificant by the Inland Revenue in the past.

6.2.2 Satisfying the Criteria for Case Study Selection

It proved to be a time-consuming process trying to identify a contact person at a company willing to take part in the study. The researcher approached respondents to the questionnaire survey (see chapter 4), delegates at transfer pricing seminars, London Business School alumni and executive programme participants, and several other Finance Directors with whom the researcher had an ongoing dialogue. However, to carry out an in-depth, longitudinal study of a company's ITP policy required an onerous commitment from the company to provide access to top management, middle management and confidential information. Following some unproductive discussions with a number of different groups of companies, Trifast plc emerged as an ideal case study company because as at early 1997 the researcher identified the following facts:

- The company had just made a number of foreign acquisitions which raised the profile of both cross-border intra-group transactions and therefore ITP within the group;
- Following informal enquiries by both the Inland Revenue and their 'Big 6' advisors, the Board of Directors was beginning to consider what the group TPP should be;
- There was an interesting mix of bulk buying, manufacturing and distribution within the group. More specifically, at that time, ITP needed to be addressed for cross-border intra-group transactions between the UK, one foreign manufacturing subsidiary and two foreign distribution subsidiaries;
- The Finance Director of Trifast plc's main operating company (TR Fastenings Ltd) was willing to arrange access to anyone within the group to discuss how ITP and the group's TPP affected their 'unit'.

6.2.3 ITP Developments at Trifast plc since March 1996

Since making their initial foreign acquisitions, the Inland Revenue has informally enquired about Trifast plc's transfer pricing policy, Trifast plc has been discussing the issue with their external tax advisors, and Trifast plc have implemented an internal review of their transfer pricing policy (see figure 6-1).

Inland Revenue interest :

year end 3/96	8/97	12/97
Informal enquiry about Trifast plc's TPP.	Trifast plc arranged a meeting with the local tax inspector to discuss transfer pricing.	Trifast plc arranged a meeting with an International Division tax inspector to discuss transfer pricing.

External Tax Advisor's interest :

year end 3/96	10/97	10/98
Informal enquiry about Trifast plc's TPP.	Produced a pro-forma report detailing Trifast plc's intra-group transactions and related transfer pricing issues.	Produced a pro-forma 'defence document' for Trifast plc to maintain their transfer pricing documentation and supporting information.

Internal Transfer Pricing Review :

year end 3/96	4/97	8/97	4/98
An internal review of the TPP was triggered by informal enquiries by the Inland Revenue.	An initial global TPP of cost + 20%[279] was implemented for all transactions (including domestic and cross-border).	All UK:UK intra-group transactions are now transferred at 'cost' in line with the Consultative Document (Inland Revenue, 1997a).	New matrix detailing cross-border TPPs introduced. Also, the group restructured so that recent UK acquisitions became TR Fastenings Ltd's locations rather than separate subsidiaries[280].

Figure 6-1 ITP developments at Trifast plc

6.2.4 Summary of the Main Issues

Trifast plc is a medium-sized MNE which manufactures and distributes industrial fastenings in a number of countries. Over the last 4-5 years it has made a number of acquisitions, both in the UK and overseas. Consequently the proportion of cross-border intra-group transactions has gradually become more material (although they still only account for about 3% of total sales as at 31/3/98). The main intra-group flows can be divided broadly into two categories : transfers from the Central Supplies (which bulk buys standard products from the Far East) to the various distribution locations; and transfers from the manufacturing locations to the distribution locations (although the direction of flows into and out of the UK vary depending on the product). The group structure (see section 6.3.1) consists of Trifast plc (the group holding company) with a number of subsidiaries including the main UK company, TR Fastenings Ltd (incorporating the Central Supplies, manufacturing locations and distribution locations) and some recent overseas acquisitions. Access was granted to any department or location that the researcher wished to visit, making it is possible to interview sub-unit managers at both 'ends' of some of the more significant intra-group flows.

[279] The cost plus 20% policy was initially implemented on the basis that was considered to satisfy tax requirements and it was very simple to implement and keep track of.

[280] The group restructured so that its UK subsidiaries became part of TR Fastenings Ltd - this also had implications on the transfer pricing policy as sales to these former subsidiaries are now stock transfers not intra-group sales : "On 31 March 1998 the trade and net assets of the subsidiary undertakings Micro Screws and Tools Limited, Charles Stringer's Sons and Company Limited and Fastech (Scotland) Limited were sold to the fellow subsidiary undertaking TR Fastenings Limited at their book value" (Annual Report and Accounts 1998, p34).

6.2.5 Interviews

The primary source of data for the grounded theory study are recorded interviews. These data are supplemented by field notes, company documents, press releases, publicly available information (annual reports, newspaper reports, WWW, journal articles), observation and visits to different sites[281]. The interviews (24 interviews of 20 people[282]) were conducted in three tranches at approximately six monthly intervals, representing each of the three stages of coding (open, axial and selective), and over a timespan of just over 18 months from when the access was approved to when the substantive theory was presented to the MNE. After every interview, the interviewees were sent a 2 page summary sheet of the researcher's understanding of the main issues raised in the interview. The interviewees were then contacted within two weeks for their comments on both this researcher's 'understanding' and the completeness of coverage of the main issues.

In the initial meeting, the FD of the main UK operating company (TR Fastenings Ltd) described the activities of the group, and it was apparent in his opinion who the main decision makers were, what the main intra-group transactions were, and which parts of the group might be affected by the TPP. At the open coding stage, the Finance Director arranged meetings with the people who he considered most appropriate and additional interviews were arranged on the basis of the researcher's understanding of the group structure and the transaction flows. It was also agreed that the researcher could reinterview any participants as seemed appropriate (their identity would become apparent as the study progressed) and the other interviewees (at the axial and selective coding stages) should be selected by the researcher on the basis of further theoretical sampling. Reinterviews provided an in-built check on the content and understanding of earlier interviews, and additional interviewees provided the possibility for confirmation or contradiction of the earlier interviews. Finally, a fourth stage was agreed in which the substantive theory developed from the grounded theory could be presented to the Finance Directors of both Trifast plc (the group) and TR Fastenings Ltd (the main operating company).

6.3 Structure and History of the Group

6.3.1 Group Structure

The listed group holding company is Trifast plc and its main subsidiary, TR Fastenings Ltd, contributes 80-90% of the group's turnover. As at the 1998 annual report date (31/3/98), Trifast plc had the following subsidiaries :

[281] Other grounded theory studies have supplemented interviews by a variety of other data sources including newspaper clippings (Cook and Barry, 1995), annual reports (Lyles and Reger, 1993), press releases and on-line searches including internet access, DATASTAR WEB and ABI-Inform (Browning, Beyer and Shetler, 1995).

[282] Some interviews were attended by two or three members of staff.

6.3.1.1 Manufacture & Distribution of Fastenings

- TR Fastenings Ltd
- Ferreus Precision Ltd (Republic of Ireland)
- TR-Formac Pte Ltd (Singapore) - [formerly Formac Technologies Pte Ltd]
- TR-Formac (Malaysia) SDN BHD - [formerly Poly Fasteners SDN BHD]

6.3.1.2 Distribution of Fastenings

- TR Southern Fasteners Ltd [formerly Southern Industrial Fastenings Ltd] (Republic of Ireland)
- TR-Magne Bjorlo AS (Norway)
- Ivor Green (Exports) Ltd

6.3.1.3 Supply of computer software and hardware

- Trifast Systems Ltd

6.3.2 Brief History

TR Fastenings Ltd was founded by Michael Timms and Michael Roberts (the T and R in TR Fastenings Ltd) in Uckfield, East Sussex as a fastener distribution business in 1973[283], and the manufacturing side of the business began three years later. Throughout the 1980s there was continued growth both organically and by acquisition. In 1990, the group was restructured into operating divisions (instead of individual limited companies) with central sales and marketing to improve internal co-operation. Eventually, the parent company Trifast plc was established in 1994. Michael Timms and Michael Roberts held 90% of the shares until Trifast plc came to the market in February 1994 via a £15.7m placing by James Capel. As at 1998 they hold about 25% of the shares. Now the Trifast group employs over 800 employees, and includes manufacturing plants, distribution centres, and specialist technical and engineering support locations. Trifast plc describes its principal activity as the manufacture and distribution of industrial fastenings[284].

The 1998 Annual Report and Accounts announced that Trifast plc had made significant investments to strengthen their international network (in both Asia and Europe) and to ensure continued success on a global basis. In addition, it emphasised the importance of satisfying customer requirements :

"The group has been and always will be a customer driven organisation and it is our duty to ensure that we thoroughly understand the needs, wants and objectives of our strategic customers. This requires a 'continuous improvement' attitude in our communication with customers" (p2).

[283] The 1998 annual report heralds 1998 as their 'Silver Jubilee'.

[284] According to Management Today (November 1995 p98), TR Fastenings Ltd supplies "some 5,000 Original Equipment Manufacturers (OEMs) with over 178 million components every month".

Part of this commitment to satisfying customers has seen the expansion of partnership sourcing[285], in which Trifast plc has sole supplier status for specified product lines which require a close customer relationship. In the 1994 annual report, this relationship was described with one of their big customers. IBM had identified that TR Fastenings Ltd could comply with their requirements and that a long term supplier relationship was possible.

In another important area, Trifast plc achieved the 'Investor in People' (IIP) accreditation in April 1995, and became the first UK fastener company to secure the IIP accreditation for the second time in 1998. John Wilson, Group FD, said "This is official recognition that Trifast plc continues to demonstrate it is a 'people organisation'. IIP is part of our overall commitment to the Total Quality Management philosophy" (Trifast Press Release, 1998a).

6.3.3 Acquisitions History

Over recent years, Trifast plc has made numerous acquisitions[286]. These acquisitions have included Rivet Bush Division of Hall & Kay; Hank Division of GKN; Binx Nut Division of Brown Bros Aircraft; Rollthread International; Fastener Techniques; Techfast; Southern Industrial Fasteners of Republic of Ireland; Hemco; Magne Bjorlo of Norway; Formac Technologies of Singapore; Poly Fasteners of Malaysia; Miller Holdings Maatschappij of Holland; Ivor Green (Exports); Fastech (Scotland) Ltd[287], Charles Stringer[288]; Micro Screws & Tools; Lancaster Fasteners Ltd[289] ; and Samson Industries (in Los Angeles, US).

Table 6-1 considers the foreign acquisitions alone :

Acquisition[290]	Country	Date	Consideration
Southern Industrial Fasteners Ltd (D); Ferreus Precision Ltd (M)	Eire	September /October 1994	IR £700,000 in cash and shares[291]
Magne Bjorlo AS (D)	Norway	February 1996	£800,000 cash & 105,820 Ord (£1.2m in total) [292]

[285] Trifast plc's 1994 placing document lists Partnership Sourcing agreements with Electrolux, NCR, Compaq, Apollo Fire Detectors and Worcester Controls, amongst others.

[286] See Trifast Press Release(1998b) for more details on the acquisitions.

[287] The consideration includes £150,000 of deferred consideration subject to certain profit criteria on the first anniversary of the acquisition.

[288] This includes £125,000 of deferred consideration to be paid on the first anniversary of ownership, subject to warranties.

[289] Once Lancaster has fitted into the Trifast group the location of some of its current customer base (around 1000 customers in the UK and Europe (Trifast Press Release, 1998c) might have implications on intra-group transfers with foreign distributors.

[290] M=Manufacturer; D=Distributor

[291] This includes IR£130,000 of deferred consideration subject to certain profit criteria on the first anniversary of the acquisition.

Formac Technologies Pte Ltd (M&D)	Singapore	March 1997	£1,291,000 cash
Poly Fasteners (M)	Malaysia	December 1997	£432,000 in cash and shares
Miller Holdings (D)	Holland	May 1998	£90,218 in cash and shares[293]
Samson Industries Inc.(D)	USA	August 1998	£2.6m in cash and shares

Table 6-1 Trifast plc's Foreign Acquisitions

The level of acquisition activity appears to reconcile with an appraisal by The Sunday Times' panel of experts on Trifast plc's strategic challenge. Their main challenge was determined to be the need to satisfy their large MNE customers in an increasingly competitive market :

"Trifast's Challenge : Its big customers want to move from national to global sourcing. It is more than 90%-concentrated in the UK, so has to build an international network that can supply them or it will ultimately lose their business. Speed is of the essence: it has to establish a global supply by the year 2000. So it has to rapidly identify suitable acquisitions and execute those deals. At the same time, customers want it to expand its remit to become a service provider, managing relationships with smaller suppliers on their behalf. And it has to do all this while maintaining profits growth in the face of increasing pressure on prices and margins" (Lawless, 1998, p9).

6.4 "Units" analysed in the Grounded Theory Study

6.4.1 Review of Main UK Company : TR Fastenings Ltd

TR Fastenings Ltd is the main UK subsidiary of the Trifast group and generates the majority of the group turnover (in 1997 it was estimated to be over 80%). TR Fastenings Ltd includes both manufacturing and distribution locations - manufacturing accounts for about 40% of TR Fastenings Ltd's turnover. Given the acquisitive nature of Trifast plc, the number of manufacturing and distribution locations is always likely to increase but at the last count the total was 20 locations. A number of these locations are included in the grounded theory case study on the basis of the initial suggestions of TR Fastenings Ltd's FD and theoretical sampling. In particular,

- ***Hank, Uckfield*** : Specialises in the manufacture and distribution of sheet metal fastenings (including the proprietary range of Hank products). The Hank product is a specialist threaded fastener for sheet metal which allows either a cabinet to be fitted together or pieces to be fixed in the cabinet. The customer base includes electronics, electric fabrications, computer industry, through to white goods and

[292] This includes £300,000 of deferred consideration subject to certain profit criteria on the first anniversary of the acquisition.

[293] See Trifast Press Release (1998d)

automobile. In fact the products are appropriate for any industry using sheet metal whether it is steel, stainless, aluminium, etc.

- ***Northampton*** : This manufacturer was acquired from Brown Brothers Aircraft in 1982 as the specialist manufacturer of the Binx range of metal self locking nuts. Northampton employs over 50 manufacturing and sales staff, and it has developed a flexible range of products to enable the production of more specials and non-standard products. In particular, it uses 2 types of machines which are different brands to those used by Hank and these allow Northampton to manufacture small to large diameters, whereas Hank concentrate on small diameters. Northampton supplies various engineering applications (railways; automotive; fan/air movement) whereas the rest of the group tend to supply the electronics industry.
- ***Edenbridge*** : Fastener Techniques was established in 1982, acquired by Trifast plc in 1993 and renamed as TR Edenbridge. TR Edenbridge is a specialist stocking location for products such as rivets (both Tucker rivets - the market leader, and TR Fastenings Ltd's rivets), screws for plastics, and inserts for plastics (manufactured at TR Fastenings Ltd's Telford location). The screws and inserts for plastics are used in industries such as the computing industry.
- ***Contracts, Uckfield*** : The department handles accounts with managed systems. The department sources products from suppliers and delivers these products straight to the customer's production line. This service is known as direct line feed (DLF). Many of the customers are big MNEs, including Kenwood; Lucas Diesel Systems; Nokia; Electrolux.
- ***Central Supplies[294], Uckfield*** : The purchasing division is responsible for purchasing and holding stock for TR Fastenings Ltd's divisions and locations within the UK. Other subsidiaries within the Trifast group have their own purchasing departments but often source from the Central Supplies. The Central Supplies stocks large quantities of standard products that have been imported from the Far East. The purchasing division is non-profit making and it is assessed on availability of stock (but not to the extent of over-stocking) and competitiveness.

6.4.2 Review of Foreign Subsidiaries

This section considers the following foreign subsidiaries :

- TR Southern Fasteners
- Magne Bjorlo
- TR Formac
- TR Formac (Malaysia)
- Miller Holdings (acquired in May 1998 : it is not analysed as part of the grounded theory study)
- Samson Industries (acquired in August 1998 : it is not analysed as part of the grounded theory study)

[294] The Central Supplies is also referred to as 'Central Stores' and the 'Bulk Warehouse'.

6.4.2.1 TR Southern Fasteners[295]

Southern Industrial Fasteners Ltd was established in April 1985 and Ferreus Precision Ltd, the manufacturing arm, was established in 1988. The company services the major petrochemical, engineering and electronic companies throughout Eire. Malcolm Diamond, Trifast plc's Chief Executive, explained why it was an important acquisition for Trifast plc : "Southern Industrial gives us a significant presence in Eire whilst at the same time providing a local base for the continued development of fastening sales to electrical and electronic companies in the region. Southern Industrial's knowledge of the petrochemical industry will enable us to expand our existing product range into this new sector and opens up further opportunities in other markets"[296].

6.4.2.2 Magne Bjorlo[297]

Magne Bjorlo was founded by 2 people in 1975. It supplies fasteners and turned parts to a range of industries including automotive , shipbuilding and electronic. Trifast plc's 1996 Annual Report and Accounts described the consideration and the importance of Magne Bjorlo:

"...a maximum total consideration of £1.2m, comprising £500,000 in cash and 105,820 new Trifast shares on completion, plus, subject to achieving certain profit criteria, up to £300,000 in cash payable after a review of the 12 months to February 1997....Magne Bjorlo is a long established family business that offers a solid platform and good growth potential in Scandinavia by drawing on the purchasing power, proprietary products and logistics resources of TR Fastenings Ltd, whilst also giving us an ideal start to the development of business units in mainland Europe over the medium term" (1996 annual report, p9).

6.4.2.3 TR Formac[298]

Formac Technologies Pte Ltd was established in October 1994 and acquired by Trifast plc in early 1997 and merged with the existing TR Fastenings Ltd's Singapore sales and distribution operations to form TR Formac. TR Formac manufactures a wide range of products[299] and the industries it services include computing, electronics and electrical, and hard disk drives. The acquisition was structured such that the vendor will retain all of their consideration shares for at least 6 months after the acquisition has been completed.

Malcolm Diamond expressed the reasons for the acquisition: "The combination of Formac's business with Trifast plc's existing operations in Singapore will create a unique manufacturing and distribution capability and so provide excellent opportunities to quickly grow existing and new business with a vibrant but

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[295] An Irish distribution company which is a subsidiary of Trifast plc and as at September 1997 it was estimated that it bought 20% of its products from TR Fastenings Ltd.

[296] Regulatory News Service (30/9/94) "UK: Trifast plc Acquisition"

[297] A Norwegian distribution company which is a subsidiary of Trifast plc and as at September 1997 it was estimated that it bought 15-20% of its products from TR Fastenings Ltd.

[298] A Singaporean manufacturer and distributor which also co-ordinates the Malaysian operations.

[299] Trifast Press Release (1998e) estimates that TR Formac can manufacture 600 million fasteners per annum.

demanding customer base"[300]. In particular, the Formac acquisition will allow Trifast plc "to meet growing demand from Far Eastern computer manufacturers. Formac's stainless-steel screws are sold mainly to the electronics industry for use in computer hard-disk drives. About 40% of the world's disk drives are made in Singapore"[301].

6.4.2.4 TR Formac (Malaysia)

The 1998 Annual Report and Accounts described the recent acquisition of TR Formac (Malaysia) : "The addition of Poly Fasteners to the Group (for £432,000 in cash and shares in December 1997) provides us with a key position in the Malaysian electronics industry and together with our manufacturing capabilities in Singapore, puts us in an even stronger position to service our multinational customers" (1998 annual report, p10).

6.4.2.5 Miller Holdings

Miller is already well known for distributing TR Fastenings Ltd's Binx self-locking nuts. Therefore, the acquisition should allow other Trifast companies direct access to customers on mainland Europe for additional products and services (Trifast Press Release, 1998d). The 1998 Annual Report and Accounts described the recent acquisition: "..We have made a second move into mainland Europe through the acquisition of Miller Holdings (Holland). Miller has been involved in the distribution of our products in its territory for a number of years and the management team are well known to us. Miller, whilst giving us a great opportunity to increase our sales of proprietary products within Europe, gives us a strong base to service a number of our multinational customers. Since establishing our Dutch presence we have successfully secured a further significant fastener management contract with one of our key customers" (1998 annual report, p10).

6.4.2.6 Samson Industries

Samson Industries was founded in 1975 with its head office in Los Angeles. The company is a logistics management provider of industrial fastenings to the electronics industries. At the moment, Trifast plc buys a lot from this supplier (probably amongst their top 5 customers) and it is envisaged that there will be substantial transactions in both directions in the future. Malcolm Diamond commented on the US acquisition:
"We have a strong trading relationship with Samson over the last 15 years. Its strategic West Coast provides a solid base to target new key accounts and service existing group MNE customers within the electronics sector who have operations in the North Californian and Mexican territories.....we will, over the coming months be re-branding the business and making significant investment" (Trifast Press Release, 1998f).

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[300] Regulatory-News-Service (5/2/97) "UK: Trifast PLC Acquisition"

[301] Birmingham Post (6/2/97 p32) "UK: Trifast Snaps up Singapore Screw Maker for £1.96m".

6.5 Cross-Border Intra-Group Transactions

6.5.1 Main Examples of Cross-Border Intra-Group Transactions

It is essential to describe the main cross-border intra-group transactions which were considered during the study. Table 6-2 describes the particular transactions and the sub-units dealing with either end of the transaction (i.e. both the 'buyer' and 'seller'). Examples 1,3 and 5 were identified by the FD in the *initial* entry interview, and examples 2 and 4 emerged at the open and axial coding stages respectively. The fundamental reason for conducting a longitudinal grounded theory case study is to facilitate a more focused, contextual understanding of a MNE's ITP in relation to a series of specific intra-group transactions. In addition to the major transactions illustrated in table 6-2, a number of additional transactions were discussed by interviewees. On the whole these other transactions tended to be small volumes or less frequent. Also, with the recent acquisition of the Malaysian operation there are likely to be some intra-group transactions which do not involve TR Fastenings Ltd. For example, Malaysia and Singapore will manufacture different types of products and there is potential for incorporating both products into an integrated finished good.

Example	Type of Transaction	'Seller' Sub-Unit	'Buyer' Sub-Unit	End Customer
Specific Transactions				
1	Assembling & supplying parts for Fire Alarms	TR Formac - Singapore & Malaysia	Contracts, TR Fastenings Ltd	1 main customer : Fire alarm manufacturer
2	Proprietary Fastenings	TR Fastenings Ltd - Northampton	Magne Bjorlo - Norway	1 main customer : Automotive
3	Proprietary Fastenings	TR Fastenings Ltd - Hank division	Magne Bjorlo - Norway	1 main customer : Automotive
4	Rivets	TR Fastenings Ltd - Edenbridge	Magne Bjorlo - Norway[302]	Range of customers
General Transactions				
5	Standard Products	Central Supplies, TR Fastenings Ltd	Magne Bjorlo, Norway; TR Southern Fasteners, Eire	Computing; Electronics Industry

Table 6-2 Main Cross-Border Intra-Group Transactions

[302] Magne Bjorlo hold a large range of rivets and it is recognised as (one of) the best source of rivets in Oslo, if not Norway. These rivets are standard products and there are no particular major accounts, but numerous customers.

In the first specific transaction there have been some changes in the directions of flows over the duration of the study (illustrating one of the strengths of conducting a longitudinal study). Originally, Contracts sourced all the components in Europe and then supplied them to the end customer. The current position is that TR Formac now sources all the components locally (in Singapore and Malaysia), assembles the base units, and the main intra-group transaction is the transfer of the base units from TR Formac to Contracts to supply the end customer.

In the second and third specific transactions in table 6-2, the 'seller' manufactures the product and transfers them to the 'buyer' in Norway which then supplies a large contract to a key multinational automotive customer.

In each of the first three specific examples, the 'buyer' operates a direct line feed (DLF) operation with the customer. This means that they keep the customer's production line running at all times and must be able to guarantee stock availability and a zero-defect product. Trifast plc has been very successful in its efforts to meet the demands of its DLF customers :

- Honeywell Control Systems Ltd named TR Fastenings Ltd as their European Supplier of the Year in the European Factory Category of its annual awards. "In that one year Honeywell experienced : A zero defects quality rating on 31,500,000 pieces supplied by TR[303]; A 100% delivery rating, based on Honeywell's definition of a tolerance of three days early delivery and zero days late delivery; An inventory saving of £40,000 through giving responsibility for on-site fastener stock levels to TR" (TR Press Release, 1998g).

- TR Fastenings Ltd has recently won a prestigious Circle Award from Unipart "in recognition of a ..Direct Line Feed..system installed by TR...which has totally eliminated fastener supply problems at the Coventry plant" (TR Press Release, 1998h).

For the fourth specific transaction, the 'seller' sources the rivets direct from a general fastener manufacturer (usually enjoying the benefits of the group's purchasing powers) and then transfers them to the 'buyer' which then services a range of end customers in Norway.

In the general transaction, the Central Supplies bulk purchases standard products from the Far East. The Central Supplies carries 6-12 months of stock which are purchased at very competitive prices. These products are then available to the rest of the group as and when required. The 1996 Annual Report and Accounts describes the rationale for the Central Supplies :

[303] Also over a 5 year period, 130,000,000 pieces had been supplied to Honeywell, with only 6,000 (0.0046%) rejected and replaced within 24 hours.

"In September 1995, we agreed the purchase of a 13,000 sq.ft freehold warehouse...at a cost of £265,000. A further £100,000 was allocated for a total refurbishment of this site in order to convert it into a bulk store to serve the mainstream product requirement of the Group, particularly on imported items where in the past we have experienced longer lead times for products. However, with the bulk storage we can now hold better stock, purchased at keener prices from our key overseas suppliers" (p9).

6.5.2 Levels of Cross-Border Intra-Group Transactions

The levels of cross-border intra-group transactions were negligible three years ago, and have started to increase as the group has made new foreign acquisitions. Table 6-3 illustrates the gradual increase in materiality of total cross-border intra-group transactions (as a proportion of group turnover) and table 6-4 illustrates the main cross-border intra-group transactions for the group for three periods :

Period	Group Turnover (£000)	Total cross-border intra-group sales as a % of group sales
12 months to 31 March 1996	47,400	0.4%
12 months to 31 March 1997	60,500	1.5%
12 months to 30 March 1998	78,800	2.7%

Table 6-3 The materiality of total cross-border intra-group transactions

Period	'Seller' sub-unit	'Buyer' sub-unit	Total cross-border intra-group sales (£000)
12 months to 31 March 1996	TR Fastenings Ltd, UK[304]	TR Southern Fasteners, Eire	123
12 months to 31 March 1997	TR Fastenings Ltd, UK	TR Magne Bjorlo, Norway	552
12 months to 31 March 1997	TR Fastenings Ltd, UK	TR Southern Fasteners, Eire	204
12 months to 31 March 1997	TR Fastenings Ltd, UK	TR Formac, Singapore	125
12 months to 31 March 1998	TR Fastenings Ltd, UK	TR Magne Bjorlo, Norway	521
12 months to 31 March 1998	TR Fastenings Ltd, UK	TR Southern Fasteners, Eire	222

[304] Note that TR Fastenings Ltd includes the sales from Contracts, Edenbridge, Hank, Northampton, and all other TR Fastenings Ltd's locations.

12 months to 31 March 1998	TR Fastenings Ltd, UK	TR Formac, Singapore	224
12 months to 31 March 1998	TR Formac, Singapore	TR Fastenings Ltd, UK	776

Table 6-4 The value of the main cross-border intra-group transactions

6.6 Series of Interviews

Table 6-5 provides information about the interviewees, their code number (for referencing quotes in chapters 7 and 8), their job title, their affiliation, and whether they took part in the open, axial, and selective stages. For instance, interviewee number 2 is a manager in Central Supplies who was interviewed during the open coding stage and then again during the selective coding stage. Interviewee 1 is the Finance Director of the main UK company who was the main point of contact. As well as participating in interviews during each stage of coding, he and this researcher met on about a dozen other occasions, and communicated regularly by telephone and e-mail[305].

No.	Job Title	Affiliation	Open Coding	Axial Coding	Selective Coding
1	Finance Director[306]	TR Fastenings Ltd	Yes	Yes	Yes
2	Manager	Central Supplies, TR Fastenings Ltd	Yes	No	Yes
3	Manager	Central Supplies, TR Fastenings Ltd	Yes	No	No
4	Head of Location	Manufacturer 1, TR Fastenings Ltd - Hank division	Yes	Yes	No
5	Managing Director	UK Distributor, Fastech (Scotland) Ltd[307]	Yes	No	No
6	Manager	Contracts, TR Fastenings Ltd	Yes	Yes	Yes
7	Purchasing manager	Contracts, TR Fastenings Ltd	Yes	No	No

305 Reviewing the researcher's e-mail records, there were over 35 e-mail communications received from the company discussing the evolving study.

306 The Finance Director was formally interviewed four times during the open, axial and selective coding stages. In addition, the findings were presented to the Finance Director and discussed on four separate occasions once the selective coding stage was completed (three interviews and one telephone conversation). On the second of these occasions, the Finance Director relayed both his deliberations and those of the Trifast group FD (I9).

307 A UK distribution company which was initially a subsidiary of Trifast plc but as at 31 March 1998 became one of TR Fastenings Ltd's locations. As at September 1997 it was estimated that it bought 10-15% of its products from group companies.

8	Purchasing manager	Contracts, TR Fastenings Ltd	No	Yes	Yes
9	Finance Director	Trifast plc	Yes	No	No
10	Head of Location	Manufacturer 2, TR Fastenings Ltd - Northampton	No	Yes	No
11	Managing Director	Foreign distributor 1, TR Southern Fasteners, Eire	No	Yes	No
12	Board Director	Foreign operations 1, Eire	No	Yes	No
13	Purchasing Director	Foreign distributor 1, TR Southern Fasteners, Eire	No	Yes	No
14	Purchasing team	Foreign distributor 1, TR Southern Fasteners, Eire	No	Yes	No
15	Sales team	Foreign distributor 1, TR Southern Fasteners, Eire	No	Yes	No
16	Manager	Specialist Supplier, TR Fastenings Ltd - Edenbridge	No	No	Yes
17	Sales team	Specialist Supplier, TR Fastenings Ltd - Edenbridge	No	No	Yes
18	Managing Director	Foreign manufacturer 1, TR Formac - Singapore & Malaysia	No	No	Yes
19	Group Purchasing Director	UK group, Trifast plc	No	No	Yes
20	Managing Director	Foreign distributor 2, Magne Bjorlo - Norway	No	No	Yes

Table 6-5 Interviews at Trifast plc[308]

Swanson (1986) suggested as a general guide that for major, repetitive themes to emerge it is only necessary to conduct 20 to 50 interview, particularly if theoretical sampling is used to investigate variation. Gibbins et al (1990) conducted a grounded theory study of corporate financial disclosure based on 20 interviews (including both managers and external consultants).

[308] A full log of contact with pilot and case study participants is provided in appendix 8.

6.7 Key Figures

The following comparative figures are produced from the annual report and accounts over the last 5 years to give an indication of :

- The breakdown of Trifast plc's activities, products and customer base;
- Trifast plc's turnover by geographic market of destination;
- Trifast plc's growth in profit and turnover over the last 5 years.

6.7.1 The Business

	1998 annual report	1997 annual report	1996 annual report
Manufacturing	26%	26%	-
Distribution	59%	74%	-
Kitting & Sub-Assembly	15%	-[309]	-

Table 6-6 The Business (%)

Approximately one quarter of Trifast plc's sales is generated by manufacturing and the remainder is generated by distribution and increased levels of kitting and sub-assembly. Kitting and sub-assembly include the Apollo contract (e.g. plastic components and batteries are sourced as part of the contract) and contracts with some of the main computer companies (originally only screws were provided and now the group packages everything including the computer manuals). The Apollo contract is the first specific intra-group transaction which is considered in table 6-2.

6.7.2 Product Split

	1998 annual report	1997 annual report	1996 annual report[310]	1995 annual report	1994 annual report
Standards	17%	21%	-	22%	23%
Own products	25%	30%	-	31%	26%
Specials	17%	18%	-	20%	20%
Sourced	41%	31%	-	27%	31%

Table 6-7 Product Split (%)

[309] In 1997, about 4-5% of the group's turnover was attributable to kitting and sub-assembly. This figure is subsumed within the distribution figure.

[310] This information was not disclosed in the 1996 annual report.

The product splits relate to the following items :

Standards : These include the very standard, large volume products such as ordinary wood screws. Typically these standard products are bought in bulk from the Far East by Central Supplies. Some of these high volume, low cost products are now manufactured by the group's Malaysian manufacturer.
Own products : These are the proprietary 'specials' manufactured by the group - including the manufacturers at Telford, Hank, Northampton (Binx), and Singapore. These products are generally high margin products.
Specials : These are produced to customer specifications in a range of materials and using a variety of methods. They also include 'specials' which are not manufactured by the group but separately sourced. For instance, Microscrews is a high margin operation dealing in micro screws which are sourced from Japan.
Sourced : Certain contracts require the group to supply items other than TR Fastenings Ltd's products or related products. For instance, TR Edenbridge source Tucker rivets and the Apollo contract requires plastic components and batteries to be sourced and assembled along with the TR Fastenings Ltd's products.

The increase in the proportion of sourced products illustrates that the group is shifting from being a supplier to a logistical supplier.

6.7.3 Customer Selection

	1998 annual report	1997 annual report	1996 annual report
Electronic & telecoms	56.2%	59.6%	-
Miscellaneous	16.9%	12.8%	-
Automotive	13.1%	12.5%	-
Other Distributors	6.2%	7.1%	-
Domestic Appliances	3.9%	4.0%	-
Security	3.7%	4.0%	-

Table 6-8 Customer Selection (%)

The predominant customer group remains electronic and telecoms, with certain parts of the group also supplying the automotive industry.

6.7.4 Group Turnover by Geographic Market of Destination

	1998 annual report		1997 annual report		1996 annual report	
	£000	% of total	£000	% of total	£000	% of total
United Kingdom	65,378	83.0%	50,699	83.8 %	41,002	85.4%
European Union (excluding UK)	6,515	8.3%	5,700	9.4%	5,662	11.8%
Europe - other	3,507	4.4%	3,008	5.0%	456	0.9%
North and South America	641	0.8%	573	0.9%	509	1.1%
Far East	2,556	3.2%	333	0.6%	219	0.5%
Other	204	0.3%	172	0.3%	147	0.3%
Total	**78,801**	**100%**	**60,485**	**100 %**	**47,995**	**100%**

Table 6-9 Group Turnover by geographical market of destination

Although the UK remains the main market for Trifast plc's sales (over 80%), there has been a significant increase in the Non-EU European and Far East markets since 1996. Also it should be appreciated that as Trifast plc's manufacturing levels increase in Singapore and Malaysia, it is likely that an increasing proportion of the UK sales will be manufactured overseas.

6.7.5 Five Year Turnover and Earnings

	1998	1997	1996	1995	1994
Group Turnover (£000)	**78,801**	**60,485**	**47,995**	**40,566**	**29,103**
Percentage growth	30.3%	26.0%	18.3%	39.4%	
Group Profit on Ordinary Activities after tax (£000)	**5,802**	**4,566**	**3,745**	**2,723**	**1,671**
Percentage growth	27.1%	21.9%	37.5%	63.0%	

Table 6-10 5 Year Turnover and Earnings figures

The group turnover and profit figures have grown significantly over each of the last 5 years. In all the compound growth in turnover over the period has been 28.3% and in earnings has been 36.5%.

6.8 The Market for Industrial Fasteners

Key Note (1997) provides an analysis of the Market for Industrial Fasteners. This section extracts some of the more relevant information from the market report.

6.8.1 Overview

Key Note (1997) forecasts that the market for industrial fasteners will grow from £1.09bn in 1996[311] to £1.46bn by the year 2001. Although there is a forecast growth rate of 5% per annum in the market for general fasteners, it is predicted that the market for specialist fasteners will experience much higher growth. This growth is attributed, in part, to a shift in the automotive industry's demand from general to specialist fasteners. These predictions appear favourable for Trifast plc which is ranked by the ICC database (see Table 6-12 below) as the second largest manufacturer in the UK specialist fastenings market.

6.8.2 Market Definition

Key Note (1997) identifies two very different markets for industrial fasteners. Trifast plc supplies both of these markets :

- sales directly to manufacturers
- sales directly to distributors and then to smaller manufacturers and retail outlets.

Key Note (1997) also identifies the number of manufacturers of industrial fastenings in the EU:

Italy	185
Germany	167
UK	129
France	91
Netherlands	23
Switzerland	22
Portugal	13
Austria	9
Belgium	9

Table 6-11 Manufacturers of Industrial Fasteners (Table 5, Key Notes. Source : Europages Directory)

It can be seen that Trifast plc is an important player in the UK specialist fastenings market :

Company	Ultimate Holding Company	Turnover (£m)	Year End
Avdel Textron Ltd	Textron Inc (US)	66.4	31/12/95
Trifast plc	-	60.5	31/03/97
SPS Technologies Ltd	SPS Technologies Inc (US)	37.2	31/12/95
Linread plc	McKechnie plc	30.9	31/07/96
Huck International Ltd	Thiokol Inc (US)	11.9	30/06/96
BAS Components Ltd	TT Group plc	10.2	31/12/96

[311] Before adjusting for imports and exports, manufacturers' sales for general fasteners were valued at £564m versus £392 for specialist fasteners.

Dzus Fastener Europe Ltd	McKechnie plc	8.2	31/07/96
Camloc (UK) Ltd	Fairchild Corporation Inc	7.5	30/06/96
Hi-Shear Fasteners			
Europe Ltd	GFI Industries SA (France)	6.9[312]	29/12/96

Table 6-12 Leading Industrial Specialist Fastener Manufacturers by Turnover (£m), 1995/96 (Table 13 Key Note. Source: *ICC Database)*

6.9 Summary

This chapter explained why the Trifast group was selected for the grounded theory study of ITP. Table 6-2 introduces the five cross-border intra-group transactions which are used as the basis for the grounded theory study. Table 6-5 illustrates which participants were interviewed at which stage. Based on the information provided in this chapter, chapter 7 explains how the grounded theory study was conducted and develops a substantive theory; chapter 8 grounds the theory in the data; and chapter 9 sets out the hypotheses evolving from the study.

[312] 30 week period

7. ANALYSIS OF THE GROUNDED THEORY CASE STUDY

7.1 Introduction

This chapter describes the pilot study, sets out the research question, and then describes how the Strauss and Corbin (1990) framework for collecting and analysing data was applied to the five specific cross-border intra-group transactions introduced in the previous chapter. At the open coding stage, 50 categories (across 10 category groups) are identified; at the axial coding stage, three paradigm models are developed; at the selective coding stage, the descriptive story line and substantive theory are developed from the paradigm models. The following chapter then grounds the theory in the data.

The main milestones in the Grounded Theory Study are shown in figure 7-1 :

4/97	5/97 - 6/97	12/97 - 1/98	6/98 - 7/98	10/98-1/99
The researcher made initial contact just after the Board of Directors had implemented the group's initial TPP.	Conducted the interviews for the Open Coding Stage.	Conducted the interviews for the Axial Coding Stage.	Conducted the interviews for the Selective Coding Stage.	Discussed the substantive theory with TR Fastenings Ltd's FD.

Figure 7-1 Grounded theory study milestones

The approach adopted in this study is very similar to the 2 stage approach adopted by Rieple and Vyakarnam (1996). Their first stage consisted of interviews with 27 people (chief executives, human resource directors, senior managers) from 15 British companies. This initial analysis served to "develop theoretical concepts about some of the issues previously identified from the literature, add new ones which did not appear to have been sufficiently recognised previously, and identify core phenomena which warranted being investigated further"(p21). This stage corresponds broadly to the interviews carried out as part of the pre-pilot study (including the questionnaire survey), theoretical sensitivity and the pilot study. Their second stage consisted of a more in depth study of one of the participating companies in which 30 managers were interviewed. This is similar to the approach adopted for the Trifast case study for which 20 managers responsible for a range of functions and associated with a number of different locations and subsidiaries were interviewed.

7.2 What does 'theory' consist of ?

Perhaps it is helpful to reproduce how Strauss and Corbin (1994) explain what theory consists of :

"Theory consists of *plausible* relationships among *concepts* and *sets of concepts*. (Though only plausible, its plausibility is to be strengthened through continued research.) Without concepts, there can be no propositions, and thus no cumulative scientific (systematically theoretical) knowledge based on these plausible but testable propositions....Grounded theory methodology is designed to guide researchers in producing theory that is 'conceptually dense' - that is, with many conceptual relationships.....Theoretical conceptualisation means that grounded theory researchers are interested in patterns of action and interaction between and among various types of social units (i.e. 'actors'). So they are not especially interested in creating theory about individual actors as such...They are also much more concerned with discovering *process* - not necessarily in the sense of stages or phases, but of reciprocal changes in patterns of action/ interaction and in relationship with changes of conditions either internal or external to the process itself. When stages or phases are distinguished for analytic purposes by the researcher, this signifies a conceptualisation of what occurs under certain conditions: with movement forward, downward, up and down, going one way then another- all depending on analytically specified conditions. Insofar as theory that is developed through this methodology is able to specify consequences and their related conditions, the theorist can claim predictability for it, in the limited sense that *if* elsewhere approximately similar conditions obtain, *then* approximately similar consequences should occur" (underlining added, Strauss and Corbin, 1994, p278).

7.3 Preliminary steps

7.3.1 Pilot interviews : Introduction

The main objective of the pilot interviews was for the researcher to both apply the Strauss and Corbin (1990) grounded theory approach for the first time in practice, and to provide an initial wide set of examples and experiences on ITP (International Transfer Pricing). Three tax advisors were interviewed on two occasions each, and four of the six pilot interviews were recorded[313]. One of the advisors was a tax partner in a firm of chartered accountants, one was the MD of a tax consultancy, and one was an independent tax advisor (although his previous employment had been as a tax manager in a major MNE). Each of the three advisors had experience of dealing with transfer pricing cases, preparing support for a TPP (Transfer Pricing Policy) either as a consultant or within a MNE. In each of the first interviews, the discussion

[313] The very first lesson of the pilot study was never to rely on University equipment. Unfortunately there would have been 5 recorded interviews but despite numerous checks before conducting the interview, one interview was not recorded due to a 'temperamental' tape recorder. Following suitable admonitions, the researcher returned the offending equipment and purchased a Sony tape recorder and a transcriber.

was opened with the question : "Please could you tell me something about the last transfer pricing review you were involved with, either as an external advisor or within a company. Really, how the transfer pricing policy decisions were made, what was looked at, what was regarded as important...to get a general feel..of the process you went through or the company went through." The second interview with each advisor provided an opportunity to discuss the summary sheet of the first interview, to check whether the researcher's interpretation of the interviewee's account was correct, and to explore some of the transfer pricing examples in more detail.

7.3.1.1 Coding the Pilot Interviews

The pilot interviews provided an opportunity to gain some experience into how to code. Prior to the open coding of the pilot interviews an expert in the grounded theory approach (based in the School of Occupational Therapy at the University of Southampton) was consulted to verify that both the intended approach and the progress to date followed a sensible rationale[314].

All the concepts were coded on a detailed line-by-line basis. According to Strauss and Corbin (1990) "Generating your categories early through line-by-line analysis is important because categories also become the basis of your theoretical sampling. They tell you what to focus on in your next interview or observational site, and give you some idea of where you might go to find instances of the phenomenon to which the category refers" (p73).

For the first interview, the transcript was made available and independently coded by two colleagues (who each use grounded theory approaches in their fields of research interest - Occupational Therapy and Management Control respectively). This exercise was particularly useful and reassuring at the pilot interview stage because it generated no material differences in the coding. As might be expected, the occupational therapist did not attach the same (in vivo or technical) names to the various categories, but she identified broadly the same concepts. Cook and Barry (1995) carried out a similar check when three faculty colleagues, experts in qualitative research, examined their fieldnotes to provide checks on themes and coding schemes and found no appreciable differences in the data identified.

Initially, one of the most difficult parts of the coding process was to understand how to identify properties of categories and then dimensionalise them. The thought process necessary for this coding technique required practice and thorough immersion in the data. Throughout the open coding of the pilot interviews, it was necessary to continually revisit earlier interviews and pages of the same interview to question existing/new categories. At this stage, existing categories were renamed and reconsidered on a regular basis to incorporate new properties and dimensions on a similar theme.

[314] The same person was consulted about both the open and axial coding stages of the main case study.

7.3.1.2 Confirmation from the Interviewees

After every interview, the interviewee was sent a 2-page summary of the main issues discussed in the interview. In a covering letter, the interviewee was asked to read through the summary to check that the summary represent what he/she view to be true. In particular, the interviewee was invited to add, remove, or modify anything that has been omitted, overstated or misrepresented. In some cases, the interviewees faxed amendments, but in all cases the researcher telephoned the interviewee for their comments. This proved to be a very useful exercise to clarify and corroborate the researcher's understanding of what was discussed in each interview.

7.3.1.3 Consideration of Specialist Computer Packages

During the pilot study, two specialist computer packages for handling qualitative data were assessed - Nudist and Ethnograph. Each of these packages was demonstrated by different researchers (employing grounded theory), and in addition the latest version of Ethnograph was demonstrated by the writer of the product at a workshop. For a number of reasons, these packages did not appear to be appropriate to the current study :

- ***General observations*** : These computer packages do not assist (unsurprisingly) with either the coding or the analysis of the data. Their main strengths are the ability to search for codes across interviews or to automatically rename codes across interviews. In addition, if the research involves more than one researcher and includes high numbers of interviews, then the computer packages are more suitable. However, the current research was conducted alone and involved a manageable number of interviews. Therefore, for this type of research, the costs of using a specialist computer package far outweighed the benefits.
- ***Nudist*** : It appeared to impose a hierarchical structure on the categories which was not necessarily appropriate to either the data or the Strauss and Corbin methodology.
- ***Ethnograph*** : By chance or ill fortune, the workshop demonstration of the latest version managed to crash the computer network for a whole morning ! Therefore, rather than a hands-on demonstration of the product, the morning was devoted to a stream of assorted anecdotes delivered by the writer of the product. As grounded theory is a labour intensive approach, the prospect of added complexity did not appeal to the researcher.

7.3.1.4 Alternatives to Specialist Computer Packages

Rather than using a specialist computer package or punchcards (see Parker and Roffey, 1997), a different approach was adopted. Whenever an interview was coded, the researcher used three word processing files - Transcript file; Memo file; Coding file.

- ***'Transcript file'*** : For every interview there is a transcript file of the recorded interview.
- ***'Memo file'*** : This file contained all memos written during coding (a running account of how categories are defined; how different categories might be related; observations; thoughts; who to interview next; issues that need further

clarification; examples which might confirm or refute a possible relationship; 'things to do').
- *'Coding file'* : This file recorded every occurrence of a category / property / dimension and cross-referenced each occurrence through to the appropriate place in the relevant 'Transcript file'. Important quotes or examples of any category were also copied into this file. As this is a Word file, it supports the equivalent search facility as a specialist computer package.

7.3.2 Pilot interviews : Findings

7.3.2.1 Lessons from the Pilot Interviews

The pilot study provided some experience of a range of skills and procedures :

- An appreciation of how to record and transcribe interviews.
- An appreciation of how to conduct an unstructured, inductive interview. During these interviews it was possible to identify and practice a range of general/specific types of questions which were not leading and allowed the interviewee to discuss their experience of ITP[315].
- Coding experience. How to identify categories, properties and dimensions.
- An initial set of categories, some of which might be appropriate for the main case study (and some of which would not apply).
- Corroboration - the first interview was coded separately and independently by two other grounded theory researchers.
- Protocol experience - each interviewee was sent a 1-2 page summary of the interview to ensure the accuracy of some of the more important issues (See Appendix 9 for an example of a summary sheet for one of the open interviews for the main case study).

7.3.2.2 Outcome of the Pilot Interviews

After the initial four transcripts (from a total of six interviews) were coded the following emerged :

- 14 higher order groupings of categories. It was very useful and instructive to structure the numerous categories into groupings of similar categories. This process helps the researcher to understand the data and propose some initial relationships between different categories both at the dimensional level and the categories themselves.

[315] One of the interviewee discussed some general questions that appeared in a reported interview with a CEO concerning general corporate policy for opening up a discussion (and suggested that some parallels could be drawn for opening up a discussion on ITP policy) : What are the basic goals of the company ? What is the strategy for achieving those goals ? What are the fundamental issues facing the company ? What is its culture ? Is the company organised in such a way to support the goals, issues and culture ?

- 102 codes/categories. But, the problem with the 102 codes identified is that they are very general concepts. Further coding could 'tighten' up the relationships into richer categories with properties and dimensions[316].
- Although all the interviews prior to these first recorded interviews had helped to enhance general theoretical sensitivity, these first four transcribed interviews helped enhance theoretical sensitivity in other directions : "The purpose behind the use of questioning is to open up the data: think of potential categories, their properties and dimensions. They help you to ask questions more precisely in the next interviews, or of any pertinent readings in the literature. We are not implying that these questions represent what is 'really' in this data, rather we are referring to what future data collection and analysis could tell us, if we knew what questions to ask" (Strauss and Corbin, 1990, p77).

Category Groups	**Number of categories in Pilot Interviews**
Intra-Group Transactions	20
Tax Authorities	16
Profit Smoothing	15
Corporate Structure	10
Role of the Tax Department	10
APAs	7
External Advisors	7
Profit Location	5
Attitudes (about the company)	3
Complexity	3
Cost Accounting	2
Miscellaneous	2
Risk-Reward	1
Self-Assessment	1
TOTAL	102

Table 7-1 Coding : List of Category Groups and Number of Categories for the Pilot Interviews

7.4 Research question

The main objective of this grounded theory study was to conduct a longitudinal study to determine the way in which the ITP policy is implemented in a MNE, the affect of the policy within that MNE and the way in which the TPP is then managed.

[316] For instance, general attitudes to taxation were discussed in a number of countries. Originally two of these countries were coded as 'Italy' and 'Spain'. A richer, more conceptual coding scheme might code each of these countries with category 'country', property 'tax compliance' and dimensions ranging from 'poor to good'.

Theoretical sensitivity and the pilot interviews allowed the initial main grounded theory research question to be established. It is context-based, process-oriented and incorporates dynamism :

Initial Research Question : **"How do MNEs formulate their ITP policy ?"**

Following the interviews at the open coding stage, the research question shifted[317] towards :

Main Research Question : **"What is the affect of a MNE's ITP policy and how does it manage the ITP policy for specific cross-border intra-group transactions?"**

The two research questions are likely to be linked because as the ITP policy evolves it will affect the MNE operations in different ways and, in turn, these affects might shape future ITP policies. However, despite the linkages, it is more appropriate to consider the 'main research question' within a single organisation case study because it is possible to interview more managers (particularly at the sub-unit level) who are able to discuss the affects of the group policy and the way in which they manage it, but not the way in which the group policy is formulated. The 'initial research question' is thought more appropriate to a series of case studies across a number of different organisations from which it is possible to interview all the policy makers.

7.5 Open coding stage

During open coding, the interviewees were asked some broad questions about the structure of the group; the role of their company/department; their customers; internal versus external purchases; internal versus external sales; the nature of their products; current TPP; and the affect of the TPP on their company/department. In addition, where possible, the interviewees provided a tour of their warehouse / factory / office[318].

The researcher developed a case study protocol and list of open-ended case questions[319] which were used to provide prompts if the interviews dried up. These questions emerged as the research study progressed at the axial and selective stages (see Appendix 10 for an example).

The first interview was conducted with the finance director of the main company. One of his jobs was to formulate and implement an ITP policy. Based on discussions with the finance director, open sampling was used to identify managers from whom it would

[317] Rieple and Vyakarnam (1996) acknowledged a similar shift in their main research question : "The core questions asked did change slightly as the research progressed, in order to follow through apparently significant issues, an important aspect of this particular methodology" (p21).

[318] Similarly, Browning, Beyer and Shetler (1995) used observational data to support their interview findings.

[319] "The heart of the protocol is a set of substantive questions relating to the actual inquiry...the questions, in essence, are your reminders regarding the information that needs to be collected, and why" (Yin, 1994, p69).

be possible to elicit a range of views and experiences on transfer pricing. These interviewees were selected on the basis of Strauss and Corbin's (1990) views on open sampling : "The aim of sampling here is to uncover as many potentially relevant categories as possible, along with their properties and dimensions...at first, we are open to all possibilities and it is this openness, rather than specificity, that guides initial sampling choices" (p181).

The first recorded interview was coded on a detailed line-by-line basis. Then 3 weeks later this interview - the initial entry interview - was recoded to ensure and confirm code-recode reliability (Slagmulder, 1997). In addition, it was recoded on more of a sentence or paragraph basis. According to Strauss and Corbin (1990), "This approach to coding can be used at any time, but is especially useful when you have several categories already defined and now want to code around them" (p73). For the subsequent interviews, a constant comparative method was employed to code each interview : "while coding an incident for a category, compare it with the previous incidents in the same and different groups coded in the category" (p106).

Informed by the structure already generated by the pilot interviews (14 groupings containing 102 codes), this stage of coding went further to try to dimensionalise all the categories identified in the first interview and fit them into the framework developed in the pilot study. This procedure resulted in additional categories, but all the categories in the first interview (both old ones from the pilot study and new ones) were attributed sets of properties and dimensions. Even at this stage it is obvious that many of the categories which emerged in the pilot stage were not relevant to the main research question of this case study.

Following the open coding of the 6 initial interviews (see Table 7-2), 10 'groups' of categories were identified incorporating 50 categories. The majority of the groups and categories identified in the pilot interviews were discarded for the grounded theory case - although some of the categories in the External Advisors, Taxation and Transfer Pricing Policy 'groups' remained. This is entirely in accordance with Strauss and Corbin: "As open coding proceeds, recollect that you make comparisons and ask questions about the data. These questions, and the conceptual products of comparisons that emerge, will then be added to your original list of questions and areas for observation....Consequently, some concepts with which you entered the field will prove to be irrelevant, and therefore are discarded, modified, or replaced by those that arise during the research" (p182/183). The whole process of identifying the groups of categories in Table 7-2 provided the researcher with some valuable insights into the data. In addition, when the new interviews at the axial coding stage were open coded, 4 new categories emerged (and 16 new properties for existing categories). Table 7-2 shows the groups and the number of categories in each group :

Category Groups	Number of categories Open Interviews	Number of categories Open & Axial Interviews	Additional categories Open -> Axial Interviews
Business Characteristics	10	10	0
Corporate Structure	6	6	0
External Advisors	3	3	0
Final Product	4	4	0
Intra-Group Transactions : Goods	4	4	0
Intra-Group Transactions : Other	4	5	1
Management Tools	6	6	0
Miscellaneous	2	4	2
Taxation	4	4	0
Transfer Pricing Policy	7	8	1
TOTAL	50	54	4

Table 7-2 Open Coding : List of Category Groups

Each category has one or more properties which all have dimensions. Table 7-3 provides information on the properties and dimensions of 3 categories to illustrate the procedure.

Category	Property	Dimensional Range
Product Characteristics	Quality	Low - High
	Specificity	Low - High
	Sales price	Low - High
	Level of service	Poor - Good
Affect of Transfer Pricing Policy (TPP)	Disincentive affects	Low - High
	External purchases	None - All
	Impact of TPP	None - Major
	Frustration	None - Immense
Targets	Adjusted for TPP	Not at all - Completely
	Number of factors	None - Many
	Success in meeting targets	Not very successful - Very successful

Table 7-3 Open Coding : Examples of 3 categories (with properties and dimensions)

7.6 Axial coding stage

At the axial coding stage the idea is to build on the initial open coding and produce a richer, conceptually dense framework using paradigm models. These models connect categories and sub-categories by showing their relationships. Strauss and Corbin's paradigm model identifies causal conditions of a phenomenon, the phenomenon itself, the context of the phenomenon (its properties and dimensions), intervening conditions (which are broad/general conditions), action/interaction strategies (to manage the phenomenon), and consequences. All the time, these relationships need to be verified against the underlying data.

Cottingham and Hussey (1996) provide a good description of what the axial coding stage involves :

"At this stage, the *researcher will construct "mini-theories": postulates about the relationships that might exist within the data and which need to be verified.* Although the overall theoretical framework will not be discovered during axial coding, the mini theories can be incorporated into, and form part of, the overall paradigm model that is being developed alongside the research" (italics added, p166).

The six interviews conducted at this stage (about 6 months after the first tranche of interviews) were selected by the researcher on the basis of the initial round of open interviews. The sampling is based on "uncovering and validating those relationships" in the paradigm model. The specific approach adopted was to "purposefully choose persons, sites, or documents that maximise opportunities to elicit data regarding variations along dimensions of categories, and that demonstrate what happens when change occurs" (p186). To achieve the stated objective of the sampling, three of the initial interviewees were reinterviewed[320] [321] and seven new interviewees were selected[322] (see table 6-5).

The transcripts of each of these interviews (both repeat interviews and new interviews) were open coded first to determine whether the existing categories (and properties) are sufficient to cater for these new data. This coding process generated no additional 'groups of categories', 4 additional categories and 15 additional properties.

Table 7-4 provides information on the number of properties describing each category. In addition, the table quantifies the number of these properties which recur. This quantification is a subjective assessment based on a combination of the number of times a property appears in all the transcripts and the number of interviewees which discuss that particular category / property. Although the number of interviewees is easy to validate, the number of times a category / property is mentioned is more

[320] I1 (interviewed on 2 separate occasions), I4 and I6 (see table 6-5).

[321] See appendix 10 for an example of an interview protocol used as a reminder when reinterviewing participants at the axial stage.

[322] I8,I10,I11,I12,I13,I14 and I15 (see table 6-5).

difficult to validate. For instance, one interviewee might have mentioned a property only once and contained within one sentence, whereas another interviewee might have discussed this property in depth over a number of paragraphs. It is possible that each incidence might have been counted as one occurrence. Despite this, table 7-4 provides an indication of the important / recurring groups, categories and properties.

GROUPS / CATEGORIES	No of Properties	Recurring Properties
1. BUSINESS CHARACTERISTICS		
COMPANY	5	0
CUSTOMER RELATIONSHIP	3	0
CUSTOMER DETAILS	4	0
CUSTOMER TYPE	1	1
ACQUISITION DRIVERS	3	0
ACQUISITION ACTIVITY	3	1
ACQUISITION INTEGRATION	1	0
PEOPLE	3	1
MARKET : COMPANY	2	0
MARKET CHARACTERISTICS	4	1
2. FINAL PRODUCT		
PRODUCT CHARACTERISTICS	4	2
PRODUCT SALES	3	1
PRODUCT MARKET PRICE	3	1
PRODUCT TERMS	1	0
3. CORPORATE STRUCTURE		
SUBSIDIARY DRIVERS	4	3
SUBSIDIARY - OPERATIONS	5	0
SUBSIDIARY RELATIONSHIP	4	1
GROUP PERFORMANCE	2	0
DEPARTMENTAL STRUCTURE	2	0
CONTROLS	2	0
4. TRANSFER PRICING POLICY		
CHANGE OF TP	1	0
AFFECT OF TPP	4	3
DETERMINATION OF TPP	3	1
DEPARTMENTAL RELATIONSHIPS	4	3
ADMINISTRATION	6	5
INTERNAL ISSUES	3	3
EXTERNAL ISSUES	3	1
DOCUMENTATION	2	0

5. TAXATION		
TAX AUTHORITIES	3	0
TAX RATES	4	0
COUNTRY CONFLICT	1	0
TAX AUDIT	1	0
6. INTRA-GROUP TRANSACTIONS - OTHER		
ENGINEERING	1	0
MANAGEMENT CHARGES	3	0
MACHINERY TRANSFER	2	0
FINANCING	2	0
INTANGIBLES	1	0
7. INTRA-GROUP TRANSACTIONS - GOODS		
MANUFACTURED GOODS	6	2
STANDARD GOODS - INSIDE COMPANY	7	5
STANDARD GOODS - OUTSIDE COMPANY	6	2
STANDARD GOODS - AUDIT ISSUES	2	1
8. EXTERNAL ADVISORS		
TAX ADVISORS	4	1
AUDITORS	4	0
PUBLICATIONS	1	0
9. MANAGEMENT TOOLS		
COST ACCOUNTING	1	1
MANAGEMENT ACCOUNTING INFO	2	1
BUDGETING	4	0
BONUS SCHEME	2	1
PRP	2	0
TARGETS	3	3
10. MISCELLANEOUS		
RISK/RETURN	1	0
EXCHANGE RATE	2	1
EMU	1	0
TARIFFS	1	0

Table 7-4 Open Coding & Axial Coding : Analysis of each category's properties

Table 7-5 provides a closer inspection of one of the categories from Table 7-4, by illustrating the properties and dimensions of 'Affect of Transfer Pricing Policy'. Consider the first property - 'disincentive affects'. This property is mentioned 15 times during the first round of interviews, 22 times during the first and second round of interviews combined, and in a total of 8 different interviews (i.e. by at least 8 different interviewees)[323].

CATEGORY : AFFECT OF TRANSFER PRICING POLICY				
Properties	*Dimensions*	*Open code mentions*	*Open & axial code mentions*	*Number of interviews*
Disincentive Affects	Low - High	15	22	8
External purchases	None - All	16	27	8
Impact of TPP	None - Major	9	22	7
Frustration	None - Immense	3	6	4

Table 7-5 Analysis of the properties of the 'Affect of the Transfer Pricing Policy' category

7.7 Axial Coding Paradigm Models

At the axial coding stage, three main paradigm models were developed. These models are the result of frequent iterations with the data and interviewees, using an evolving process of redesigns, modifications and a 'back to the drawing board' approach. These paradigm models represent complex attempts to illustrate the relationships between various categories. Strauss and Corbin (1990) have stated that "in developing a grounded theory we are trying to capture as much of the complexity and movement in the real world that is possible, while knowing we are never able to grasp all of it" (p111). The three axial paradigm models consider the "Affect of the TPP", "Determination of the TPP" and "Foreign subsidiary operations".

One example of the continual reiterations to design the paradigm models appears in paradigm model 2. 'Number of determinants' is a property of 'Determination of TPP'. Following discussions with interviewees, it became apparent that the categories within the Final Product group (see tables 7-2 and 7-4) are subsumed within the 'Number of determinants' property, representing some of the actual determinants.

Each of these models is summarised below and then presented later in terms of how the categories (and their properties and dimensions) fit into the model along with a

[323] For the purposes of these quantifications, if I1 discussed 'disincentive affects' in both the open and axial interviews, this is counted as 1 interview. Similarly, if both I11 and I12 discussed 'disincentive affects' in the same interview, this is counted as 1 interview. Therefore, on this basis, to prevent double counting of repeat interviews, the maximum number of 'interviews' in table 7-5 is nine (see also table 6-5).

brief description of each model. Of the three paradigm models, "Affect of the TPP" develops into the story line at the selective coding stage subsuming some of the categories and relationships presented in the second and third paradigm models. *Given the direction of the emergent story line and substantive theory which is grounded in the data in chapter 8, paradigm model 1 is supported by a number of quotes from interviews but paradigm models 2 and 3 are summarised very briefly.*

Table 7-6 refers to the categories only (not the properties and dimensions) - some categories appear twice in the paradigm models but in relation to different properties[324].

	Paradigm Model 1	Paradigm Model 2	Paradigm Model 3
Causal Conditions	Acquisition Activity; Market Characteristics; Subsidiary Relationship	Acquisition Activity; Acquisition Drivers; External issues; Standardised Goods - Audit Issues	Company Reputation; Market Characteristics; Customer Type; Customer Details.
Phenomenon	**Affect of transfer pricing policy**	**Determination of transfer pricing policy**	**Foreign Subsidiary operations**
Context	Disincentive affects; External purchases; Impact; Frustration	Number of determinants; Relationship to market price	Margins; Importance of profit maximisation; Level of incentives
Intervening conditions	Departmental relationships; Targets; Subsidiaries; Change of transfer pricing policy.	Group performance; Departmental relationships; Standardised Goods - Audit Issues	Exchange rate; Affect of transfer pricing policy; Manufactured goods; Product characteristics
Actions	Administration; Management Accounting Information	Administration; Change of transfer pricing policy; Budgeting/Targets	Manufactured goods; Standard goods (inside company); Departmental relationships
Consequences	Internal Issues	People; Departmental relationships; Documentation; Internal Issues; External Issues	Standard goods (inside company); Standard goods (outside company); Subsidiary operations; Subsidiary relationship

Table 7-6 Summary of the three axial paradigm models.

[324] In relation to developing a paradigm model for the story line of one of their studies, Strauss and Corbin (1990) have noted similar dual roles of some of the categories : "'Biography' would be kept as a secondary concept, this phenomenon acting both as a condition to management and in turn affected by management" (p122).

7.7.1 Paradigm Model 1 : The Affect of the Transfer Pricing Policy

7.7.1.1 The Paradigm Model

<u>CAUSAL CONDITIONS</u>	
Acquisition Activity :	**Level (Highly acquisitive)**
Market Characteristics :	**Level of competition (high)**
Subsidiary Relationship :	**Competitive in the market (Not very)**
<u>PHENOMENON</u>	**<u>PROPERTIES (CONTEXT)</u>**
AFFECT OF TPP	**Disincentive affects (high)**
	External Purchases (-> all)
	Impact of tpp (-> major)
	Frustration (immense)
<u>INTERVENING CONDITIONS</u>	
Department Relationship :	**Previous agreements (some)**
	Level of negotiation (low)
	Proportion of intra-group (high)
Targets :	**Adjusted for tpp (not at all)**
	Number of targets (few)
	Success in meeting targets (few)
Subsidiaries :	**Margins (low)**
Change of TPP :	**Timing of change (bad)**
<u>ACTION</u>	
Administration :	**Level of exceptions (high)**
	Need for exceptions (great)
Management Accounting Info :	**Availability (Widely available)**
	Understanding (Good)
<u>CONSEQUENCES</u> :	
Administration :	**Time consuming (high)**
	Policy (complex)
Internal issues :	**Rationale (good understanding)**
	Level of support (total)
	Equity (fair)

Figure 7-2 Paradigm Model 1 : Affect of TPP

7.7.1.2 A Description of the Paradigm Model

The paradigm model is described here and supported by a selection of extracts from interviews.

CAUSAL

For the TPP to become an issue, one of the causal conditions is that there might have been acquisitions of subsidiaries (leading to an increased potential for intra-group transactions). In addition, if either the market as a whole is very competitive and/or the subsidiary is struggling to compete, then this will focus attention on affects of the TPP.

"But whichever country you go into fastenings is very very competitive.. and people buy world-wide. That's what they are up against. So if they can't buy at the Far Eastern price from us, they have to do it themselves, because the neighbour competitors will be doing exactly that" (I2).

"Local business is under immense margin pressure at the minute, and transfer pricing becomes even more of a headache" (I2).

PHENOMENON

Once pressure is put on the subsidiary's profitability, the affect of the TPP might include disincentives; increased external purchases from external suppliers even though the stock might be available in the group; a certain degree of frustration; and its impact in general could be major.

"And what incentive do we have to our trading divisions to buy that stock if whatever it is is close to the buying price anyway and you stick 15/20% on top?" (I6).

"It could be detrimental to your business..it could be a major part of your business. We could be putting money outside our own company for stock we've sitting on our shelves" (I8).

"I am sitting upstairs..it is a £7,000 order to me, and its for purely Hank product, and I'm sitting upstairs saying 'is it worth me taking it ?' Which is wrong. There's something wrong with that if you are in that situation. A £7K for anybody is a good piece of business. But previously I would have made about £2,500 on it, now I'm maybe going to make £1500 on it"(I5).

INTERVENING CONDITIONS

The intervening conditions are those conditions which might compound the affect of the TPP: according to Strauss and Corbin "they facilitate or constrain the strategies taken within a specific context" (p96). The following represent some of the main intervening conditions :

Department Relationship :

- Did the subsidiaries deal with each other before the acquisition ? If so, is the TPP the same as/ different to the pre-acquisition price and will one party 'lose out' as a result of the acquisition? Alternatively, the subsidiaries might not have bought from the group before on the grounds of price (i.e. the products might have been too expensive).
- In principle, are the subsidiaries able to negotiate with each other ? Do they negotiate over price in actuality ? Which deals do they typically negotiate over ?
- What is the proportion of intra-group transactions ? If it is high, then the TPP could be a major concern.

"So previously we were selling it to Magne Bjorlo, they were then selling it on to the end customer, then all of a sudden we buy them and they become part of the group, we lose all the profit from the job. But it was mutual agreement" (I3).

Targets :

- What are targets actually based on - is it purely profit or does it recognise other factors as well ? Do recent acquisitions have to achieve a certain level of profit to earn deferred consideration? Is this based on profit alone?
- Are the targets adjusted for the impact of the TPP at all ? If the targets are not adjusted then do the Management Accounts recognise this fact?
- Finally, if the subsidiary smashes its targets regardless of the TPP, then the TPP is likely to take on less importance.

"They are going to say why should we make the sale if you are going to make the profit, we have got to find another way possibly of measuring them" (I3).
"..they each (subsidiary) want to maximise profit and they have directors who are in charge of maximising their profit" (I1).

Subsidiaries :
Linked to the success in meeting targets : are the subsidiaries showing high or low margins ?

"He was one of the ones, he smashed his target by 60% or something, so it (the TPP) had no relevance on it at all" (I1).

Change of TP :
Whenever a new TPP is introduced, the timing needs to be handled very carefully. Does the TPP coincide with the new budgets so that its affect can be built into each department's budget and disruption can be minimised?

"And that started on April 1 last year. It could have come in earlier but it didn't make sense..it would have affected his budget in Norway and mine over here" (I10).

<u>ACTION</u>
There appear to be two main strategies for managing the 'Affect of TPP' under a specific set of conditions :

- **Administration** - where necessary there should be some mechanism for dealing with exceptions. Therefore there might be a need for exceptions and the level of exceptions might be high.
- **Management Accounting Information** - Is information widely available and, more importantly, is it properly understood? In particular, if profits are down due to TPP then is this message conveyed?

"..so those five areas within 22 TR business units are probably the five where ideally there should be an exception to the ruling, because again it does affect our trading capabilities and our competitiveness" (I2).

CONSEQUENCES

The ultimate consequences of successful strategies to handle the TPP is that the TPP will be well understood, supported and perceived as fair. However, the cost of achieving this success (perhaps through exceptions to the general rule) might result in very time-consuming and complex administration.

> "Because it wasn't fair.. that was a big exception, it was a big contract and it didn't make sense to do cost plus 20 from Hank their machine capacity is at maximum, why should they do something at 20% when they could do it somewhere else ? So you had to give them the incentive, to the group it made sense because its a million pound a year contract" (I1).

7.7.2 Paradigm Model 2 : The Determination of the Transfer Pricing Policy

7.7.2.1 The Paradigm Model

CAUSAL CONDITIONS

Acquisition Activity :	Level (Highly acquisitive)
Acquisition Drivers :	Location (Important)
External issues :	Tax authority interest (high)
External issues:	Supportable transfer pricing policy (With difficulty)
Standardised Goods - Audit Issues :	Materiality of inter-group transaction (-> High)

PHENOMENON	PROPERTIES (CONTEXT)
DETERMINATION OF TPP :	No of determinants (high)
	Relationship to mkt price (different)

INTERVENING CONDITIONS

Group Performance :	Awareness (High)
Departmental Relationships:	Previous agreements (Many)
Standard Goods - Audit Issues:	Elimination of unrealised profit (with difficulty)

ACTION

Administration :	Need for exceptions (great)
Change of TPP :	Timing of change (good)
Budgeting/Target :	Adjusted for TPP (no - completely)

CONSEQUENCES :

People :	Motivation (high)
Departmental relationships:	Proportion of intra-group (high)
Documentation :	Amount of detail required (extensive)
Internal Issues :	Level of support (total)
External issues :	Supportable transfer pricing policy (With ease)

Figure 7-3 Paradigm Model 2 : Determination of TPP

7.7.2.2 A Description of the Paradigm Model

CAUSAL CONDITIONS

One of the reasons that a company might review its TPP is because there might have been an informal/formal enquiry from the Inland Revenue about the nature of its TPP. One potential reason for the initial enquiry from the Inland Revenue might be triggered by the acquisition of foreign subsidiaries (possibly compounded by lower corporate tax rates in the countries of acquisition) and the existence (or prospect) of material intra-group cross-border transactions. If a company finds it difficult to support its existing TPP then it becomes necessary to review (or possibly determine for the first time) what its TPP should be.

PHENOMENON

When determining the transfer price, a range of factors will need to be considered and in particular the relationship of the transfer price to the market price and whether any differences can be accounted for. The range of factors that might need to be considered include the characteristics of the product in question (in terms of quality, specificity, sales price, and level of service) and whether the company can demand different prices in different markets.

"You can sell a machined good to customer A at one price and to customer B at a different price, and I mean substantially different prices....price is what the market will bear and it depends on your customer" (I9).

"Oh, yes, the market price definitely varies from country to country. We know what it is pretty much over here, as far as the UK's concerned. As far as the exports are concerned it varies, like Italy and Holland are a lot cheaper, the market price is a lot less than you would get in the UK. France is on a similar par to us. Scandinavian countries tend to be slightly higher, but then everything else in Scandinavia is slightly higher than the rest of the world anyway. So it does vary. Germany is very much on a par with us. So it really does vary where you go as to what you can get for the product" (I4).

INTERVENING CONDITIONS

Standard Goods - Audit Issues:

As an additional consideration, the TPP might make it easier to eliminate unrealised profit at the end of each accounting period. Although this is not a major consideration, it is something which could be taken into account at 'the edges'.

Group Performance :

Similarly, an awareness about the group performance means that the TPP should, where possible, help to achieve optimum performance (in terms of commerciality).

Departmental Relationships :

One of the ways in which Trifast has grown has been to acquire companies it dealt with previously. Whilst this means that Trifast knows about the management of the new acquisition and the new acquisition understands the 'Trifast way', there will be implications with regards to the pricing of goods which were supplied prior to acquisition.

ACTIONS

There are a number of actions following on from the determination of the TPP.

Administration : There will probably be a need for exceptions in certain circumstances. There must be a mechanism for ensuring that these exceptions can be agreed (and fit into the TPP as a whole). Related to this, the Inland Revenue are placing more onerous requirements on companies to document and support their TPP, particularly when exceptions are in evidence (Inland Revenue, 1997a).

Change of TPP : The timing of any changes in TPP needs to be handled carefully to ensure that they are not counterproductive (e.g. making all existing budgets infeasible) and also to ensure that the management implementing the policy does not lose the respect of the employees.

Budgeting/Target : An additional action which needs to be considered is the adjustment of targets for TPP to acknowledge that increased intra-group sales might reduce a subsidiary's profit margins but increase the performance of the group overall.

CONSEQUENCES

There are a number of consequences resulting from the series of actions - some of these might be achieved (but it might be very difficult to guarantee all of them - they might be mutually exclusive in some cases) :

- Related to the initial causal conditions, the company needs to be able to support the TPP with regard to Inland Revenue interest.
- Wherever it is commercially appropriate, the group might want to ensure that the proportion of intra-group transactions is high. In other words, if it is in the group's best interests to buy/ sell internally then the TPP should not make this option unattractive.
- From the internal dynamics viewpoint, people should not be demotivated (in other words motivation should remain high) and the TPP should be supported fully within the group.
- Finally, if the TPP permits exceptions then there will probably be related documentation requirements.

7.7.3 Paradigm Model 3 : Foreign Subsidiary Operations

7.7.3.1 The Paradigm Model

<u>CAUSAL CONDITIONS</u>	
Company :	Reputation (small...serious player)
Market Characteristics :	Level of competition (high)
Customer type :	Size (blue-chip)
Customer details :	Range of customer base (narrow..wide)
<u>PHENOMENON</u>	<u>PROPERTIES (CONTEXT)</u>
FOREIGN SUBSIDIARY OPERATIONS	Margins (low) Importance of profit max (high) Level of incentives (high)
<u>INTERVENING CONDITIONS</u>	
Exchange rate :	Impact (high)
Affect of transfer pricing policy:	Impact (major)
Product Characteristics :	Specificity (Low...High)
Manufactured goods :	Available capacity (0% - 100%)
<u>ACTION</u>	
Manufactured Goods :	Level of transfer (low)
Standard Goods (Inside company)	Level of transfer (low)
Departmental relationships:	Proportion of intra-group transactions(low)
<u>CONSEQUENCES</u> :	
Standard Goods : (Outside company)	Purchase volume (low...high) Lead times (high) Incremental costs (high)
Standard Goods : (Inside company)	Levels of duplication (high)
Subsidiary Operations :	Margins (high)
Subsidiary Relationship :	Relative importance of group profit (low)

Figure 7-4 Paradigm Model 3 : Foreign Subsidiary Operations

7.7.3.2 A Description of the Paradigm Model

<u>CAUSAL CONDITIONS</u>

If the subsidiary is operating in a competitive market then there are likely to be pressures on the profit margins. The pressures are more intense when the subsidiary has (or is trying to win) large customers / accounts. To ward off competitors the margins on the account must be fairly tight. Also, in Southern Ireland the small accounts (as well as the large accounts) are very competitive. Much will depend on the reputation of the Trifast group (from the customer's perspective) and the customer base (e.g. does the subsidiary rely on 1 large account ?).

PHENOMENON

These causal conditions might lead to reduced profit margins. However, the subsidiaries' performance and the subsidiary managers' level of incentives are based on an emphasis on their profit figure (i.e. profit maximisation). Therefore, if the profitability of the subsidiary is low then the subsidiary must adopt the necessary strategies to improve their profitability.

"We are very highly targeted and monitored in all the subsidiaries. They are driven by their sales, their gross margin, their contribution" (I1).

"We've had to bear in mind as well that TR Formac are a business unit in themselves and to be effective to the Trifast group they have to be profitable, and that again is where it makes it much more difficult. Why should we be losing out and them be gaining, but similarly why should they be losing out and us gaining?" (I6).

INTERVENING CONDITIONS

A number of factors bear on the action/ interaction strategies
Exchange rates : with strong sterling it puts pressure on foreign distributors buying from the UK (e.g. Ireland; Norway)
Capacity constraints : if the manufacturers are operating at full capacity, they can afford to be more selective over whether to sell internally or externally. Therefore, is there available production capacity ? Is the required volume too high or too low ? What is the likely level of future demand ?
Product characteristics : the distributors are likely to have more choice over sourcing arrangements for standard products, but in some cases (e.g. proprietary products) the end customer will specify that they require a specific TR product. Also, is the product actually available (i.e. in stock) within the group ? If it needs to be manufactured, how long will it take?
Affect of transfer pricing policy : finally, if the profit margins are very low and competition is fierce, the TPP is more likely to have a major impact.

ACTION

The subsidiaries are likely to source products (if they are distributors) or sell products (if they are manufacturers) at the best price possible. Often this will mean more external transactions and lower levels of intra-group transfers - both for proprietary products and standard products.

CONSEQUENCES

The ultimate consequence of the subsidiaries' actions might be improved margins (at the subsidiary level) but this might be at the expense of other indicators. For instance, less attention might be paid to the group profit as a whole ; separate sourcing by the subsidiary might lead to increased lead times, costs and duplication of stock ; also, even though the purchase volumes of the subsidiaries might increase in relation to specific suppliers, the purchase volumes and related discounts of the Central Supplies (which generates the most significant savings for the group) might fall as they supply less to the subsidiaries.

7.8 Selective coding stage

The interviews conducted at this stage (about 6 months after the axial interviews) were selected by the researcher on the basis of discriminate sampling. The sampling is "very direct and deliberate, with conscious choices made about who and what to sample in order to obtain the needed data...In discriminate sampling, a researcher chooses the sites, persons, and documents that will maximise the opportunities for verifying the story line, relationships between categories, and for filling in poorly developed categories" (Strauss and Corbin, 1990, p187). In particular, the objective of the discriminate sampling was to progress from the 3 paradigm models and develop the main story line.

At this stage, two interviewees had been interviewed previously at both the open and axial stages[325]; one person had been interviewed at the open stage[326] ; one person had been interviewed at the axial stage[327]; and five people were interviewed for the first time[328].

Although selective coding was described as a five stage process in chapter 5, the objectives of selective coding can be condensed further into two parts :

- A descriptive story line[329] of the central phenomenon (core category) needs to be developed;
- The descriptive story line needs to be restated in terms of a more conceptual and concise 'theory'. This theory must also be validated / grounded in the data.

In order to develop the story line, the axial paradigms were presented to a number of the interviewees for their comments. In particular, interviewees I1, I2, I6, I8 and I20 (see table 6-5) confirmed and refined the paradigm models. The paradigms illustrated in figures 7-2, 7-3 and 7-4 incorporate their comments, and the story line and 'theory' incorporates further discussion and analysis from the selective coding stage.

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325 I1 and I6 (see table 6-5).

326 I2 (see table 6-5).

327 I8 (see table 6-5).

328 I16, I17, I18, I19 and I20 (see table 6-5).

329 Salafatinos (1996a) illustrates a descriptive story line from a published grounded theory case study : "This research is about the organisational change process which occurred at Calor Gas as it implemented an ABC system. As a result of new pressures and stresses of higher performance targets and declining resources, a change mechanism was introduced to relieve this pressure. The organisation adapted and responded to change by learning the new language and techniques of ABC. Organisational growth and development seems to be a pervasive theme in the data. The case data hints at identifiable stages of organisational growth. The diversity of organisational members and the complexity of the new system resulted in a slow incremental change process. New knowledge was built on top of old which transformed the organisation from simple to complex. Unintended changes occurred which appeared to be the organisation's survival response to a new environment" (p348).

The core category for the current study is the "Affect of the Transfer Pricing Policy". The selective coding investigates what strategies are used by the MNE to handle the affects of the TPP in relation to cross-border intra-group transactions.

7.8.1 Descriptive Story Line

"This research studies the implementation of a TPP at Trifast plc and the affect of the agreed group policy on the group's operations. Trifast's main corporate strategies for growth are to satisfy customer requirements (e.g. managed systems; logistical suppliers), and to supply its large MNE customers in as many countries as possible by acquiring foreign manufacturers and distributors local to those MNEs. This strategy of foreign acquisitions has meant that cross-border intra-group transactions have become increasingly material and there is pressure from the Inland Revenue to formalise its TPP. Following implementation, the MNE has had to contend with a number of affects of the TPP. These affects include a range of disincentives, uncompetitive prices on intra-group transactions, and pressures on budgets and targets. Whilst the group's performance evaluation criteria, the profitability of subsidiaries (and their success/failure in meeting targets), and the relationship between sub-units all have some impact, several action strategies for handling the affects appear to dominate. For larger, specific contracts there appears to be scope for negotiating exceptions to the TPP. Despite increased administration and documentation, this approach improves motivation and level of support for the negotiated policy. For smaller, standard contracts the subunits can (and do) source from or sell to external parties at better prices. Despite improving the profitability of individual subsidiaries, this approach may lead to incremental costs and inefficiencies for the group as a whole."

7.8.2 The Conceptual 'Theory'

The descriptive story line needs to be restated in terms of a more conceptual, higher-level theory which can be used both to understand ITP within MNEs and to inform and direct future research. The grounded theory is illustrated in figure 7-5 . Each of the 'blocks' in the theory are explained briefly below :

7.8.2.1 Features of the Global Market

The features of the global market impact on the corporate strategies pursued by a MNE. The market for industrial fasteners is a very competitive market. The market is truly global and attractive customers include large computer and electronic MNEs with manufacturing sites located in many different countries. The importance of MNE customers is recognised by the customers' ability to arrange global sourcing and pricing deals with suppliers to ensure an efficient supply of good value industrial fastenings. In addition, these customers require ever-improving levels of service, stock availability and zero defect.

7.8.2.2 Corporate Strategy (Top Management decision)

In part, the features of the global market have necessitated that ambitious industrial fastener groups must pursue certain corporate strategies. To be successful, they must be able to satisfy global customers by having a global presence themselves : "If we can satisfy our top 10 customers, who are all global world-wide players.. everything else follows on" (I1).

One route to a global presence is by strategic acquisitions. In addition, industrial fastener groups must be more flexible and prepared to satisfy a variety of customer needs (for example running managed contracts).

Where industrial fastener groups have established and reputable proprietary products, they must be prepared to supply these products via their global network of distributors. This is likely to increase the levels of intra-group transactions.

As the global market is so competitive, the industrial fastener groups must continue to seek efficiencies through cheaper manufacturing locations or more efficient processes.

7.8.2.3 Implementing TPP (Top Management decision)

Following global expansion and increased distribution of proprietary products, the group might need to implement or review its TPP. The determinants of the TPP are likely to include considerations of commerciality, tax requirements and accounting requirements. Also, the timing of the implementation / change requires careful planning.

7.8.2.4 Affect TPP

Potential affects of the TPP include varying degrees of disincentive affects, uncompetitive intra-group transactions, and impacts on budgets and targets.

7.8.2.5 Identifying & Managing Intra-Group Transactions (Subsidiary Management decision)

Once a TPP has been implemented, the group must manage the affects of that policy. Day-to-day management of its affects are likely to be handled at the subsidiary level. First, the subsidiary managers must identify the characteristics of each transaction, or at least problematic transactions. Of the various elements, identifying intra-group transactions includes Product Characteristics[330] and Final Product Placement[331]. Second, the divisional managers must employ a tactic to manage these transactions. Available strategies include negotiation at divisional level leading to exceptions, and increased levels of external sourcing/ selling.

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[330] Product Characteristics is a set of characteristics including specificity; price; quality; volumes.
[331] Final Product Placement includes demand for the products and the differential prices.

7.8.2.6 Organisational (Dis)Equilibrium

Depending on the management strategies adopted by divisional management, there might be a trade-off between improved group profit versus improved subsidiary profit. Similarly, there might be a trade-off between higher administrative costs associated with internal transactions and higher incremental costs associated with external transactions. The nature of the management strategies are likely to influence whether there are increased levels of understanding and support for the TPP itself.

Finally, if divisional management is unable to manage successfully the affects of the TPP, top management might have to review the group TPP.

7.8.2.7 Intervening Conditions

There are a host of intervening conditions which might either exacerbate or limit the (negative) affects of a TPP. These conditions include the way in which management at any level is evaluated; the availability and understanding of management accounting information relating to the affects of the TPP; exchange rates; and considerations involving pre- and post-acquisition dealings.

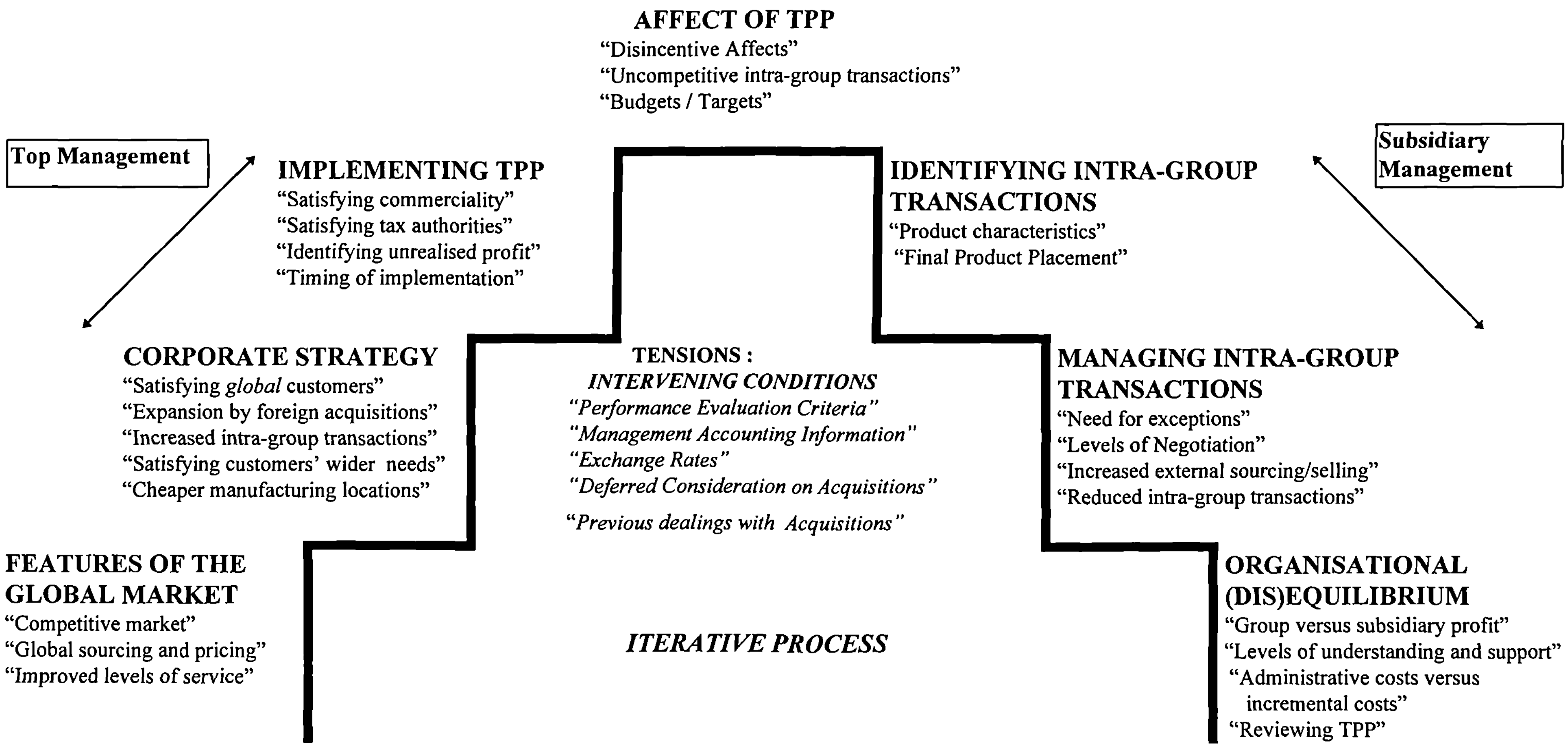


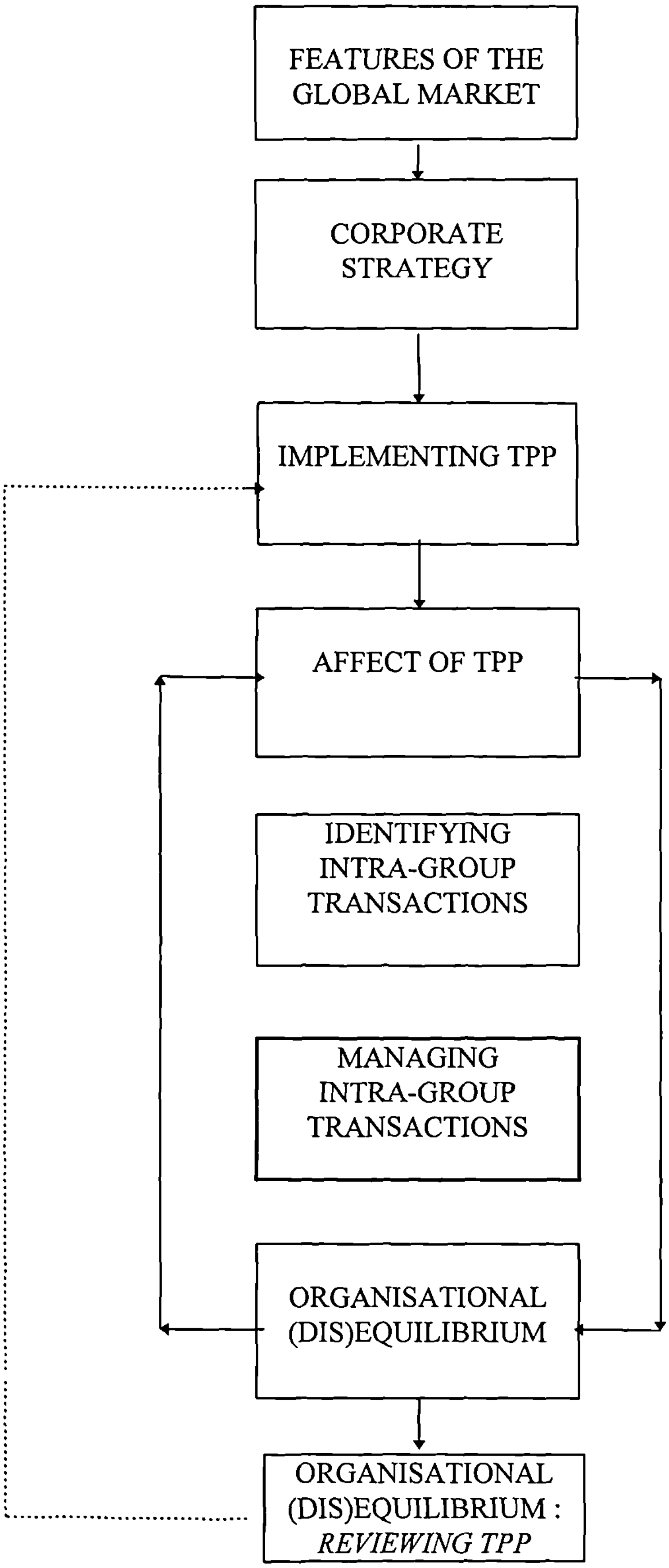
Figure 7-5 A Substantive Theory : How MNEs Manage The Affects of their ITP Policy

7.8.3 Iterations in the Change Process Model

Figure 7-6 describes the main iterations involved in this process change model. The iterations can be divided into three types :

- The regular iterative process involves the way in which subsidiary management manages the group TPP. This iteration starts with the Affect of TPP and concludes with the Organisational (Dis)Equilibrium.
- The less frequent iterations occur when the top management implements a new TPP arising from changes in the global market, the corporate strategy, or the way in which the TPP is formulated (e.g. having to satisfy new tax requirements).
- The third iteration occurs when the Organisational Disequilibrium is particularly disadvantageous to the group and the top management is forced to revisit the implementation stage and revise the group TPP or create exceptions for certain geographic markets or specific product lines. Top management might become aware of the need to revise the policy either through formal channels (e.g. variance reports) or informal channels (e.g. continual complaints from subsidiary management).

Figure 7-6 Iterations in a Change Process Model



7.9 Summary

Following an explanation about what a 'theory' actually entails, this chapter described the pilot study and the main stages of the grounded theory study. Three stages of coding and theoretical sampling were used to address the research question (which evolved as the study proceeded): "What is the affect of a MNE's ITP policy and how does it manage the ITP policy for specific cross-border intra-group transactions?"

50 categories were identified after the open coding stage and an additional 4 categories were identified at the axial coding stage. Three paradigm models ("Affect of the TPP"; Determination of the TPP"; and "Foreign Subsidiary Operations") were developed following the axial coding stage. After the third coding stage, selective coding, a descriptive story line and substantive theory (figure 7-5) emerged. Figure 7-6 illustrates that the model is a change process model which involves a series of iterations at different levels.

The following chapter grounds the substantive theory in the data. In particular, the theory is grounded in the five cross-border intra-group transactions identified in table 6-2.

8. GROUNDING THE THEORY IN THE DATA

8.1 Introduction

This chapter validates the substantive theory developed in figure 7-5 by grounding the theory in the each of the five cross-border intra-group transactions presented in table 8-1 (table 6-2 reproduced). This is a vital part of grounded theory research: "theories are always traceable to the data that gave rise to them" (Strauss and Corbin, 1994, p278) and "validating one's theory against the data completes its grounding" (Strauss and Corbin, 1990, p133). To recap, table 8-1 describes each of the five transactions and the sub-units dealing with either end of the transaction (i.e. both the 'buyer' and 'seller').

No.	Type of Transaction	'Seller' Sub-Unit	'Buyer' Sub-Unit	End Customer
Specific Transactions				
1	Assembling & supplying parts for Fire Alarms	TR Formac - Singapore & Malaysia	Contracts, TR Fastenings Ltd	1 main customer : Fire alarm manufacturer
2	Proprietary Fastenings	TR Fastenings Ltd - Northampton	Magne Bjorlo - Norway	1 main customer : Automotive
3	Proprietary Fastenings	TR Fastenings Ltd - Hank division	Magne Bjorlo - Norway	1 main customer : Automotive
4	Rivets	TR Fastenings Ltd - Edenbridge	Magne Bjorlo - Norway	Range of customers
General Transactions				
5	Standard Products	Central Supplies, TR Fastenings Ltd	Magne Bjorlo, Norway; TR Southern Fasteners, Eire	Computing; Electronics Industry

Table 8-1 Main Cross-Border Intra-Group Transactions

In the first specific transaction, TR Formac sources all the components locally (in Singapore and Malaysia), assembles the base units, and the main intra-group transaction is the transfer of the base units from TR Formac to Contracts (in the UK) which then supplies a managed service to the end customer. In the second and third specific transactions, the 'seller' manufactures the product in the UK and transfers them to the 'buyer' in Norway which then supplies a large contract to a key multinational automotive customer. In each of the first three specific examples, the 'buyer' operates a direct line feed (DLF) operation with the customer. In the fourth specific transaction, the 'seller' sources the rivets direct from a general fastener manufacturer in the UK and then transfers them to the 'buyer' in Norway to service a range of local end customers. In the general transaction, the Central Supplies bulk purchases standard products from the Far East, and then supplies these products to the rest of the group as and when required.

At the end of the chapter table 8-2, provides a summary of this validation process for each of the five cross-border intra-group transactions.

8.2 Common features of the substantive theory across the 5 intra-group transactions studied

The common features of the global market, corporate strategy, implementing TPP, and the intervening conditions are described in this section. Any features more relevant to a specific intra-group transaction are described in the relevant section of this chapter.

8.2.1 Features of the global market

The interviewees have stressed the competitiveness of the market, the move to global sourcing and pricing, and the pressures for improved levels of service.

"Local business is under immense margin pressure at the minute, and transfer pricing becomes even more of a headache" (p11/12 I3-open)[332].

"But in the last two years competition has been fierce. Prices for the electronic industry have been dropping as the OEMs become more global with global pricing and all the rest of it" (p16 I11-axial).

"Oh yes, it has changed dramatically over the last 2 or 3 years. So whereas Trifast might have been getting a nice 40/50 % 4 or 5 years ago, they won't get it now" (p17 I11-axial).

These views about global sourcing were echoed in a review of Trifast plc and its position in the fasteners' market :

"The company is on a two-year deadline to finalise a big restructuring of its business. Companies such as Hewlett-Packard and Ericsson have told Trifast that it must snuggle up to their factories world-wide - and either take a lead role in managing many of its other suppliers or become an also ran" (Lawless, 1998, p9).

8.2.2 Corporate strategy

The main corporate strategy which relates to the specific intra-group transfers in particular (and notably examples 2 to 4 in table 8-1) is expansion by foreign acquisition to service the needs of the large MNE customers in different countries around the world (but particularly Europe) :

[332] The notation means that this quote by I3 is found on pages 11 and 12 of the open coding interview transcript.

" So it's probably gone from here to become the strategy which has then driven the acquisition. So before we won Xerox in Wales we bought the Wales company.... We bought that for Xerox, to supply Xerox. But that was Xerox coming to us. So that was driven. The Holland one was the reverse because having got Xerox down there we then fought for it and won Xerox in Holland and then went out to buy a company" (p17 I1-sel).

" It's definitely driving ... I mean the global side of it is what is driving us now. To grow up – we're £100 million turnover now, to grow in the UK by 10% just on new customers is near on impossible. But to grow by £10 million on the back of Compaq and Xerox, Hewlett Packard globally, is nothing. Take this Xerox one, there's £1.2 million straight in one account. So definitely it was our key growth area at the moment" (p15 I1-sel).

"I think that we need to acquire other companies not only in the UK but around the globe because not only does it open a lot of doors for us to sell our products into because they've obviously already got their own known market place in customers in their country. They can bring other things into our market that perhaps we can sell on as well" (I4-open).

Magne Bjorlo are pursuing this strategy with one of their main customers :

" I20 : That's Hydra Raufoss, they have plants in what is it, ten or twelve different countries, and they want to build a fastener supplier in every country, so that it will be the same. JE :So is Trifast likely to be that supplier? I20: It could be yes, absolutely. We are the main supplier now to Hydra Raufoss in Norway. We are delivering to Belgium and Sweden, we are working on Denmark, working on Germany, working on The States with Hank products. JE: And so it will be Hank supplying all of these? I20 : Not only Hank, also Northampton, also other... again Bulk Warehouse, if possible" (p20 I20-sel).

Two experts have acknowledged the importance of foreign acquisitions :

Ray Perry (Chartered Institute of Marketing) : "...To achieve global expansion, becoming 'local' is Trifast's key issue. It could partner other similar suppliers in other countries, merge with them, or acquire them....for Trifast acquisition seems to be the chosen route" (Lawless, 1998, p9).
Malcolm Gloak (31) "..Trifast is right that the next challenge is international expansion. Competitors have not been slow to spot this" (Lawless, 1998, p9).

But in addition to satisfying the specific needs of global customers, the group is also providing a logistical fastener service - offering the customer a package of services so that it is very difficult for the customer to change Trifast as the main supplier (this is very relevant to the specific transaction example 1) :

" I think we were driven by ... The global customers was almost pushed on us by accident. We went from being a fastening company, just selling nuts and bolts and dropping it off on people's doorsteps to a logistical fastening company which then we found, yeah, the deeper you get into the customer, right up to his production line, the more service you can offer and the harder it is to kick you out. And then by the fact that we got so good at that we then had them asking us to do other things. You then do other things, so suddenly we've fallen into we're not only fastenings we are offering the other services" (p15 I1-sel).

".. as we build a relationship and the business grows, what we would try and do is..they might come to us and say well we want you to look at..can you supply us with these products that we're buying from another supplier, but we want them on a faster management system. So what would happen there is that they would then speak to the people they were already buying from saying look, if you want to keep sending your products in here, you've got to do it via TR so like we would then say that the customer well fine we can do it but obviously you are going to have to pay more for it because the supplier's not going to give us any discount, so we'd have to put like a management charge on it for servicing" (I4-axial).

In a review of Trifast plc and its position in the fasteners' market, both the chief executive (Malcolm Diamond) and the group finance director (John Wilson) stressed the importance of being logistical suppliers :

Malcolm Diamond : "We willingly submit to being a customer-led organisation with regard to strategy. By the millennium, we must have more than a token presence in Asia and North America, while we continue to establish more logistics services in mainland Europe" (Lawless, 1998, p9).

John Wilson : "We've moved away from being a nuts and bolts producer to being a service provider. Most of our customers are saying : 'We have ten suppliers, but can you manage the other nine for us?' It means we're buying springs, pulleys, plastic ties and all manner of other products we knew nothing about, and then supplying them" (Lawless, 1998, p9).

Partnership sourcing is one of the corporate strategies which has resulted in increased levels of intra-group transactions of standard products held by the Central Stores (transaction 5) :

"Over the period we deliberately increased our stock levels to service the growing number of large partnership sourcing customers who demand ultra responsive deliveries of zero defect products at world competitive prices. Longer delivery lead times on imports and the availability of bulk discounts have also influenced this strategy" (Chairman's Statement, 1994 Annual Report and Accounts, p9).

8.2.3 Implementing the TPP

One issue that has been discussed is how to balance the requirements for commerciality, tax compliance and accounting for unrealised stock. These three considerations were reiterated at the selective coding stage as well - in particular, commerciality was crucial, tax compliance was also fundamental, any tax savings would be welcome but not if they affected commerciality, and accounting for unrealised stock was the least important of the stated considerations:

"I suppose in the order it is going to be the commercial view, then the tax view, and then the accountability" (p11 I1-open).

"The problem we have got with the accounting side is if we need to eliminate stock profit (unrealised)..if we don't have standard rates...we would have to go and look at each transaction" (p5/6 I1-open).

"And it doesn't come in at all from a tax, where the tax people think it comes in from a group point of view of lowering the tax rate. We've never at any point thought it makes far more sense to make all the profit on Apollo in Singapore because their tax rates lower. Because that completely affects the commerciality of our business and at the expense of, okay, we've lost out on tax saving" (p19 I1-sel).

"And the year ended 1996 was the first year that they questioned or asked about our transfer pricing policy. Our discussions with KPMG (tax advisors)..it has come about because of the fact that we have bought subsidiaries, and mainly because we have bought subsidiaries in countries that have got lower tax rate than ourselves"(p10 I1-open).

Another consideration is when to implement the TPP. The optimum time is at the beginning of a financial year so that each departments' budgets can be adjusted accordingly - but this is not always possible.

"This is running as of 1st April which meant that people like I10 could know roughly what he's going to sell to Magne Bjorlo and say, right, budget 20%, rather than budgeting 40%. The difficulty there I presume when you buy a company in mid year and you suddenly transfer onto transfer pricing " (p20 I1-sel).

"I think that it is. We haven't instigated change of selling prices during a financial year. Consequently it makes budgeting sensible and you don't get kicked in the teeth half-way through the year and try to explain month on month why you are getting variances on something that has changed" (p11 I10-axial).

8.2.4 Intervening factors

A number of intervening factors emerge from the case study including performance evaluation criteria, management accounting information, exchange rates, previous dealings with acquisitions and deferred consideration on acquisitions. Most of these intervening factors are discussed in more depth for each of the five intra-group transactions.

It is evident from a range of other sources (as well as in the interviews) that Performance Evaluation criteria play an important role within Trifast plc:

Collins (1992) found that "An important factor in TR's office routine is the use of performance charts. In some companies visited during my work, employees are very fearful of making such figures public. In all the most successful businesses I have visited, they are prominent, regularly updated and cause no embarrassment". It was also this researcher's experience when visiting a number of the locations that targets (and whether these targets were being met) were clearly visible.

"As the group relies heavily on the skills, knowledge and attitudes of its people to retain its competitive edge, the core structure is built around many small empowered teams bound together by well tried and tested key measurements of margin, liquidity, stock management, quality performance and customer care" (1997 annual report, p1).

The importance of performance evaluation is reiterated by the interviewees :

"..they each (subsidiary) want to maximise profit and they have directors who are in charge of maximising their profit" (p7 I1-open).

"'JE: So what are your targets and your performance evaluation ? Is that purely profit ?' I5: 'We're measured on key areas. Obviously we are measured on sales, purchases, gross profit, controlling overhead, and then our net profit" (p5 I5-open).

In relation to the acquisitions - particularly foreign acquisitions - it is evident that many of these subsidiaries were previously independent customers of the group. Therefore, it is important to recognise that if targets are based on performance prior to takeover, they might be impacted on if the pricing of transactions changes following the acquisition. This fact magnifies the affect of the TPP and how it is managed :

"the subsidiary companies I think, without exception, were customers of ours prior to acquisition" (p7 13-open).

8.3 Specific transaction 1 : intra-group transactions between Contracts and TR Formac

This is a one-off intra-group transaction which has evolved in a number of stages :

1. Contracts sourced (six) component parts from Europe for the base unit and delivered them to the customer which then manufactured the complete fire detector;
2. The customer determined that the units could be bought much cheaper in the Far East than they could be manufactured in-house. But the customer agreed that TR could supply the base unit for a price slightly higher than the Far East price (as a management charge). Initially, Contracts continued to source the components in Europe, shipped them to Singapore for assembly (exclusively for this one customer), then they were shipped back to Contracts to manage the contract with the end customer. At that time, the customer still manufactured in house as well. Therefore, Contracts had to supply the individual components to both Singapore and the customer.
3. Now, the components are sourced from Malaysia, the unit is sub-contracted to a manufacturer in Malaysia by TR Formac, and then TR Formac performs various quality control checks before shipping to Contracts to manage the contract with the end customer. This subcontracting generates a margin of about 20% (for TR Formac) compared to 32% for the other products which TR Formac actually manufactures. Even though TR is the sole supplier of the base unit, there is still a requirement for TR to supply component parts (as well) for other fire detector models that the customer continues to manufacture.

This particular intra-group transaction is very much an exception for TR Formac because the majority of their other production is sold to external customers (usually in the local market). At any one time it is estimated that there are only a handful of intra-group transactions representing perhaps about 20% of total sales, and this contract accounts for the majority of those transactions.

8.3.1 Features of the global market / corporate strategy

For this specific transaction, the original driving force was that customers (in general) require improved levels of service and Trifast has attempted to satisfy this particular customer's wider needs. In this example, the role of Contracts is to provide a managed system, sourcing the products direct from suppliers and delivering these products to the customer's production line, thus minimising the customer's stock requirements and invoicing. An integral part of the service is to ensure best quality products which never stop the customer's production line.

The main reason for sourcing the base units from TR Formac (in Singapore) is that it is a cheaper manufacturing location which also provides the group with access to the Singaporean local market. This was one of the reasons that TR Formac was acquired. Similarly, Contracts' role is assured because of the nature of managed systems :

"I mean we could sell the product directly to Apollo from Singapore, but they want a delivery service, they want it daily. So it needs two companies working in harmony to achieve it" (I19-sel).

8.3.2 Affect of TPP

From Contracts' perspective, one of the concerns about sourcing from TR Formac using the original TPP was that Contracts would not be rewarded for the amount of work that this contract requires to manage it in the UK (storage, packaging, deliveries, quality checking, telephone communication). The margins earned by the department would be reduced because the profits are be shared with TR Formac.

"Well, I don't have a problem in telling everybody I will not be proactively selling this service to our customers because until we get all the situation straight, we understand how it's going to be operated , and everybody else understands, then we would be making a rod for our own back" (p12 I6-open).

"To answer your question, the whole team feel completely demotivated about it!! Obviously, we are an extremely motivated team. Our targets mean a lot to each individual member" (p7 I6-open).

"I don't really appreciate the amount of time and effort that Singapore are putting in and whilst I'm sure we have their full commitment, I haven't been there, I haven't seen it, I don't know the set up, so I can't appreciate how much time and effort this takes up as part of their working week. Unfortunately I'm only seeing one side of the coin and I see everybody here moaning and groaning and pulling their hair out" (p16 I6-axial).

"Definitely, no further motivation to proactively go and source this type of business. Yes, it does need to be addressed because it is the only way that we're going to grow some of our new, some of our contract accounts, but at the moment we haven't progressed that far to have the transfer rolling smoothly enough to allow us to go and do that" (I6-sel).

The specific transaction has been a continual problem area for Contracts - not exclusively caused by the transfer price but in the view of Contracts is does contribute to the problems :

"All you have to do is look at the last 7 or 8 variance reports since I've been doing the job I've been doing, and every one of them has got Apollo base unit mentioned, which means something's not right there. I know it wasn't budgeted for last year, but we've been going since April now and it's still got it in the last 3 or 4 months" (I8-sel).

Similarly, TR Formac the manufacturers need to ensure that they receive adequate reward for intra-group transactions :

"But the one thing that surely pisses people off totally in manufacturing organisations is when they give you orders to make and they're not making any money on them" (I19-sel).

"I think there ought to be a totally flexible pricing policy, and then one should look at the position after a period of time and say, do we believe this to be fair? ..... At the moment it's a rate and that would kill the kindred spirit . It makes things neat for accountants, which is what they want. But there isn't reality of the world, it has to be invariably different. That's why I find the whole thing to be a nonsense. I don't find the concept a nonsense, the fact that we shouldn't be paying all our profits out to a lesser taxation scheme somewhere, that principle's fine. But what is a nonsense is you try to control it in an accountancy-style way. Trading's about, in affect, wheeling and dealing on prices, all sorts of different things. Take all that out of the equation and you haven't got much left" (I19-sel).

"That Singapore factory isn't keen on making them because it only makes 20% because of the transfer pricing policy. They're selling them over here at double the cost. Right? The UK here starved of production, because of transfer pricing policies. Because they aren't keen to do it. And when everything comes down to everything in business, it's about how much money people get really in business, and our business, are focused on absolutely, on profit related pay. Right? I've got good management out there, and I say OK, we want to hit the budget, we want to do this, and when we get there this is what we get. Sod this, I ain't making these for anyone else because otherwise we won't get there" (I19-sel).

"....And transfer pricing policy can kill business between each other. It can snuffle it right out by making it unattractive to do business with each other, by people not being happy. I mean guys in Singapore get bonuses based on their profit?" (I19-sel).

8.3.3 Identifying intra-group transactions

This particular contract is worth about £900,000 per annum to the group. Prior to the arrangement between Contracts and TR Formac (when Contracts were sourcing components in Europe and delivering to the customer), the fire detector contract accounted for about 18-20% of Contracts' sales. Since switching the sourcing to Singapore, this particular contract accounts for about 15% of TR Formac's total sales. The current customer requirement is for 100,000 units per month.

For this specific contract, the product characteristics (particularly price and quality) are driven by the customer. The way in which the contract has evolved has meant that the margins are low for this item and the two group companies have had to try to deal with that :

"JE: So would it be right in assuming that the uplift really had nothing to do with it. It's just a case of well we can manufacture it for a satisfactory price/cost? I6: It was led by the sales price. The customer said yes, we really like TR Fastenings...;At the moment in-house, we make it for 1 pound and we can buy it from the Far East for 80p. If you take all those costs out for us and all the extra work we're prepared to buy it from you at 90p. So the whole costing issue was led by the customer on the price he was prepared to pay for it. JE: So if by the time this was all filtered through you could make it for 60p, then 10% or 20% wouldn't have been an extra burden? I6: Yes... If we were making money we wouldn't question what Formac were making" (I6-axial).

From the manufacturing perspective, a number of product characteristics of general intra-group transactions are identified :

"You're looking at the best options, not necessarily the best price, it might be delivery, it might be quality, it might be other aspects" (I19-sel).

"Sure, it's quite obvious. If it fits in with what we are already running it is just added volume to our manufacturing, and we wouldn't mind accepting a low margin on it because the added cost is not going to cost a lot more to produce the additional quantity that they want" (I18-sel).

"If they can accept the lead time then this order is placed. If they can't accept the lead time then they'll probably go somewhere else to buy it" (I18-sel).

One distributor reported that :
"You've had cases where Telford have turned down things because the volume wasn't high enough. Which is another problem. It wasn't worth their while..shutting down machines..there wasn't enough volume. That probably occurs more often. We've had that particular case a couple of days ago where they didn't want to take it because the volume was too high" (p7 I13-axial).

8.3.4 Managing intra-group transactions

For the specific contract, the negotiations about intra-group prices have been conducted at a higher level than usual (Board of Directors' level) for a number of reasons - it was for a new type of product which TR has not done before (moulding; sub-assembly) and it represents a very big investment with one of TR's biggest customers.

For the specific intra-group transaction in question, the two subsidiaries have agreed to split the profit :

" Well I mean, in the pricing on that we basically split the profit on it, from start to finish. Like working out .... so each business gets half of it" (I19-sel).

"I mean basically what we do still is look at the end price of the customer, and say OK, if we're going to be making an amount of money, between making it and selling it, what's a fair proportion, who should get what?" (I19-sel).

" I think it's quite ridiculous to say split 50:50 but I think because we're talking about such a minimal amount of profit and they're making and we're not, it seems that if we split it 50:50, you know all fair in love and war. You know, sorry guys, but that's the decision that's been made. If we buy another product from them and they make 48 gross profit margin and we're only making 35, you know the best sales person gets the best price and that's fine. I wouldn't think about it in any other circumstances, I really wouldn't, because if we're getting a good cost price that enables us to sell it on at a good sales price, well that's life" (I4-axial).

However, both the Managing Director of TR Formac and the Group Purchasing Director have made it very clear that in general, intra-group transactions will only be agreed if they are profitable (compared to external sales), if there is spare capacity, or as a favour to another group company.

" I18: At the moment I think we are fully utilising our capacity. So we look at it, if there is more business coming our way, we just have to keep adding on to the factory. But at the present moment we are quite comfortable with what we have in terms of our manufacturing capacity. It is fully utilised at the moment. JE : OK. And what are the pressures from within the group to supply the group? I19 :.......As long as we are making a decent margin on it we would say yes we will take an order inter-group.......we are just one of the sources they can buy from....if they find our price attractive they will buy from us, if they don't find our price attractive they will go to Taiwan. So there is no hard and fast rule that they have to buy intergroup I guess" (I19-sel).

TR Formac will only accept to manufacture for the group if the price has been negotiated and is agreeable :

"If we stick to cost plus, then if we find the prices unattractive then we won't do the order. We'd rather go out and find customers who can pay out more money for our product" (I18-sel).

8.3.5 Organisational (dis)equilibrium

The message from the manufacturers in Singapore is that intra-group transactions (including the specific transaction here) will only be continued whilst they are profitable to TR Formac (regardless of the contribution to the group):

"All the time the profit's there I suspect they're happy. If the profit's not there, then we won't do it" (I19-sel).

There are also implications regarding sourcing decisions. For a similar arrangement, Contracts source some individual components from France for the same customer's production. These parts can also be supplied by Singapore - but they are more expensive to Contracts. There is a suggestion that Contracts should buy from Singapore instead but this is not an attractive proposition to them because (as well as cost) the quality control/ manufacture / scheduling is satisfactory with the French supplier. Also it is easier in terms of location dealing with France. However, this might be to the detriment of overall group profitability.

"I6 :So it's like a double sided knife really isn't it? There's a side that would keep it internally, the group profits from our internal purchases. Then you've got the other side of the coin ...... we've got an awful lot of supplier customer history and very often you find if it ain't broke, don't change it. You know, that's the sort of double side of... We know really the ethics that we should be changing to Formac, but... I8: David I mean the inter company side, fair enough, but if it's individual locations are suffering from it...I6: You know, cost and commitment and manageability, geographically" (I6-sel).

One associated cost of the specific contract is that it is very time consuming. TR Formac and Contracts operate on different databases which can't talk to each other. This means that there is additional manual paperwork documenting everything concerning the Apollo contract. This had been further complicated by an estimated 22/23 people working on the project on the UK side in the past- all with their own hand-written notes. Now the number of people has been streamlined in the UK.

8.3.6 Intervening conditions

Performance Evaluation is very important to both Contracts and TR Formac. Both units are highly motivated by sales and profit targets.

"You're talking about profit? (Yes) We're talking about bonus schemes I18. I was explaining earlier that your factory, it would have a budget, you have to meet that budget, and anything over that budget there's a bonus scheme worked out. So it's in the interests of everybody in Formac to produce a high profit, and it definitely isn't in their interest to produce intercompany work at low profit, because that will affect bonus, correct?" (I19-sel).

Management Accounting Information is also viewed as an important factor as far as Contracts are concerned. The management accounts appear to be widely available throughout the group and employees are encouraged to refer to them to assess performance (both of individual departments and the group as a whole). One of the concerns of the department is that the management accounts will not do justice to the performance and hard work of the department if TR Formac sources the component. Although the department will understand the reasons for any decline in margins, this will not be obvious to other departments or subsidiaries reviewing these accounts. TR encourages a competitive environment between departments and it would be highly demotivating if the main source of comparison and competition showed an apparent decline in performance.

8.4 Specific Transactions 2 & 3: intra-group transactions from Northampton to Magne Bjorlo (2) and Hank to Magne Bjorlo (3)

The main transactions from both Northampton and Hank to Magne Bjorlo are very similar - perhaps slightly different technologies, but for the same end customer and for similar usage. The relationship between the three parties is explained by I1 :

"It was actually Binx in Northampton that used to supply Magne Bjorlo with the bulk of their products, Hank never supplied a lot of product to Magne Bjorlo...We had a big contract that Northampton had with Magne Bjorlo, I10.. we had a big contract that he had that went into Magne then went onto a company called Raufoss that make bumper nuts that go into BMWs and things. Raufoss then did a full inspection and for whatever reason decided they didn't like our Northampton factory...(and) they looked at Hank and said 'wow, brilliant and yes you've got the contract but we want it made here'. So that's when the products, the main contract going to Magne Bjorlo, that's when it switched from Northampton.. but that was after we bought them" (p10 I1-axial).

"... most of the overseas transfers they'll (Northampton) be doing will be to Norway for the same customers that we (Hank) are making this stuff for. So they're making, if you like, the original developed part, which was the steel part, and we're now making the new developed part, or the second era of that part, which is an aluminium part. So that is actually going to Magne Bjorlo and going to the same customer" (I4-axial).

However, despite the fall in demand for Northampton's product, Northampton have reported that it is likely that Magne Bjorlo will maintain the current level of demand (about 800,000 units) for the next 3 years or so.

Although the product involved in transaction 3 is a second generation version of transaction 2, there are some major differences in the nature of the contracts. Northampton supplied a medium specificity locking nut which could be bought from alternative suppliers, whereas Hank now supply a newly-developed aluminium version of the same product. The Hank product is specified on Raufoss's drawings which means that this is a high specificity product which cannot be replace by competitors' alternatives. Furthermore, Hank has not licensed this product to other manufacturers so it is only available from Trifast.

"This contract (transaction 2) in affect flowed into this one (transaction 3)....It started off they used the Binx nut. But BMW wanted a recyclable car and therefore everything on it had to be recyclable. Raufoss, who make the bumpers, the only bit on it that couldn't be recycled is the nut. So we had to come up with a nut....They (Rausfoss) came down and they said if you are going to manufacture it, we want it manufactured at Hank. So that contract went from there (Northampton) being a locking nut to here (Hank) being the aluminium autosert which was developed by TR (and is now in

Raufoss's drawings) and it became a highly specific product. We own the patents on it" (I1, 13th January 1999).

8.5 Specific transaction 2 : intra-group transactions from Northampton to Magne Bjorlo

8.5.1 Implementing TPP

From Northampton's perspective the timing of the TPP implementation was such that it caused minimum problems with the budgets. This was especially important as the volumes of intra-group transactions prior to acquisition were high:

" The only real change has been with direct selling because Magne Bjorlo was a customer and is now part of the group. That has come in. And we were selling at 40 GP and we are now selling at 20 on cost which is near enough 17 GP. And that started on April 1 last year. It could have come in earlier but it didn't make sense..it would have affected his budget in Norway and mine over here. There is no point in creating too disruptive an influence for the sake of delaying for a couple of months" (p7/8 I10-axial).

8.5.2 Affect of TPP

The main affects of the TPP are exacerbated by the intervening fact that the 2 companies traded before Magne Bjorlo was acquired :

"So if anyone has lost out its Northampton, because they've actually lost the business completely. They went through a period of probably a year after we bought Magne where their margins really dropped, because they had been making as (I10), I'm sure, will tell you, 35-40% on the product to Magne Bjorlo and it suddenly cut to 20, and that went on for the year until the contract was switched to Hank" (p10 I1-axial).

8.5.3 Identifying intra-group transactions

Northampton generates total sales of about £2.5m per annum of which about £1m is direct sales of Binx products (a very small proportion to group companies); £1m is direct sales of turned parts (including about £350,000 to Magne Bjorlo) and about £0.5m of inter-company sales of turned parts (Hank accounts for about 40% of these). Northampton manufactures a steel product which Magne Bjorlo supplies to one of its major customers Raufoss (automotive oriented, making bumpers) and Hank also manufactures the aluminium equivalent. Magne Bjorlo itself sells about £800,000 of (mainly TR proprietary) products to Raufoss per annum.

These proprietary products generate higher margins and transfer pricing is less problematic from the distributor's perspective :

"We have found out that on the TR products, if we have transfer pricing, there is not the problem. I think it is alright that the producer here in the UK puts on 20% or whichever percentage they want, because still we are competitive against other competitors, and especially like the Bulk store, and if they have to put on a margin then we are out of competition. So that's where we have the biggest problem.......JE: Right, so it does come down to that, if it's a standard type product it's difficult, if it's more specialist within the group, produced by the group then it's OK. I20 : Then it's OK, yes. JE : There are big margins on those sort of things? I20: Yes. Or at least bigger margins" (p1/2 I20-sel).

8.5.4 Managing intra-group transactions

Despite TR proprietary products generating a better margin than standard products, Magne Bjorlo still make enquiries about the possibilities of external sourcing where possible :

"JE : OK. But are there any alternatives to what Hank and Northampton sells you? I20 : Yes there is. JE: And do you buy from the... I20: Not from Hank, but from Northampton yes. We buy turned part from Denmark because sometimes it is cheaper to buy from Denmark than from Northampton. JE: So it's a price issue? I20 :It's the price, yes. But again this is because of the 20% of course. So sometimes we, even with Northampton, buy somewhere else" (p3 I20-sel).

It is clear that the heads of locations at Northampton and Norway deal with each other and negotiate quite closely. In fact, for products or contracts with healthy margins there appears to be some evidence that Magne Bjorlo agree to paying more than the standard cost + 20% for the manufactured product.

"I10: Yes. Magne Bjorlo..if there is a very large margin they will pass some of it back to us and say keep some of it your end as well as our end. It's all the same..it's all back in the same pot at the end of the day. JE: And you negotiate this yourselves ? Or is it at director level ? I10: Myself and I20 liaise very closely on all our work. We are fully aware of what each other are doing. All our costings are sent to him as is, there is no colouring of them or distorting in any shape or form. He gets exactly the way it is" (p4 I10-axial).

8.5.5 Organisational equilibrium / disequilibrium

When managing intra-group transactions, Magne Bjorlo is subject to incremental costs whether or not it purchases products from within the group or externally. This is usually in the form of time taken pursuing the best price :

"I20 : ... time consuming...Well we, because of the transfer pricing and also the currency, we have to send enquiries to many companies, especially if it's the bigger orders. We should really like to use only Bulk Warehouse, Hank, Northampton, but today we really have to send to several other companies. JE : So it's not just the time is taken up arguing over or discussing transfer pricing within the group, it's the time you have to spend outside as well. I20 : Yes" (p11 I20).

Whenever Magne Bjorlo actually source from Denmark (say) rather than Northampton it will reduce the scope for increased group profitability :

"our own products..tend to be the products that we can get more of a return on, because we're controlling all the profits and everything else. They tend to be products you can sell more for in the market place than just buying in and selling out again" (I4-axial)

The head of location at Northampton is very pragmatic about the combined affects of the TPP and the acquisition of Magne Bjorlo on his management accounts. He appears to understand (and support) the TPP :

"JE: And to Magne Bjorlo? I10: That is probably around the £350,000 a year mark now at the current selling prices. JE: And this is the cost + 20 that was introduced by the Board of Directors ? I10: Yes JE: Did you or any of the other manufacturing sites have an input into that? I10: Not really no. I won't say it was a directive but it was a requirement because of the Inland Revenue. It doesn't raise a problem as far as we are concerned. Magne Bjorlo are part of the group, as long as the profit is made somewhere..there is no point in moving furniture around..it's not a problem" (p2/3 I10-axial).

8.5.6 Intervening conditions

In this example, the intervening conditions (exchange rates; performance evaluation) impact on the way in which Magne Bjorlo manages its intra-group transactions, but from the Norwegian standpoint the influence of evaluation is softened slightly because the 2 companies did business before the acquisition (at higher prices). From the Northampton perspective, the head of location is less concerned about the evaluation criteria because of his beliefs in the way that the management accounting information is interpreted :

"Yes as far as stock transfers are concerned or inter-group sales, the only real factor is to recognise the benefit coming out of the individual locations' manufacturing processes. In essence that's all it is really. That's the trick. It's to say, well there isn't a very good return coming out of Northampton, or wherever it may be, without adding in in your own mind, not necessarily have to write it on paper what the benefits of the sales at cost are or the sales at plus 20 are somewhere else in the group. That issue which was..one had to keep identifying in the past, is less of an issue today because people are aware of it. And people in the right place are aware of it actually..."Everybody now understands the situation as far as I know, and are very aware about what we can and can't do" (p14 I10-axial).

8.6 Specific transaction 3 : intra-group transactions from Hank to Magne Bjorlo

8.6.1 Affect of TPP

The main affects of the TPP are experienced by Hank. The head of location (I4) has expressed concerns that the products sold to Magne Bjorlo for cost + 20% would generate much higher profit margins if sold to external customers (the typical gross profit margin for this division is 52-54%).

"I've got a concern that we could end up being just a manufacturer for the group whereas we've got a lot of strong, good customer base that we are making and selling to at a normal GP. So it is a difficult situation looming in the distance" (p5 I4-open).

"it does create problems as far as motivating our sales team to keep the GP up, because suddenly 30% on two accounts has been wiped out overnight and they've got no control over it" (p2 I4-open).

As a basic premise, there is a view that the manufacturer is doing all the hard work whereas the distributors simply order the product and send it out to the customer. Therefore cost + 20% is not a suitable reward :

"But you still have the problem where we are selling to them at cost plus twenty and we are doing all the hard work - we're making it; we've got all the costs out there to cover; etc - and basically all they are doing is picking up the phone and placing an order, receiving an order and sending it out to the customer. And they are given a large chunk of the profit" (I4-open).

Also, there is a concern that the group distributors will sell the products at a price lower than that which the market could bear, and therefore undervalue the market. Part of this is because either the distributors don't know what the market price is (according to the manufacturer) or they are able to settle for a good (but not maximum) gross profit margin.

8.6.2 Identifying intra-group transactions

Whereas the distributors appear to be concerned about paying cost + 20 for standard items and more relaxed about paying cost+20 for proprietary items / specials (with higher margins), the manufacturing perspective demonstrates the opposite :

"JE: So with Ireland, can you negotiate on what the cost plus will be, or it is strictly ...? I4: No, it's generally cost plus 20. On the standard parts it's not so much of a problem. It's on the specials where you have a lot of outlay, like this job for Norway, and you need to get a little bit more back to cover it" (p13 I4-axial).

One of the main intra-group transactions (from Hank to Magne Bjorlo) is a contract worth £1m over 3 years in Norway. The manufacturing division needs to invest in product development and machinery.

8.6.3 Managing intra-group transactions

As the gross profit margin for this contract is around 48/49 % it is suggested that there should be a profit split rather than transfer at cost plus 20% to the Norwegian subsidiary. This would result in a more appropriate reward for the work of the manufacturing division. So for the high volume and profitable contracts, Hank and Magne Bjorlo are able to review the TPP and negotiate a mutually acceptable transfer price :

" JE : OK. And what about with Hank say, can you negotiate with them? I20 :Yes we can, but normally we accept what they say. JE: Right. So that's normally cost plus 20%.? I20: Yes. JE : Do you ever split profits or anything like that? I20: We often do that in some cases, yes. JE: Yes? When would you decide to do that? I20: On big orders, we split the profits. JE: So that's a sort of accepted route now for big contracts? I20: Yes, and that's both for us and for them. So we say OK, we sell it at this price, and we split the profits. That's better for them of course, it's worse for us, but... JE: It's still worth it? I20: Yes yes, absolutely. And in the end it's the same profits for the same company" (p3 I20-sel).

The Finance Director of TR Fastenings Ltd is also prepared for some exceptions to the standard TPP :

"JE: Can I just ask about two exceptions then on that, one being Hank to Magne Bjorlo, talking to I4 where they had agreed a 50/50 profit split - was that arrived at amicably and who agreed that? I1: I think that was arrived at by I4 and I20 , with probably (board directors) involved in it as well....I guess that's how it was arrived at. I know there was an exercise done, how much was it costing us as a group and how much are we selling it for and then coming down to these figures and who gets what. Because it wasn't fair.. that was a big exception, it was a big contract and it didn't make sense to do cost plus 20 from Hank.. their machine capacity is at maximum, why should they do something at 20% when they could do it somewhere else. So you had to give them the incentive, to the group it made sense because its a million pound a year contract" (p10/11 I1-axial).

In addition, the Group Purchasing Director supported the change from cost plus 20 to profit split :

"(Hank) supply parts to Norway. One job in particular, we changed our transfer pricing policy to accommodate, or the new pricing policy that came up was transfer pricing, actually made several divisions here suffer, and it was ridiculous, we were actually exporting more profit out of the country. There was no arm's length transaction" (I19-sel).

These exceptions to the rule can only be managed once the characteristics of each individual (large) intra-group transaction have been identified :

"Well, it's probably more as and when they crop up, to be honest. It all depends what it is and where it's going and who the customer is and the volume concerned. So you have to take each one by its own merit when it comes up and have a look at it. You can't set the policy on what you don't know is going to crop up. It's a difficult one; you just have to wait and see what crops up and take each one individually" (I4).

8.6.4 Organisational equilibrium / disequilibrium

Even after identifying and managing the larger, more profitable intra-group transactions, the manufacturers still do not really support the policy, although the rationale is understood :

"It's a tricky subject but at the end of the day you have to go with what legislation is put in by the Board, saying right that is what you are going to do, and being aware that at the end of the day all the profit that everybody is making is all coming into one big pot. But it doesn't sit too well with the guys here - the fact that we have had to drop GP on our products just for that reason" (I4-open).

"At the end of the day it is all coming back to the same pot so whichever way it goes it doesn't really matter because you can always talk to the troops..the team here and say at the end of the day the profit is still coming back in so there is going to be a profit share, it is all going to be going towards the same pot whether you put it in or somebody else does. When you are having to do a lot of the ground work and do all the hard work behind..keeping the product manufactured so they can deliver it to the customer. If you are getting a small percentage of it it is not ideally what you like to do as part of your business" (I4).

8.6.5 Intervening conditions

The concern about whether or not the management accounts are properly understood is expressed by I4 :

"It (transfer pricing) does have a knock on effect if people don't understand when they read in the management accounts that they might be up 100 grand, therefore our purchase/stock figures are up 100 grand because it's going out at cost (for inter-company) rather than the 50 grand it would normally be because we're selling it at a marked up price. So sometimes you have to force that point over so people understand it" (I4).

In addition, these intra-group transactions reduce Hank's profits and the affect of these changes are magnified by the current performance evaluation criteria used by the group. Furthermore, Hank did sell (low levels) of products to Magne Bjorlo at higher margins before Magne Bjorlo was acquired.

8.7 Specific transaction 4 : *the transfer of rivets from TR Edenbridge* to Magne Bjorlo :

8.7.1 Features of the global market / corporate strategy

Magne Bjorlo, a recent acquisition, is operating in a competitive market in Norway trying to supply rivets - originally purchased through TR Edenbridge - to its customers.

8.7.2 Implementing TPP

As the levels of intra-group transactions increased between TR Edenbridge and Magne Bjorlo, it was necessary to apply a formal TPP to them. As such, the 'transfer' of rivets included a 20% uplift.

8.7.3 Affect of TPP

The problem here relates to products sourced by TR from other suppliers to then transfer to foreign subsidiaries. The main affect of the group's TPP was that Magne Bjorlo could not afford to purchase *the rivets from TR Edenbridge. Magne Bjorlo's* strategy for dealing with this (discussed below) was to source direct from the main supplier.

"... Let me say we want a product from a company in the UK, TR buys it for us, and they have to put on 20° o. Which is totally stupid..... then we are not competitive in Norway" (p1 I20-sel).

8.7.4 Identifying intra-group transactions

Magne Bjorlo's customer requirements entail the regular supply of (standard) rivets which are not TR proprietary products but sourced from external suppliers:

"Regular usage of rivets, they were always buying from Tucker, whereas with Ireland we get the feeling that it is for each individual order" (p7/8 I16-sel).

As TR Edenbridge is a specialist stockist, they are the best placed location within the UK for supplying these rivets :

"Now TR Edenbridge, because of historical reasons, became almost like a stocking location, like the experts if you like, on a various range of products for the whole group. Rivets is a nice easy one that you could associate with...... So TR Edenbridge was a specialist location" (p1 I16-sel).

8.7.5 Managing intra-group transactions

Magne Bjorlo's strategy for dealing with the problems of transfer pricing (and exchange rates) for this particular product was to deal direct with the main supplier

(Tucker) in the UK. The Head of Location at TR Edenbridge discussed the change in purchase policy :

"Well, let's talk first of all about, you mentioned Norway, because something's changed there recently. There's a large manufacturer of rivets in this country called Tucker, they're probably the market leader. It used to be that Norway would place all their orders for Tucker rivets on us, so we would actually get them in from Tucker in Birmingham, we would get them into here, and then we would ship them out to Norway. Now for whatever reason, it was purely Norway's decision, in April they changed that, and they started placing their orders direct with Tucker, which we were happy to do, and that was sort of £5,000 worth a month that they used to take from us of Tucker rivets, but as I say, now they're doing it direct. Now it would be that we used to "sell them" to Norway, I think we used to put 10% on" (p2 I16-sel).

The person at Edenbridge responsible for dealing with Magne Bjorlo confirmed that the shift was directly attributable to the TPP :

"I16 : And one of the questions we came up with, I don't know whether you know the answer to this, Magne Bjorlo stopped placing the orders on us for Tuckers stock taking it direct. That was April time? I17 : May be a bit before then. I16 : Do we know why? I17 : Purely because they didn't want to pay the percentage increase that we put on" (p4 I16-sel).

8.7.6 Organisational equilibrium / disequilibrium

Rather than negotiating with TR Edenbridge on a regular basis, Magne Bjorlo has secured a direct source of rivets at a competitive price:

"I20 : But there again, that was especially Tucker rivets. We have now got a very good relationship with Tucker in Norway. And then we avoid the 20% and then it's possible for us to get much better prices from Tucker Norway than we get from Edenbridge. JE: So even if Edenbridge did it at cost... I20: We get now better prices than Edenbridge does. JE: Right. So even in their cost... so you're quoted prices from Tucker less than Edenbridge is quoted? I20 : Yes. JE : Oh right. I20: So in the future what I think is that they should buy rivets from us, they don't buy from Tucker.JE :Another interesting twist" (p5 I20-sel).

Also, there are additional savings attributable to this channel :

"I17 :I think the other thing as well, because Tuckers arranged to send the goods direct to Magne Bjorlo so of course we didn't incur any carriage cost or anything like that, and so it was a plus situation from both sides." (p4 I16-sel).

However, one of the knock-on affects of Magne Bjorlo's purchasing policy was that it impacted on TR Edenbridge's budgets and targets - this might have been avoided if there was more communication between the two group companies regarding intentions about sourcing :

"I16 : I don't think we do a great deal with Norway now at all do we? I17 :No, since they've been doing Tuckers direct, I mean that is the main, quite substantial bit of the business we do. I16 : I actually budgeted, in, when we did the budgets back in January, to sell about £5000 worth a month to these intergroup companies. In fact most of the goods ..... I wasn't aware of when I did the budgeting, we're well below that. I mean we're stating 5,000 a month, we're probably doing 1,000 a month, at most actually. It's probably less than that. I could actually give those figures. But I seem to think, was in May it was £74. Yes, it really was" (p7 I16-sel).

8.7.7 Intervening conditions

The intervening conditions impacting on the way in which Magne Bjorlo managed its intra-group transactions include the performance evaluation criteria and exchange rates :

Performance evaluation :

"JE :So putting that altogether, how would your company be evaluated in terms of performance? What are the key indicators would you say at the moment? Is it sales, growth...? I20: Sales, gross profits.. our gross margin and net profits. That's what we are measured on. JE: OK, so it's a mixture of those is it? I20: Yes. JE: Right, and are they adjusted at all for transfer price? I20 : No, not at all" (p8/9 I20-sel).

Exchange rates :

"JE :And just to throw something else into the pot, exchange rates. I20:Yes? At the moment it's really terrible, and that is also one of the reasons why we buy from Germany, because one and a half years ago one pound was ten Krona, and today it's 12.70 or something like that. So it has increased nearly 30%. JE: Right, and this isn't taking into account at all the transfer pricing? I20: No, not at all" (p11 I20-sel).

8.8 Specific transaction 5 : the transfer of standard products from Central Supplies to Magne Bjorlo and TR Southern Fasteners:

8.8.1 Affect of TPP

The main affects of the cost + 20% policy on standard goods in Central Supplies are that the prices are not competitive. Even though the subsidiaries in the group would like to buy the products, they cannot afford to.

" (a subsid in Scotland) with a turnover of £1m a year..they've now got access to the best manufacturing available in Asia on the back of a 30 million pounds spend, because they've never had access to it, they couldn't even get through the door. They can buy just like that and they think it's fantastic. They'd like to support us as well; they are quite happy to buy from us, but when you get 20% on it" (p4 I3-open).

"the silly thing is that they (the subsidiaries) will come to us and say 'I need these products, I know that you have got them, but I can't afford them from you so where do I go and buy them?' Seriously that's what will happen" (p20 I3-open).

8.8.2 Identifying the intra-group transactions

The intra-group transactions relating to standard products from the Central Supplies are often for supplying larger end-customers. As the products are very standard and the markets are competitive, the contracts are often not generating good profit margins. So the combined affect of the product characteristics and the relationship with the customer makes it even more difficult to support using the standard transfer pricing policies.

"It is such a large customer, we can't afford to..it is a big account, a lot of people will be seeking that account, we have had to fight this year to keep hold of that. So we don't have much of a choice really" (I13-axial).

"If you are taking a bigger customer you are probably going to have a smaller margin because it is a bigger volume and it could be easily left open to being taken over by somebody else. The margins have to be smaller anyway" (I13-axial).

However, one of the management team in TR Fastenings had assessed the prices of competing standard products in Norway. He argued that the prices were very comparable to those offered by the Central Supplies - the only difference being due to exchange rates (strong sterling) not transfer pricing.

8.8.3 Managing the intra-group transactions

The purchasing manager at TR Southern Fasteners articulated the role of a purchasing manager in a distributor : "We are always looking for new prices, better prices." (p9 I13-axial). This philosophy is apparent for both TR Southern Fasteners and Magne Bjorlo in their increased external purchases :

"We could sell much more of the TR products if we could avoid the transfer pricing. That's also what I've told my employees, that if you get it cheaper at another place, buy it there" (p15 I20-sel).

"From the takeover, gradually bit by bit we were increasing the purchasing, but nothing as dramatic as I thought. I assumed in one of my good moments that we would be buying 90% of our stuff from TR and at the moment it is probably around 20%" (p13 I11-axial).

"We are tending to move away from the Bulk Store[333]. What is the point of going to them if there is 20% or even 5 or 10% ? And if we are going for bigger quantities we might as well go direct to the .... or the original source" (p12 I13-axial).

Although the Central Supplies are prepared to negotiate over price in certain circumstances, this is really for the exceptions not for all transactions. The problem appears to be that Eire and Norway need these negotiated prices for nearly all their transactions :

"Southern Ireland... came back and said 'look, we are really up against it here, we need to compete, what can we do?' then we negotiate a price to ensure we win the business for the company. And all those transactions are actually recorded so anything that goes outside the 20% is actually documented by the receiving locations on a, I think maybe on a monthly basis" (I3-open).

"JE: Is there any way you can negotiate with UK ? ....I11: You can but how many times can you negotiate ? On a once off maybe you can, but on a day-to-day basis absolutely you can't" (I11-axial).

In fact, at the selective coding stage, it was now the Central Supplies' view that the revised TPP allowed no room for negotiation :

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[333] The bulk warehouse supplies Southern Ireland with about £60,000 stock per annum which is subject to the 10% uplift. In the view of Central Supplies, these stock sales could be substantially more if the 10% uplift did not apply - Central Supplies already knows of another £40,000 at least which Southern Ireland sources direct from the Far East.

"JE : The level of negotiation, whether negotiation is a possibility. I2: Non existent actually. JE They're not existent now? I2 Virtually. Very low...........JE Are you saying there's less room for negotiation now? I2 There's no room at all for negotiation" (I2-sel).

These views sit uncomfortably with the group's stated policy concerning the Central Supplies :

"Standard industrial products...are stored in bulk and as the Group has already made the financial investment in the stock it is the Group policy to utilise these stock before purchasing from sources outside the group. Because of this, the group has to ensure the products have to be transferred at prices that enable the subsidiary to be competitive in the market in which the subsidiary operates" (Trifast plc Memorandum, "Transfer Pricing", 3rd March 1998).

However, on closer inspection and following several phone calls it became apparent that the group policy for 'competitive' transfer prices only applied in exceptional circumstances and was not the general rule.

8.8.4 Organisational equilibrium / disequilibrium

The resultant higher levels of external transactions do lead to improved levels of profitability for the foreign subsidiaries but at the expense of the group's profitability. The reduction in intra-group transactions or increased external sourcing does have some adverse consequences and costly duplications - e.g. stockholding; carriage; customs declarations; paperwork; minimum order charges; hidden costs. In addition, if the subsidiaries source from outside the group, this might lead to missed opportunities in terms of the best source for a particular item. For instance, information might not be shared amongst the disparate purchasers regarding the best suppliers[334].

"Then you finish up with duplicated stocks as well. Our own philosophy of this location was very much to make all the other locations very lean stocking areas - absolute maximum a couple of months; at the worst 3 months' stock" (p10 I3-open).

"to buy Far East stuff you are talking about lengthy lead times, anything from 3 to 6 months" (p20 I3-open).

"Indirectly there could be..certainly 5% of the 20% transfer price we implement, because they have to pay direct carriage then.....but they don't see the common sense in it at all. One group wanting to become bigger, more turnover, more profit" (p12 I3-open).

"The additional problem that that incurs is firstly, it encourages the subsidiaries then to start buying independently from the same sources we are supplying at, so that compounds import costs, carriage costs, etc. It also therefore weakens our buying power to an element, so therefore we will tend to pay higher prices, we have every intentions for this unit to buy by a group basis, so it's really very much we believe against our group, that means Trifast, trading" (I2-sel).

[334] "There's a lack of communication between the two of them. There's information that doesn't get shared out which should be. They are very much at arm's length. There is a bit of a wall between TR and subsidiaries. There isn't enough knowledge shared between the two on the local markets" (I4-sel).

Reviewing the TPP

Following repeated complaints about the TPP, top management reviewed the TPP and implemented new rules for selected countries. Although the new matrix of rates initially applies to all intra-group transactions between different subsidiaries, the Board of Directors received most complaints about the 20% uplift on standard products supplied by Central Supplies. One example of the rate changes, was a reduction in the transfer price from TR Fastenings Ltd to Southern Industrial (i.e. applicable to transfers from the UK to Southern Ireland) from cost + 20% to cost + 10%.

8.8.5 Intervening conditions

The main intervening condition emphasised by both foreign subsidiaries were the problem of exchange rates and performance evaluation:

"So I think it is probably increasing all of the time. Really you are talking 20% for sterling......And I think that the problem with sterling is that we were forced to go outside the UK straight away. More and more we are looking for suppliers" (p4 I13-axial).

"But now lately unfortunately the Norwegian Krona has been weakened, so that is the third problem really. Then both the Pound and the Deutchmark has increased" (p12 I20-sel).

8.9 Summary

This chapter grounded the substantive theory about how MNEs manage the affects of the implemented TPP in five cross-border intra-group transactions. Table 8-2 summarises how each of the five transactions justifies the main relationships underlying the substantive theory. The features of the global market are common across all transactions, so table 8-2 commences with consideration of the corporate strategy relating to each of the transactions.

All five transactions relate to the transfer of goods, but there is rich enough variety in the types of activity (manufacturing, distribution and bulk buying), types of product and service (standard products, proprietary products, and managed services) and directions of flow (sales from Singapore and the UK; purchases by Norway, Southern Ireland and the UK) for a conceptually dense theory to emerge[335].

The substantive theory in figure 7-5 appears to have sufficient theoretical density for it to be applied to the range of five cross-border intra-group transactions considered in this study. Furthermore, there is sufficient specificity for the emergence of a set of hypotheses which are presented in the following chapter. These hypotheses are "systematic statements of plausible relationships" (Strauss and Corbin, 1990, p279) which allow for future research to explore the situations in which they might and

[335] "The idea is to have a theory that is conceptually dense and that has specificity, plus enough theoretical variation to enable it to be applied to many different instances of any given phenomenon" (Strauss and Corbin, 1990, p109).

might not apply. The following chapter *also reports feedback from Trifast plc on the* substantive theory and hypotheses; evaluates the qualitative research; and reconciles the model with the academic literature.

No	Strategy	Implementing TPP	Affect of TPP	Intervening Conditions	Identifying Intra-Group Transactions	Managing Intra-Group Transactions	Organisational (Dis)Equilibrium
1	Satisfying customers' wider needs; Cheaper manufacturing location	Satisfying tax authorities; Timing (poor)	Demotivation; Uncompetitive intra-group transactions	Performance Evaluation Criteria (highly important); Management Accounting Info (belief that it is not understood)	Large contract; Low margins; Highly specific product; High quality	Negotiation: Profit split	More support for TPP; Less concern about group profit
2	Foreign acquisition	Satisfying tax authorities; Timing (good)	Budgets (not affected)	Performance Evaluation Criteria (highly important); Management Accounting Info (belief that it is understood); Previous dealings (high level) Exchange rates (influential)	Large contract; Medium specificity (alternatives available)	Increased external sourcing	Emphasis on subsidiary profit; Administrative costs increase.
3	Foreign acquisition; Satisfying customers' wider needs	Satisfying tax authorities; Timing (poor)	Demotivation; Uncompetitive intra-group transactions	Performance Evaluation Criteria (highly important); Previous dealings (low level)	Large contract; High margins; Highly specific product	Negotiation: Profit split	Support for TPP (medium); Understood
4	Foreign acquisition; Increase intra-group transactions	Satisfying tax authorities	Uncompetitive intra-group transactions	Performance Evaluation Criteria (highly important); Exchange rates (highly influential)	Customer requirements; Standard product	Increased external sourcing; Zero intra-group transactions	Incremental costs reduced (Norway); Incremental costs increased (Edenbridge); Administration increased (affects on budget)
5	Foreign acquisition; Increase Intra-group transactions.	Satisfying tax authorities	Disincentives; Uncompetitive intra-group transactions	Performance Evaluation Criteria (highly important); Exchange rates (highly influential)	Low margins; Standard products; High quality	Increased external sourcing; (Increased exceptions)	Emphasis on subsidiary profit; Increased incremental costs

Table 8-2 Grounding the 5 Cross-Border Intra-Group Transactions : A Summary

9. EVALUATION OF SUBSTANTIVE THEORY

9.1 Introduction

The substantive theory developed in chapter 7 (figure 7-5) is reproduced below in figure 9-1. It recognises that both the 'Features of the Global Market' and 'Corporate Strategy' are important elements in the implementation of a TPP. In particular, expansion by foreign acquisitions, satisfying global customers (by locating manufacturing or distribution affiliates close to the customer) and cheaper manufacturing locations are viewed as fundamental features of Trifast's corporate strategy. Once the TPP has been implemented, the affects of that TPP must be managed by subsidiary managers on a day-to-day, regular basis and by top management in less frequent but more problematic cases. The manner in which the affects of the TPP are managed is likely to impact on the (dis)equilibrium of the organisation.

UNCTAD (1997a) recognises that certain aspects of Trifast's strategy for expansions are common to many MNEs. Increased globalisation of production has been made possible by liberalisation of FDI regimes. Over the period 1991-1996 there have been 599 changes in countries' regulatory FDI regimes and 95% of these have favoured liberalisation. Following these changes, cross-border mergers and acquisitions accounted for investment of $275 billion in 1996.

UNCTAD (1997a) summarises some likely future trends which are very influential in a process change model relating to TPPs :

> "The ongoing globalisation of production begs the question of whether the upward trend in FDI flows witnessed to date will continue into the next century. A survey of foreign investors suggests that this may, indeed, be the case.....*Production by foreign affiliates is also expected to increase as a proportion of total production by MNEs, while home-country exports are expected to remain constant.* Mergers and acquisitions, joint ventures[336] and other equity and non-equity types of inter-firm agreements are expected to go hand-in-hand with the growth in FDI. Although smaller firms will be stepping up investments abroad, large firms will continue to account for the lion's share of outward investments. Corporate restructuring in developed countries, aimed at improving efficiency and modernisation, is expected to continue, giving rise to efficiency-seeking investment. However, accessing markets will remain the principal motive for investing abroad: survey respondents placed twice as much weight on production for local markets than on labour-cost factors" (italics added, p11).

[336] "We announced this morning a joint venture in China...." (I1, 2nd October 1998).

Two future trends increase the potential for intra-group transactions and as a result the implications of the TPP :

- Increased production (both actual and relative to export) by foreign affiliates - ***this is reflected in the Trifast case study.*** "The intention is for the end of this year to have the Far East delivering 10% of the group profit- so you are looking at £1m from The Far East. At the moment it is probably close on £500,000 this year; 18 months / 2 years ago it was delivering a loss of about £200,000 per year, because it was just an overhead out there before we bought Formac and Polyfasteners" (I1, 2nd October 1998).

- Increased levels of mergers and acquisitions - ***this is an integral part of Trifast plc's corporate strategy***

One of the main drivers of FDI is:

- Accessing local markets - ***another of Trifast's corporate strategies is to invest abroad to service local markets (and in particular local MNEs). However, once an investment has been made, subsequent production decisions regarding location can be made on the grounds of cost.***

One future trend emphasises the change process part of implementing a TPP :

- Corporate restructuring is likely to result in changes to the direction of flows and magnitude of various intra-group transactions. In turn, the TPP will probably need to be reviewed and the affects of any revisions to the TPP will need to be managed - ***this happened when Trifast plc restructured and reviewed other intra-group flows on ground of efficiency. In particular, the UK subsidiaries (mainly recent acquisitions subject to deferred consideration) became divisions of TR Fastenings Ltd which meant that their UK transfers were at cost (rather than say cost + 20%). Consequently, the corporate strategy influenced the TPP.***

Dunning (1998) acknowledges the importance of mergers and acquisitions as a method for FDI and, more specifically, the acquisition of both foreign distributors and manufacturers in different countries is often based on the decision to establish a presence in a particular country. The identification of the preferred location is followed by the search for a suitable target for acquisition :

> "What are the implications of our analysis and findings for future international business research?....I believe more attention needs to be given to the importance of location per se as a variable affecting the global competitiveness of firms. That is to say, the locational configuration of a firm's activities may itself be an O-specific advantage, as well as the modality by which it augments, or exploits, its existing O advantages. With the gradual geographical dispersion of created assets, and as firms become more multinational by deepening or widening their cross-border value chains, then, both from the viewpoint of

> harnessing new competitive advantages and more efficiently deploying their home-based assets, the structure and content of the location portfolio of firms becomes more critical to their global competitive positions" (p60).

In response to reading Dunning's (1998) argument, the FD of TR Fastenings Ltd confirmed that this is "definitely the way we do acquisitions because they are driven by global customers" (21st December 1998).

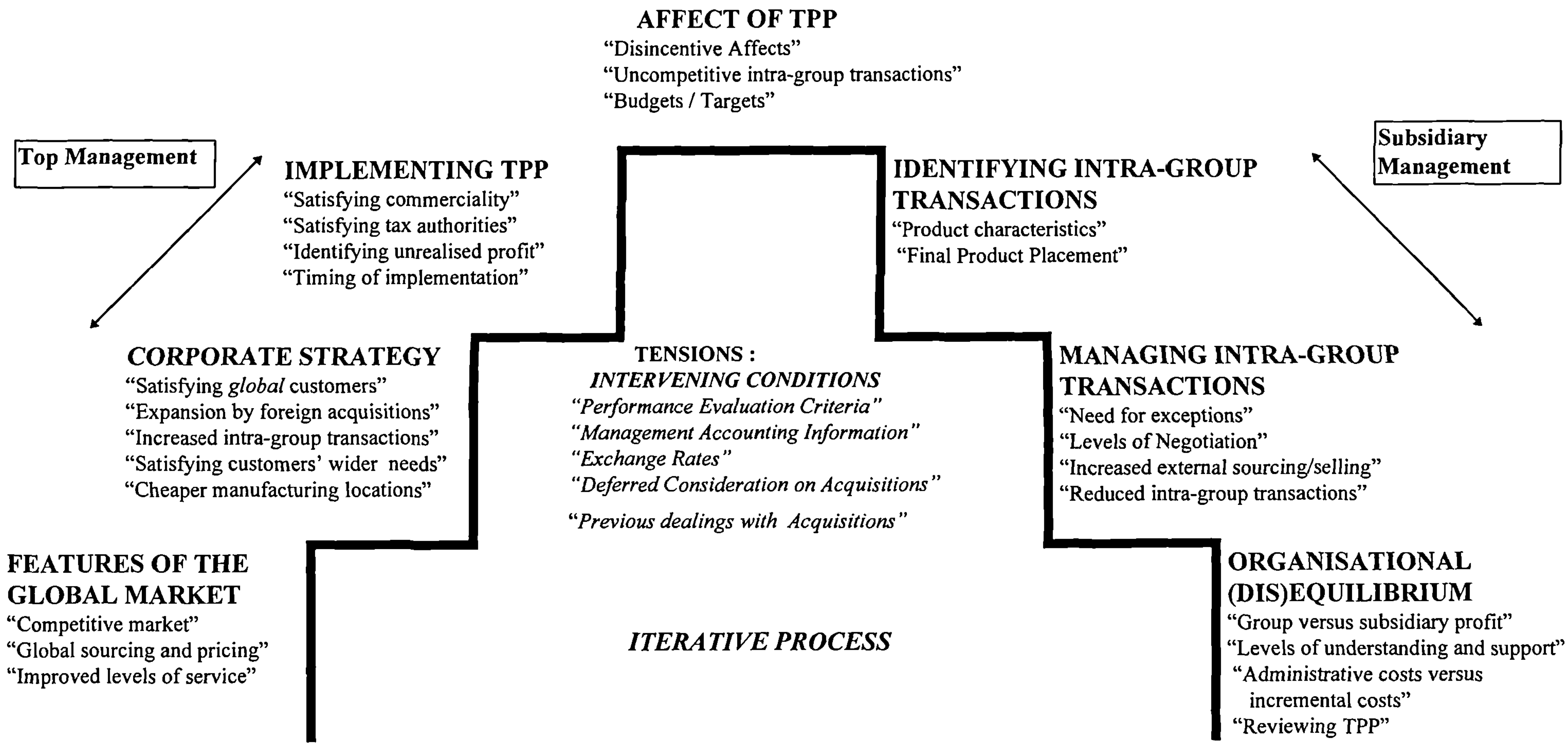

Figure 9-1 A Substantive Theory : How MNEs Manage The Affects of their ITP Policy

9.2 Developing Hypotheses

The substantive theory and the underlying relationships in figure 9-1 represent a dynamic change process model. The iterative nature of implementing and managing a TPP gives a dynamic element to the substantive theory. Furthermore different MNEs will be at different stages, ranging from some MNEs which have no implemented TPP and are still evaluating their corporate strategy to other MNEs which have implemented a successful TPP following a number of iterations.

The substantive theory in figure 9-1 can be summarised as follows (see figure 9-2):

- "Strategic" : This summarises the left hand side of figure 9-1. "Strategic" decision making results in the formulation of an initial group TPP. This represents almost a theoretical TPP, which is the group's opening position before implementing the TPP and determining whether it can be successfully operationalised in practice.

- "Tactical" : This summarises the right hand side of figure 9-1. "Tactical" decision making refers to those decisions which must be made to operationalise the TPP. These decisions will depend on a combination of factors such as the specific location or transaction or product or end market. In some instances, this will result in modifications to the TPP or agreed exceptions to the TPP. In other instances, the TPP will be so problematic to operationalise that it will be necessary for the top management to review and revise the TPP as part of their strategic decision making.

- "Intervening conditions" : These are moderating variables that increase or reduce the need for tactical decision making to operationalise the TPP formulated as part of the strategic decision making process.

"Intervening conditions"

"STRATEGIC" <======> "TACTICAL"

Theoretical formulation Operationalisation

Figure 9-2 A dynamic representation of the decision making processes underlying the implementation of a successful TPP

From these general relationships introduced in figure 9-1 and summarised in figure 9-2, several hypotheses have emerged. These hypotheses can be grouped under strategic decision making, tactical decision making and intervening conditions.

9.2.1 Strategic decision making

9.2.1.1 Stability of TPP over time

Hypothesis 1: If the TPP is stable over time there is less need to manage the affects of the TPP within a MNE.

More specifically, linking this with corporate strategy :

Hypothesis 1a: ***Acquisitive firms*** *are less likely to have a stable TPP over time and more likely to need to implement a new/revised TPP. Therefore, these MNEs are more likely to need to manage the affects of the TPP on intra-group transactions.*

Hypothesis 1b: ***Customer-led businesses*** *are less likely to have a stable TPP over time and more likely to implement a new/revised TPP. Therefore, these MNEs are more likely to need to manage the affects of the TPP on intra-group transactions.*

9.2.2 Tactical decision making

There are two sets of hypotheses which relate to the tactical decision making :

9.2.2.1 Product characteristics

Hypothesis 2: MNEs with a wider range of products and product characteristics are more likely to need to manage the affects of the TPP. In particular, these MNEs are likely to have a greater need for negotiation and exceptions to the general policy.

More specifically, linking this with corporate strategy :

Hypothesis 2a: ***Acquisitive firms*** *are more likely to have wider range of products and product characteristics and more likely to implement a new/revised TPP. Therefore, these MNEs are more likely to need to manage the affects of the TPP on specific intra-group transactions.*

Hypothesis 2b: ***Customer-led businesses*** *are more likely to have a wider range of products and product characteristics and more likely to implement a new/revised TPP. Therefore, these MNEs are more likely to need to manage the affects of the TPP on specific intra-group transactions.*

9.2.2.2 Transfer Pricing Method

Hypothesis 3a: Larger contracts for specific intra-group transactions are likely to be exceptions to the general TPP. Some form of profit split policy is likely to be negotiated as the 'fairest' way to settle disputes.

Hypothesis 3b: Smaller contracts for standard intra-group transactions are likely to be subject to the general group TPP or sourced externally.

9.2.3 Intervening Conditions

The following intervening conditions are likely to intensify the affects of the TPP and make it both more difficult and more necessary to manage intra-group transactions and operationalise the TPP determined as part of the strategic decision making process :

Hypothesis 4a: The greater the emphasis placed on subsidiary profit measures for performance evaluation, the greater the need to manage the affects of the TPP.

Hypothesis 4b: If the management accounting information is not properly understood or perceptions on the information are misinformed, the greater the need to manage the affects of the TPP.

Hypothesis 4c: The greater the volatility of exchange rates, the greater the need to manage the affects of the TPP - particularly on low margin, standard products.

Hypothesis 4d: The higher the level of transactions between group affiliates and newly acquired subsidiaries prior to acquisition, the greater the need to manage the affects of the TPP after acquisition.

Hypothesis 4e: The higher the levels of deferred consideration attached to the acquisition of new subsidiaries, the greater the need to manage the affects of the TPP after acquisition.

9.3 Evaluation of the substantive theory by Trifast plc

As an integral part of the grounded theory approach, the substantive theory and the hypotheses were presented to TR Fastenings Ltd's FD (I1) and chapters 6 to 9 were given to I1 and Trifast plc's FD (I9) for their comments. The substantive theory and the relevant chapters were presented to I1 on 2nd October 1998, the feedback from I1 and I9 was discussed with I1 on 13th November 1998, and subsequent discussions took place on 21st December 1998 (by telephone) and 12th January 1999 for clarification and additional feedback.

Previous grounded theory researchers have presented initial findings and the end results of their research back to their participants. For instance, on the subject of strategic investments in plant and machinery, Slagmulder (1997) presented the case study report at 10 research sites back to the interviewees to reduce potential researcher bias, enhance accuracy and increase construct validity. Similarly, Browning et al (1995) studied co-operation in a consortium of semiconductor manufacturers and submitted their published findings to the consortium's standard document review process. At least five people (including the consortium's CEO and the researchers' key informant) reviewed the documentation "to further verify the accuracy of our statements and interpretations" (p122).

Overall, for this researcher's study, I1 and I9 were generally supportive of the substantive theory (figure 9-1) :

"JE: On the whole, does that make sense? I1: Absolute sense. That sets the picture quite well" (I1, 2nd October 1998).

"As far as I can see it fits the way we work" (I1, 21st December 1998).

Similarly, I1 agreed that the emergent hypotheses were all relevant to Trifast plc and provided various examples to support each of them. However, he stressed that the original impetus for having to implement an initial TPP was tax compliance:

"What made me and I9 sit down and decide that we have got to get this lot together, it was the tax rules. We then decided that that wasn't the most important rule for getting the policy, but the thing that kicked us going on it was all the legislation and all the reports that were going around (2 years ago now) on transfer pricing. So that drove the policy" (I1, 13th January 1999).

Overall, I1 supported the links and the relationships between the substantive theory, grounding the substantive theory in the five transactions (table 8-2), and the emergent hypotheses. In particular he stated that "(table 8-2) would give us a tool for explaining it to someone, particularly the Main Board......"It has set it out clearly and it does tie back to the hypotheses we talked about earlier" (I1, 13th January 1999).

9.3.1 Implementing a TPP : A dynamic process

In addition, I1 agreed that the substantive theory (figure 9-1) and the summary of the underlying decision making (figure 9-2) are a dynamic process. Trifast plc have undergone a number of iterations between strategic and tactical decision making to operationalise their TPP. First, the top management implemented a TPP at the strategic decision making level. This TPP (cost + 20%) was a theoretically optimum TPP based on discussions with advisors and attendance at seminars. However, the group policy generated many problems at the tactical level including problems in relation to individual transactions, conflicts between group and subsidiary profit, and little understanding about why a TPP was being implemented. Second, top management attempted to make minor adjustments to the TPP. Third, top management reviewed and revised the TPP and changed from a single rated TPP (cost + 20%) to a matrix of different rates applicable to transactions between different subsidiaries.

"We ended up saying why isn't it working? What can we do to change it? And we started tweaking it. We have probably been through that loop only three times, the big key change, then we had the smaller tweak, and now we have the matrix, and at the end of the year is going to be the next stage" (I1, 13th November 1998).

This last quote illustrates that even when a TPP has been successfully implemented and operationalised it still needs to be monitored by additional iterations in the substantive theory. Therefore, the process is continually dynamic and needs to take into account any changes at both the strategic level (e.g. a shift in corporate strategy) and the tactical level (e.g. the need to consider how to treat a new intra-group transaction). Trifast plc have decided to adopt a six-monthly review of the TPP by the top management to check whether the matrix of transfer pricing rates between different subsidiaries has been appropriate for the previous six month period. Depending on this review, the different rates in the matrix might have to be adjusted or alternative action might have to be taken : "I9 is just doing his first interim review because the end of September is our interim"(I1, 2nd October 1998).

9.3.2 Strategic decision making

Trifast plc's corporate strategies are, in part, a response to the features of the global market. I1 confirmed that their acquisition strategy aimed to buy companies in cheaper locations (on the manufacturing side) and to buy companies located close to their MNE customers (on the distribution side). Both of these strategies are likely to have an impact on the level of intra-group transactions and the need to implement a TPP and ensure that it is managed effectively.

In relation to manufacturing, the emphasis has been on setting up manufacturers of standard products in low cost countries such as Singapore and Malaysia, whilst manufacturing the proprietary (e.g. Hank products) and more specialist items in the UK :

"If you look at our manufacturing it is expanding in Asia..it's not contracting in the UK..its expanding in the UK in the specialist stuff but all the more standard stuff is definitely expanding out there" (*I1, 2nd October 1998*).

Furthermore, Trifast have a two-pronged approach to winning new business which is also likely to generate increased intra-group transactions. First, specialist locations such as Hank identify potential customers to which they could supply specialist products. If these customers are located overseas and Hank wins the business it is likely that Hank will supply them via an overseas (affiliated) distributor. Generally this is high margin business as for the intra-group transaction with Magne Bjorlo. Second, at the lower margin end of the business, Trifast plc will approach a MNE and say 'give us your business'. This business is likely to consist of a range of products including some standards, some specials, some products which Trifast has never made before, and some products which Trifast will definitely outsource. Depending on the location of the customer and their product requirements this will determine the level of Trifast plc's cross-border intra-group transactions. For instance, the business might require some standard products manufactured in Malaysia and some special products manufactured in the UK, all supplied on a managed DLF by the Southern Irish distributor.

9.3.3 Tactical decision making

I1 acknowledged that profit split is a sensible way of setting transfer prices for the larger contracts, but not for the smaller contracts in which the administration costs would become excessive. In particular, there needs to be some mechanism in place or accepted criteria to ensure that subsidiary managers do not waste time and effort arguing about applying a profit split to every single transaction. It is important to ensure that the costs of allowing exceptions do not outweigh the benefits. I1 supported the use of profit split in relation to transactions 1 and 3, but he had stressed in earlier interviews, that profit split is a possibility only as long as both parties could support the policy by reference to the risks borne by each party :

"The Apollo one (transaction 1) was definitely worth doing; the Raufoss one (transaction 3) was a definite profit split, but you need to have some sort of criteria that says the contract must be worth x amount and it is worth investing the time of the 2 senior guys saying right how are we going to split this?" (I1, 13th November 1998).

9.3.4 Intervening conditions

I1 was very supportive of the importance and influence of the intervening conditions. These conditions are likely to be influential on the affect of the TPP and necessitate the occurrence of tactical decision making to manage particular intra-group transactions (for example). I1 stressed that any of the intervening conditions could focus attention and blame on the TPP, leading to the necessity for tactical decisions to manage the adverse affects of the TPP.

"Whereas if you are underperforming, all these little points suddenly become major. It suddenly becomes the main reason for them missing their budget" (I1, 2nd October 1998).

"Transfer pricing on its own is very rarely an issue. Its normally something else that pushes transfer pricing..it is an excuse, so something else has happened and transfer pricing is something to grab onto and say it is transfer pricing. There are very few situations which I have come across where the whole problem is the transfer pricing..." (I1, 2nd October 1998).

I1 also reiterated the importance of performance evaluation, citing the Singapore manufacturer as an example. TR Formac's bonuses are based on 50% of the profits exceeding the budgeted target. If TR Formac generates margins of 40/50% selling to external customers and 20% to internal customers, they will never sell to affiliates in preference to their external customers. Instead, intra-group sales will probably only take place if there is spare capacity, if it is a particularly easy job which doesn't interfere with other operations, or as a favour.

Finally I1 emphasised that Trifast plc had implemented its strategy of growth by acquisition by acquiring companies with which the group had had prior dealings. The reason for this approach is that Trifast plc is confident about fitting the new subsidiaries into the group structure. However, as discovered during the grounded theory study, this approach also impacts on the affect of the TPP and the way that it is managed. It is clear that more recent acquisitions follow the same pattern :

"The acquisitive firm : every one we have acquired has either bought from us or supplied us. Our US acquisition is our third biggest supplier, therefore it is an immediate transfer pricing issue" (I1, 21st December 1998).

9.3.5 Final thoughts on the evaluation of the substantive theory by Trifast plc

This final part of the grounded theory study has been a very useful exercise. Trifast plc's evaluation of the substantive theory and the emergent hypotheses has provided a greater degree of comfort and assurance to this researcher that they are applicable to Trifast plc. In some cases, I1's initial reaction was that some aspects of the analysis did not reflect Trifast plc's approach to ITP. However, on greater reflection he agreed that the analysis did actually reflect what happened in practice.

In addition to evaluating the substantive theory, I9 also evaluated the grounded theory approach. He commended the mix of top management and subsidiary management participants to try to reconcile the strategic and tactical decision making in relation to the TPP :

"I9 felt that the approach to it (the current study) was a lot better than normal..normally you would go to him and me and get a view about what management thought was happening as opposed to what was actually happening..he found that quite refreshing" (I1, 13th November 1998).

Finally, it is evident that Trifast plc has benefited from this researcher's independent study into how the group has implemented its TPP. In particular, the strengths of the study include the fact that this researcher was subject to no constraints, this researcher had complete freedom of access, and the 18 month longitudinal study covered all three iterations in the implementation and management of Trifast plc's TPP.

9.4 Evaluation of the Research

9.4.1 Strauss and Corbin's (1990) grounded theory approach

The data collection, data analysis, and theory building carried out for the Trifast case study used Strauss and Corbin's (1990) grounded theory approach. In particular, the researcher recognised the importance of theoretical sensitivity and used the open, axial and selective stages of coding and the associated types of theoretical sampling. Some authors have argued that adherence to the operations essential to a grounded theory research design satisfies the characteristics of rigorous case study research (Parker and Roffey, 1997; Salafatinos, 1996b). Furthermore, this researcher has incorporated two additional features to ensure improved rigour. First, there is a mixture of continuing and new participants at the three stages[337]. This mix is determined by theoretical sampling. Second, this researcher presented the substantive theory and the emergent hypotheses back to the top management at Trifast plc to allow them the opportunity to comment.

[337] Many previous studies have favoured one of the two extremes, either keeping the same participants throughout the study or interviewing new participants at each of the three stages. The latter of these approaches might be the result of necessity: either it is infeasible to gain access to participants in a company for more than one interview or perhaps the nature of the study (e.g. "Stress levels at airports" was one study this researcher discussed with a grounded theory expert; or terminal illnesses) in which it is impossible to contact the same people again.

9.4.2 Qualitative Evaluation Criteria

Chapter 5 introduced some of the criteria for evaluating qualitative research design. Many authors have attempted to set out qualitative evaluation criteria, ranging from strict reference to standard quantitative evaluation criteria (e.g. Yin, 1994: construct validity; internal validity; external validity; reliability) to a restatement / reinterpretation of quantitative evaluation criteria (e.g. Guba and Lincoln , 1981: truth value ; applicability; consistency; neutrality). Strauss and Corbin (1990) refer to validity, reliability, and credibility of the data; adequacy of research process; and empirical grounding of the findings in the data. Taking each of Strauss and Corbin's criteria in turn :

In broad terms, validity refers to the accuracy of interpretations : "I use validity in a fairly straightforward, common-sense way to refer to the correctness or credibility of a description, conclusion, explanation, interpretation, or other sort of account" (Maxwell, 1996, p87). Table 9-1 describes three types of understanding which threaten validity and this researcher's attempt to control for them (Maxwell, 1996, pp89-90).

Type of understanding	Threat	Researcher's solution
Description (what the researcher heard)	Inaccurate/ incomplete.	Each interview was tape recorded and transcribed ad verbatim.
Interpretation	The researcher might impose his/her framework of meaning rather than understand the interviewee's perspective.	Make a serious effort to understand/ learn the interviewee's views ; Feedback data and conclusions to the interviewee for comment ; Multiple data sources (interviews / documentation) Multiple perspectives on the data (interviewing at both 'ends' of a transaction).
Theory	Ignore discrepant data / alternative explanations or understandings.	Seek exceptions and explanations ; Present the substantive theory to Trifast plc for comment; 'Flip-flop' technique (Strauss and Corbin, 1990) ; 'Red Flags' (Strauss and Corbin, 1990).

Table 9-1 Types of understanding which threaten validity

In broad terms, reliability refers to rigour in data collection and testing so that the procedures might be repeated in the same case over again (Yin, 1994, p36). The Strauss and Corbin (1990) framework provides a statement of the procedures followed, which is supported by maintaining a 'memo' file. Similarly, additional transparency of procedures is evident from the case study protocol questions (particularly for axial and selective stage interviews) and the log of communications with the MNE (appendix 8).

Given that case study research acknowledges multiple realities and in grounded theory "..multiple perspectives must be systematically sought during the research inquiry" (Strauss and Corbin, 1994, p280), credibility exists when the researcher's interpretations are recognised by the participants to the study. As for 'interpretation' in table 9-1, the interviewees need to be able to verify that the researcher's interpretation is consistent with their stated views.

Furthermore, "in grounded theory, concepts are formulated and analytically developed, conceptual relationships are posited - but we are emphasising here that they are inclusive of the multiple perspectives of the actors. Thus grounded theories, which are abstractions quite like any other theories, are nevertheless grounded directly and indirectly on perspectives of the diverse actors toward the phenomena studied by us. Grounded theories connect this multiplicity of perspective with patterns and processes of action/ interaction that in turn are linked with carefully specified conditions and consequences" (Strauss and Corbin, 1994, p280).

In relation to research process, the grounded theory case study follows the Strauss and Corbin framework. Chapters 5 introduced grounded theory, chapter 6 provided some information on Trifast plc, chapter 7 described how grounded theory was applied to Trifast plc, and chapter 8 grounded the theory in five cross-border intra-group transactions. These chapters stated explicitly how interviewees were selected, the major categories emerging and the basis of theoretical sampling. Similarly, the development of the axial paradigms (systematically relating the categories) and the emergent theory tackle both relationships in the data ('working hypotheses') and exceptions. Finally, the core category corresponds to the research study's main research question. The five cross-border intra-group transactions allow the theory to have both conceptual density and variety. The set of intervening conditions include some wider issues which might impact on the phenomenon. Finally, the theory does incorporate process, which Strauss and Corbin (1990) describe as "action/interaction that is flexible, in flux, responsive, changeable in response to changing conditions" (p157).

9.4.3 Generalisability

Finally, the issue of generalisability needs to be reconsidered. Strauss and Corbin (1990) favour 'specifying' when and where a particular theory either holds or doesn't hold, rather than generalising to a larger population. Maxwell (1996) supports the idea that a theory might hold for specific situations, stating that there are "..a number of features that lend plausibility to generalisations from case studies or non-random samples, including respondents' own assessments of generalisability, the similarity of dynamics and constraints to other situations, the presumed depth or universality of the phenomenon studied, and corroboration from other studies. All of these characteristics can provide credibility to generalisations from qualitative studies, but none permit the kinds of precise extrapolation of results to defined populations that probability sampling allows" (p97-98).

Chapter 10 specifies some of the circumstances in which the substantive theory might hold and suggests some specific directions for future research. For instance, the findings might apply to other acquisitive, fast-growing medium-sized MNEs; other

MNEs with less stable / changing corporate structures; and other MNEs operating in competitive markets with global customers.

9.5 Link to the Extant Literature

This section reviews how the substantive theory developed in chapter 7 (and reproduced in figure 9-1) and the emergent hypotheses fit in with and enrich existing theory. In particular, this section considers Eccles (1985), Spicer (1988), and Colbert and Spicer (1995), as these are three influential studies which adopt an interpretive approach to understanding the practical aspects of transfer pricing. These three studies restrict their analysis to domestic transfer pricing between divisions, whereas this researcher considers ITP between subsidiaries. In addition, this section considers Cravens (1997) who attempts to position ITP within its strategic framework.

9.5.1 Eccles (1985)

Eccles (1985) attempted to narrow the gap between theory and practice. The overriding findings of the book "The Transfer Pricing Problem: A Theory for Practice" was that TPPs depend on corporate strategy, and that successfully implemented TPPs depend on the administrative processes in place within the organisation. Although there are some differences in emphasis, many parallels can be drawn between Eccles' work and the findings of the grounded theory case study. One distinction between the two studies is that Eccles places more emphasis on explaining the influence of two particular dimensions of strategy (vertical integration and diversification) on which TPM is likely to be used by an organisation.

9.5.1.1 The importance of strategy and administrative process

Eccles identifies strategy and administrative process as the two main determinants of TPPs. Each of these is considered and contrasted with the model developed from the grounded theory case study.

9.5.1.1.1 Strategy

Eccles started with the premise that the two key elements of strategy were whether or not an organisation was vertically integrated and the level of diversification. Eccles states explicitly that "our concern here is with transfer pricing as a matter of strategy implementation"(p79) rather than strategy formulation. In contrast, the model developed from the grounded theory case study starts with a consideration of strategy formulation (for example acquiring foreign distributors geographically close to multinational customers) which in turn determine whether the organisation is vertically integrated or diversified, or whether the degree of vertical integration varies for individual subsidiaries.

9.5.1.1.2 Administrative Process

Eccles identifies five aspects of the administrative process :

- How the transfer price is set;

- The individuals involved;
- What information is used;
- When transfer prices are set;
- How conflict is managed.

Also, Eccles acknowledges that the administrative process is affected by a wider consideration of corporate strategy, by "...management style of the managers involved, by company culture, by technological and market characteristics of the transferred product and the products that incorporate it, and by general business conditions" (p10).

The model developed from the grounded theory case study identifies most of these aspects of administrative process and the influence of a wider view of corporate strategy. In particular, administrative issues are considered as part of 'Implementation of the TPP' (for instance, who is involved in the decision and the timing of implementation); 'Identification of intra-group transactions' (for instance, the characteristics of the transactions and the information used); 'Management of intra-group transactions' (for instance, how conflict is managed and by whom); and intervening factors such as the availability and presentation of management accounting information.

9.5.1.2 Changes in TPPs

In Eccles' chapter 9, 'Pressures for Endless Change', he explores how changes in strategy lead to changes in the TPP. The grounded theory case study also emphasises that the management of TPPs is a change process model, but these changes are not just due to changes in strategy but also the need to review regularly the TPP to satisfy both subsidiary management and tax authorities. Eccles discusses four areas related to change :

- The product/ process life cycle provides an indication of the changing pressures on a TPP;
- Implementation of a TPP for the first time;
- Changing strategies leading to changing structures leading to a changing TPP;
- The decision about whether to have one uniform TPP or a number of policies.

Of these four areas, the final three can be compared with this researcher's experience at Trifast plc which is consistent with some of Eccles' findings. Following several foreign acquisitions which meant that the group structure included foreign subsidiaries, Trifast plc needed to introduce its first formal TPP (one uniform policy) and then manage subsequent changes to that policy (resulting in a matrix of varying policies by subsidiary).

9.5.1.2.1 Implementation of a TPP for the first time

"Structural reorganisations can be implemented fairly rapidly, but it usually takes several years to develop the necessary management information and control systems to support the structure" (p239) - *For some of Trifast's foreign acquisitions it is true that there are some difficulties obtaining the necessary information relevant to transfer pricing decisions. In fact, I1 has acknowledged that initial reviews of intra-*

group transactions will focus on those involving TR Fastenings Ltd because it is more difficult to access information on intra-group transactions between two foreign subsidiaries.

"Whether corporate policy should program the decision to establish transfer prices or whether the profit centres should be left to negotiate it themselves presents a dilemma for top management" (p240) - *Trifast plc's top management has indicated that as an opening position the group policy should be followed, but there is leeway and discretion for subsidiary management to negotiate exceptions on the grounds of commerciality.*

"Hypothesis 36 : When a company implements a multiple profit centre structure for the first time, transfer pricing will be a major problem in implementing the new organisational form" (p238) - *Trifast plc's first attempt to implement a single TPP (cost + 20%) for all foreign and UK subsidiaries did result in a "major problem". Since then, a reorganisation has meant that the UK subsidiaries are now divisions of TR Fastenings Ltd (with internal transfers at cost), and a matrix of rates applies to intra-group transactions between different subsidiaries.*

9.5.1.2.2 Changing a TPP

"Exactly how a company should go about implementing changes in TPPs in terms of such considerations as who is involved in designing the new policy, what information is made available, and how fast the change is implemented depends on many considerations. Too often, problems with a new transfer pricing policy are due to insufficient attention to the process used to implement it. Through the change process, clarity about the new policy and the process for using the policy can be established. Although it is impossible to make precise statements that are applicable in all instances, some general guidelines can be established" (p255).

Following problems with the initial TPP, Trifast plc implemented a revised policy. Important considerations as part of the change process include the timing of the implementation (preferably at the start of a financial year to coincide with budget setting), education of those affected by the TPP (including general education about what management accounting information shows and how it should be interpreted), and clarity. Trifast plc circulated a Board of Directors' statement about the group's TPP which set out general guidelines and the availability of exceptions.

9.5.1.2.3 Uniformity versus diversity in a TPP

"Hypothesis 38: At any given time, a company's transfer pricing practices are a result of pressures for uniformity balanced against pressures for diversity" (p257).

"..pressures for uniformity in transfer pricing policies will be based on the advantages of administrative simplicity and concerns about fairness" (p256).

In Trifast plc's experience, although a uniform policy was introduced on the grounds of administrative simplicity it was modified on the grounds of both inequity and taxation requirements. The uniform policy was perceived as inequitable for a variety *of reasons including the intervening conditions such as exchange rates. Therefore, the original uniform policy was replaced by a matrix of different cost plus policies which recognised the characteristics of markets in different countries.*

9.5.2 Spicer (1988)

Spicer (1988) develops an organisational theory of the transfer pricing process and deduces a set of hypotheses from that theory. This section attempts to reconcile the findings of the grounded theory case study with Spicer's work, to determine whether practice is consistent with Spicer's relationships and hypotheses.

9.5.2.1 The 'Make or Buy' decision

Spicer[338] relates the dimensions of a transaction to the decision about whether the organisation should 'make or buy' and the transaction costs associated with external procurement. The two ends of the spectrum are summarised and related to Trifast plc:

- When transactions involve standard products (regardless of the frequency and levels of uncertainty), the organisation is better served by buying externally because there are likely to be very low transaction costs associated with this option.

To apply this relationship to Trifast plc, the 'make' option needs to be redefined. In two of the chosen five intra-group transactions, the distributor has the option of either buying externally ('buy') or buying internally ('make'). In these examples, Edenbridge (transaction 4) have the opportunity to buy rivets from the originating manufacturers, and Central Supplies (transaction 5) have the opportunity to buy general standard products in bulk for a discount. Then in both cases, the foreign distributors can source internally or externally. Therefore, in these examples the economies of scales relate to bulk buying centrally rather than 'making'. However, TR Fastenings Ltd's FD (I1) stated that the Trifast group is "probably only capable of making about 60% of everything we sell" (21st December 1998). In addition, certain items (referred to as 'category C items' such as plastic parts and sellotape which are sourced and supplied to customers at an agreed management fee) "are not manufactured and the group would never look at manufacturing them. So for category C items in effect there is no make or buy decision" (21st December 1998).

For transaction 4, Magne Bjorlo buy externally from the original supplier for more competitive prices than internally - as Spicer suggests. In addition, some incremental costs are avoided with this sourcing arrangement (freight and customs charges).

For transaction 5, Magne Bjorlo & TR Southern Fasteners also buy externally (the intervening condition of exchange rates play an important part in this decision) - as Spicer suggests. However, in this example the transaction costs associated with external buying are not negligible. As discussed in chapters 7 and 8, external

[338] Spicer (1988), table 1, p310.

sourcing results in the duplication of costs and reduced buying power for the Central Supplies, leading to the potential for increased costs to the group overall.

Perhaps it could be argued that although the products are very standard, the Central Supplies' facilities represent large transaction-specific investments in physical capital (both in terms of the actual warehousing and the high levels of stockholding). Therefore the distributors should buy internally to realise economies of scale and minimise the transaction costs associated with external procurement.

- When transactions involve recurring levels of highly specific products (and high levels of associated uncertainty or complexity), the organisation is better served by making these products because economies of scales are likely to be captured and there are likely to be very high transaction costs associated with external sourcing.

Transactions 2 and 3 are examples of highly specific (including proprietary) products which entail high levels of investment, high levels of complexity and recurring transactions. As identified by a number of interviewees, these are the products which generate very high profit margins and economies of scale are captured by making them within the group.

In relation to the specific investment for the Hank-Magne Bjorlo contract : "....needing two machines that we specially built , through the rebuild centre we dedicated both the machines to that customer...... and of course we'd spent an awful lot of outlay, and we'd got machines ... where we should have been utilising two machines fully we'd been using one 50% and the other was sat there, we could have been using it for making other parts, giving more support somewhere else" (I4-axial).

9.5.2.2 The need for adaptability and co-operation between profit centres

Spicer[339] relates the dimensions of a transaction to the decision about whether the profit centres need to cooperate and need an arbitration procedure to settle disputes.

Note that Spicer refers to divisional management which would appear to relate to inter-company transactions (which are strictly transferred at cost within Trifast plc), whilst this researcher's study relates to subsidiary management and intra-group transactions. Therefore, Spicer's reference to 'divisions' are reinterpreted as 'subsidiaries' for the purposes of this ITP study.

The two ends of the spectrum are summarised and related to Trifast:

- When transactions involve standard products (regardless of the frequency and levels of uncertainty), there is little need for co-operation between profit centres or a need for arbitration of disputes.

[339] In Table 2 (p311)

Depending on how transaction 5 is classified (as non-specific or highly-specific investment), it is clear from discussions with the Central Supplies and some of the distributors that the buying subsidiary does need to cooperate with the seller, Central Supplies. Unfortunately, for these products they are constrained in the degree to which they can cooperate by the TPP which can only be set aside in exceptional circumstances.

- When transactions involve recurring levels of highly specific products (and high levels of associated uncertainty or complexity), there is a pressing need for co-operation between profit centres and the arbitration of disputes

Transaction 1 (for the arrangement between TR Formac and Contracts) involves a one-off intra-group transaction which is specific to one customer. As well as negotiating a profit split transfer price, an arbitration process took place (this negotiation took place between the two Board Directors responsible for each subsidiary) to ensure first that both parties were reasonably content to facilitate this specific contract, and second (and more importantly) that the contract definitely went ahead. In addition, transactions 2 and 3 illustrate that both profit centres are prepared to cooperate and negotiate a transfer price (although the buyer also purchased externally in the case of the transaction 2 product). In these instances, the negotiation took place at subsidiary management level.

Spicer identifies three main ways for ensuring that the relationship between profit centres protects the organisation's economic interests :

1) "Allow divisional managers full autonomy to negotiate their own arrangements to buy inside or outside the firm" (p314) - *Trifast grants this autonomy to the distribution* ***subsidiaries*** *which are able to source internally or externally, and to the manufacturing* ***subsidiaries*** *which can choose not to manufacture for the group in certain circumstances.*
2) "Allow divisional managers full autonomy to negotiate their own arrangements; but provide for intervention, as needed, by corporate managers to protect the firm's economic interests in the overall make-or-buy decision" (p314) - *Trifast does provide some intervention in the form of the group TPP which limits the level of negotiation between subsidiaries. Rather than protecting the firm's economic interests per se, this particular intervention protects the firm in its relationship with the tax authorities. However, for transaction 1 an arbitration process between Board Directors ensured that the contract went ahead, thus protecting the group's economic interests.*
3) Reorganise the firm : "Conflict and disputes over internal transfers and transfer prices can also be a signal that the present organisation structure is not conducive to organisational efficiency" (p316) - In *actual fact, Trifast reviewed its group structure and decided to restructure so that its UK subsidiaries became divisions - amongst other things this addressed one of the disincentive affects of the TPP (within the UK national boundaries) expressed by I5 (earlier).*
"Having taken the discussions further we then started reviewing the structure in the UK anyway and we decided that the only real reason that the subsidiaries were separate subsidiaries was due to

warranties and things when we had purchased them. And you had got earn-outs and things like that, and they would actually be better service to the group if they were just divisions of TR Fastenings. They've all got their own product..their own market place, so they just become specialist divisions in which case you would wipe out all of those problems. So as much as I5 may be a bit miffed off for the next few months, as from 1st April they will be a division so that solves that problem" *(I1-open).*

9.5.2.3 Spicer's hypotheses

Table 9-2 presents most of Spicer's hypotheses along with a brief comment based on the Trifast case study. Hypotheses 6a,6b and 6c were presented in chapter 3 and are discussed in more detail after the table.

Note that for this industry some customers might specify that they require TR Fastenings Ltd's proprietary products, some might specify non-TR proprietary products, and others might not specify any particular source. Customer requirement will obviously have an added influence on intra-group transfers.

No.	Hypothesis	Trifast experience
1	The dimensions of intra-firm transfers of intermediate products are jointly related to a firm's diversification strategy, its product design and its organisational structure.	In an international context, as well as these factors, the group's ITP policy must also satisfy fiscal authorities. In turn, this will also affect the dimensions.
2	The greater: (1) the degree of transaction-specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transaction the stronger will be the firm's interests in **centrally controlling** the make-or-buy decision.	Trifast does not centrally control the make-or-buy decision for its subsidiaries, although it is more likely that top management will try to control or influence these types of transactions.
3	The greater: (1) the degree of transaction-specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transaction the more likely it is that the firm will have well specified **arbitration procedures** to safeguard the firm's interests in the make-or-buy decision.	Trifast does not have a specific arbitration procedure.
4	The greater: (1) the degree of transaction-specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transaction the more likely it is that the firm will de-emphasise **performance measurement and incentive mechanisms** that focus entirely on divisional profitability, in favour of broader measures and incentives that recognise the need for co-operation and adaptation.	Trifast emphasises the importance of **subsidiary** profitability. Although the PRP attempts to take a broader approach, the **subsidiary** profitability appears to be a more important factor influencing subsidiary management's decisions.
5a	The greater: (1) the degree of transaction-specific investment, (2) the frequency and volume, and (3) the degree of uncertainty and/or complexity associated with intra-firm transaction the more likely is **conflict** between divisional managers involved in internal transfers of intermediate products	This appears to be true for intra-group transactions between different subsidiaries of Trifast plc. These transactions are more likely to be exceptions to the group TPP.

5b	Conflict between divisions involved in intra-firm transfers of intermediate product is more likely for ex-post proposals for transfer price adjustments than for ex-post proposals for quantity adjustments.	No information found on ex-post adjustments between Trifast plc's subsidiaries. It was found that the subsidiaries tended to adjust the transfer price for future transactions when conflict arose.

Table 9-2 Spicer's hypotheses in relation to Trifast

Hypotheses 6a,6b and 6c

These hypotheses relate to the primary basis for setting internal transfer prices. In brief, they suggest that market prices will be used for standard products and cost (plus) will be used for highly specific products. Although this corresponds to the way in which the group TPP has been set, it does not reflect the way in which the intra-group transactions are subsequently identified and managed (as in the substantive theory developed in chapter 7).

The Trifast case study questions the basis of Spicer's Figure 2 on 'Process of Negotiation, Conflict and Arbitration'[340]. In that model, it is assumed that the supplying division bases its pricing decisions on cost based information and the buying division bases its decision on market based information.

However, in transaction 3, Hank bases its selling decision on market-based and not cost-based information - what customers are prepared to pay may not bear any relation to the actual cost of the product. Furthermore, Hank even claimed to have a better grasp of the market-based information than the buying division (Magne Bjorlo) :

"The other side of the coin is also trying to get the subsidiaries to sell at what we recommend should be market selling price. Because in a lot of instances we either lead the market as far as market price is concerned or we have a very good knowledge about what the market price should be. And it is very difficult sometimes to get them to try and sell it at what the market price should be; where they could just take the cost plus twenty that we are giving them and double it which undervalues the market and brings the overall profits down" (I4-open).

In actual fact, the transfer prices agreed for the more specific transactions 1 (TR Formac to Contracts) and 3 (Hank to Magne Bjorlo) were both negotiated on the basis of profit split (sharing the profit 50:50) rather than on a cost plus basis.

9.5.3 Colbert and Spicer (1995)

As discussed in chapter 3, Colbert and Spicer investigated internal transfers in four

[340] It is worth observing that Spicer refers to an intermediate product, whereas the transactions between Hank and Magne Bjorlo involve finished proprietary products - although the distributor might be responsible for providing an additional service such as a managed account/ direct line feed along with the manufacturing product.

large, vertically integrated high-technology companies in the electronics industry. Their data collection and analysis was informed by previous theory (notably Spicer, 1988). In contrast to the case study of Trifast plc, Colbert and Spicer do not consider the international dimension of TPPs[341] and Colbert and Spicer consider transactions between divisions rather than subsidiaries.

Colbert and Spicer discuss two main findings:

- The degree to which sourcing and selling decisions are constrained based on asset specificity : *In the Trifast case study, the subsidiaries have complete autonomy in their sourcing and selling decisions. However, the divisions (notably TR Fastenings Ltd's locations) are treated differently and constrained in their sourcing and selling decisions*[342] *- but these domestic transfers are not considered in this study.*

- The degree to which market prices will be used for standard products and cost (plus) will be used for highly specific products. : *This is discussed in the previous section on Spicer (1988).*

Finally, Colbert and Spicer acknowledge that other factors might be important :

> "Although the relationship between asset specificity reported by component (selling) divisions was an important determinant of resulting transfer prices, in some instances other firm-specific factors appear to account for exceptions to policies based on asset specificity alone. *For example, we noted that transfer pricing policies were influenced, in some cases, by market conditions for the transferred component and competitive pressures in end product markets....In addition, organisational history, management style and organisational culture appear to play a moderating role"* (italics added, p454).

The substantive theory developed in chapter 7 stresses the importance of the global market (e.g. competition), corporate strategy (e.g. acquisitions) and tax requirements on the way in which the group transfer pricing policy is implemented. Following that, depending on the affect of the TPP (moderated by factors such as performance evaluation criteria and foreign exchange), the subsidiaries can negotiate new transfer prices based on factors such as the profitability of those specific transactions.

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[341] Although there might be some cross-State implications, these are not discussed.

[342] Within the TR Fastenings Ltd company, divisions are required to buy stock, if available, from other members of the company before buying from external suppliers. Within the group as a whole, although subsidiaries are encouraged to buy stock that is available within the group, these subsidiaries have the option to go to external suppliers. "On a lot of these items we don't have a choice, we need to keep the business within the group, they're like the bulk store" (I7-open).

9.5.4 Cravens (1997)

The substantive theory can be compared and contrasted with Cravens' (1997) views on the relationship between corporate strategy and transfer pricing. Cravens emphasises that corporate strategy is an important consideration when trying to understand ITP. She views corporate strategy as a two stage process - formulation followed by implementation - where transfer pricing is one mechanism available to implement the chosen strategy.

However, perhaps Eccles' description of the relationship between strategy and transfer pricing policy as almost a tautology is closer to the substantive theory developed in this study. From the interviews conducted as part of this researcher's theoretical sensitivity it is apparent that transfer pricing can be a mechanism **for achieving** a corporate strategy (such as market penetration). But it is also apparent from the Trifast case study that the TPP can also be a **result or by-product** of implementing the strategy itself (such as growth by foreign acquisition).

Therefore, although Cravens identifies that there is a causal link between corporate strategy and TPP, the role of transfer pricing is not restricted to a mechanism for achieving corporate objectives. The precise role of the TPP depends on the MNE's corporate strategies and the way in which it determines its policy in relation to commerciality criteria, tax requirements (or perhaps tax efficiency), and accounting requirements.

9.6 Contribution of this research

This research provides a valuable contribution to the existing literature on transfer pricing. The findings of the grounded theory study both complement and extend some of the key studies which relate to transfer pricing. The impact and contribution of these findings are magnified by the methodological approach adopted in the study. Rather than selecting and relying on any one specific theory from a mass of confounding evidence, this study used an inductive approach to develop an understanding of how an international transfer pricing policy was implemented and managed in one MNE. Therefore, the insights are founded on the data which were collected and analysed in one MNE, and these insights are reinforced by links to the existing literature.

Figure 9-1 provides an holistic representation of the way in which TPPs are implemented and then managed in Trifast plc. A higher order conceptualisation of these relationships are set out in figure 9-2. Reduced to basics, figure 9-2 illustrates how the TPP results from a strategic decision to implement a policy agreed at the top management level followed by a tactical decision about how best to operationalise successfully that initial policy. The longitudinal nature of the study adds dynamism to both the strategic and tactical decisions. Over an 18 month study period it was apparent that at the strategic level the TPP was implemented based on group strategy (and FDI in particular), whilst at the tactical level it was necessary to consider issues of commerciality for each transaction and in each country so that the TPP actually works in practice.

Similarities can be drawn between Figure 9-1 and existing studies by Eccles (1985), Spicer (1988) and Colbert and Spicer (1995). Parts of the model can be reconciled with each of these studies, but none of these studies provided such an holistic and processual overview of the importance of intra-group transactions to a group, the implementation of the TPP, the management of that TPP, and the iterations involved in managing a TPP. In particular, these previous studies are cross-sectional and static, whereas the current longitudinal study incorporates dynamism. It is even more essential to incorporate dynamism into a model of ITP (as opposed to domestic transfer pricing) because there is increasing pressure from tax authorities for MNEs to review and revise their TPPs on an ongoing basis.

- **Eccles (1985)**
  Eccles (1985) identified the importance of strategy and administrative process as two of the main determinants of the TPP. The importance of these two aspects are also reflected in the substantive theory developed in figure 9-1. However, Eccles' Manager's Analytical Plane (reproduced in figure 3-1 earlier) reflects a rather narrow view of strategy. The main strategic decisions refer to the degree of vertical integration and diversification adopted by a company. Similarly, there is an overemphasis on the transfer pricing method adopted by a company (eg whether cost-based or market-based). The current study considers a much wider view of corporate strategy, including the international dimension, and is less concerned about the transfer pricing method per se.

- **Spicer (1988) ; Colbert and Spicer (1995)**
  Perhaps the most influential aspect of these authors' work is the focus on the specificity of individual transactions and an analysis of the buyer and seller sub-units at either end of these transactions. This feature of their work is reflected in the design of the current research and earlier sections in this chapter contrasted their findings with the current findings. However, these authors concentrated mainly on explaining their findings in terms of asset specificity alone with only a brief reference to the possibility of other factors being the main determinants. The current research places the TPP into both its corporate context and its external context. Therefore, explanations other than just asset specificity are explicit and these help to improve our understanding of the way in which TPPs are implemented and managed in the case study MNE.

The fundamental contribution of the current research over and above the works of Eccles (1985), Spicer (1988) and Colbert and Spicer (1995) is that it studies international transfer pricing. In short, it adds an extra international dimension to their existing studies of domestic transfer pricing. The importance of ITP compared to domestic transfer pricing cannot be stressed enough. As explained in chapter 2, recent developments in many different countries have raised the profile of ITP and it is essential that all MNEs have a documented ITP policy which they are able to justify and support. Figure 9-1 incorporates many different international aspects to the substantive theory about how MNEs manage the affects of their ITP policy.

It is possible to distinguish the substantive theory developed for an international transfer pricing policy in a MNE from one that might apply in a multi-divisional UK-based company[343]. Two particular distinguishing features warrant mention : the corporate strategy for investing overseas (ie FDI) and the real tax consequences of operating in many different countries. From the case, these are seen as non-trivial and the tension between strategic and tactical implementation and operating issues reflect this.

- ***Foreign Direct Investment***

  The first significant international dimension identified in the substantive theory is the nature of the global market (for industrial fastenings in the case of Trifast). The global market is very competitive and large multinational customers (eg the leading computer manufacturers) are able to arrange global sourcing and pricing deals. In addition, these customers are able to demand increasing levels of service and "more for their money". Consequently, suppliers must adopt a corporate strategy which allows them to meet the requirements of these customers. One of the prime ways in which suppliers can supply global customers through local distributors and manufacture in cheaper locations is via foreign direct investment (FDI)[344]. FDI is an international corporate strategy which allows many MNEs to compete in the global market place. Some of the key consequences of FDI are increasing levels of cross-border intra-group transaction, greater incentive and opportunity for scrutiny by tax authorities, and the increasing importance of setting, reviewing and documenting an ITP policy. The substantive theory demonstrates how one MNE which has high levels of FDI has implemented and managed a workable ITP policy.

  In addition, two of the intervening conditions identified in figure 9-1 relate to the way in which Trifast identifies acquisition targets for FDI and structure the subsequent deals. The historical context is important because Trifast typically acquires companies with which it has had previous dealings and which it considers to be well-run companies which will fit into the Trifast group. Therefore, "previous dealings with acquisitions" will mean that the affect of the TPP is likely to be more noticeable because existing transactions might be

[343] In the specific case of Trifast plc, it is possible to demonstrate the differences between TPPs in a MNE and in a multi-divisional domestic company. This thesis has focused exclusively on the TPP relating to Trifast plc (the multinational group). However, TR Fastenings Ltd (the main operating company) is itself a multi-divisional domestic company. Any transfers between locations/ divisions within TR Fastenings Ltd are transferred at cost and constraints are placed on purchasing decisions (divisions **must** buy from other divisions before contacting external suppliers if stock is available in the company) such that it is not possible for divisional managers to manage transfer prices for individual transactions. Therefore, for the particular case study company there is a distinct difference between the substantive theory that applies to the group and one that might apply to the multi-divisional company.

[344] In a multi-divisional domestic company the incentive to set up local distributors is much reduced because it is much easier to service customers direct from the main site in East Sussex.

transferred at a different transfer price following the acquisition. Similarly, Trifast incorporates an element of "deferred consideration on acquisition" into each acquisition deal. Therefore, this focus on subsidiary profit magnifies the "performance evaluation criteria" and increases the affect of the TPP immediately pursuant to acquisition. The importance of exchange rates is also identified as an important intervening condition which adds an international dimension to existing studies on domestic transfer pricing.

- ***Tax rules and regulations***

  In an international environment, a MNE must implement a TPP which satisfies the tax requirements of all the countries in which that MNE operates. Therefore there are very real tax consequences for a MNE operating in a global environment which are distinct from those factors affecting a multi-divisional company. For instance, although Trifast plc is a UK group and must satisfy all the recent developments in the UK transfer pricing rules, it must also satisfy the tax rules applicable in Malaysia, Norway, Singapore and Southern Ireland. Furthermore, the reason for Trifast plc implementing a formal TPP (rather than transferring everything at cost) was because the Inland Revenue enquired about the group's TPP following the acquisition of two companies in Southern Ireland.

Another feature of the substantive theory is that it incorporates change and identifies the various iterations which Trifast has undergone to reach the current TPP. Figure 7-5 attempts to describe the iterative nature of the model. The specific iterations and changes to the group TPP are discussed in section 9.3.1.

Finally, the study develops some insights for future research in the form of a set of hypotheses relating to strategic decision making, tactical decision making, and intervening conditions (see figure 9-2). The contribution of the study includes the identification of some relationships based on acquisitive firms and customer-led businesses, and discussion of some of the intervening conditions. Hypotheses relating to the transfer pricing method are consistent with Spicer's work and the intervening conditions relating to performance evaluation and management accounting information are consistent with years' of management accounting research.

9.7 Summary

This chapter has attempted to identify the main relationships underlying the substantive theory (figure 9-1), to summarise these relationships at a higher conceptual level (figure 9-2), and to develop a set of hypotheses emerging from the grounded theory study. This chapter highlights that the whole decision making process underlying the TPP is dynamic and involves iterations between decision making at the strategic and tactical levels.

This researcher gained increased comfort and assurance by presenting the substantive theory and the hypotheses to Trifast plc. Both the TR Fastenings Ltd's FD and Trifast plc's FD acknowledged their general support for these findings. The research process and the research findings are also considered in terms of qualitative evaluation criteria to demonstrate that this researcher has adhered to Strauss and Corbin's (1990) framework and conducted rigorous qualitative research. Finally the research findings are positioned in relation to previous literature to show how these findings enrich existing theories.

The substantive theory, emergent hypotheses and general findings of this research study represent an important contribution to our understanding of ITP in MNEs. In particular, this research study offers some valuable insights for redirecting future ITP research. The following chapter presents the overall conclusions, the strengths and limitations of the research, recommendations for conducting grounded theory research, and more importantly the way forward. Chapter 10 suggests the characteristics of MNEs which might be considered for testing the hypotheses and also suggests some situations in which the substantive theory and the hypotheses might not be applicable.

10. CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

10.1 Conclusions

The main objective of this research study was to make a contribution to an improved understanding of ITP within MNEs. In particular, the study has responded to Mehafdi and Emmanuel's (1997) call for a different approach to tackling the problem :

> "The involvement of divisional and sub-unit managers in the research is essential.......To redress the balance in transfer pricing research, we believe that a grounded theory approach using in-depth exploratory and explanatory case studies with pluralistic data collection methods is the way forward. To give an encompassing account of transfer pricing change within single case companies, the case studies will need to be longitudinal. While internal validity seems to override external validity in this approach, we believe that sufficient individual case studies of this kind may in time overcome representativeness and external validity problems" (p30-31).

The remainder of this chapter identifies the strengths and limitations of the research, considers the grounded theory approach, and suggests directions for future research.

10.2 Strengths of this research

The literature review in chapter 3 identified many of the limitations of previous empirical studies. In short, the survey and database studies do not improve our understanding of ITP because there is a gap between theory and practice. Many of these studies lack the focus to provide meaningful explanations of ITP practice, transfer pricing is such a multi-disciplinary area that there are numerous competing theories, and the vast volume of studies have produced much confounding evidence and many conflicting findings[345].

One of the strengths of the case-based reasoning (CBR) study is the emphasis on an inductive rather than deductive methodology. Given the range of competing theories underlying ITP, there is a justifiable argument for trying to identify a set of characteristics, relationships or theories from ITP data using induction. Although the CBR study demonstrates the potential for using CBR to investigate ITP[346], the full impact of this approach (as employed in this study) is reduced by the limitations of survey data itself (e.g. surveys take a parent company focus and are too general).

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[345] Quoting Colbert and Spicer (1995) again : "..most surveys of practice are of limited value, firstly because they tend to abstract from industry and organisational context and, secondly, because they *are wrongly directed* at the level of the firm as a whole rather than at the subunit level where internal transactions actually take place" (p453).

[346] A possibility which has since generated interest from the transfer pricing department of one of the 'Big 5'.

One of the main strengths of this case study is the degree of access granted to this researcher. The research required that the researcher investigate both 'ends' of each of the five cross-border intra-group transaction identified. This objective was fulfilled because the Finance Director of TR Fastenings Ltd agreed to every single request made by this researcher in relation to access to sites, managers and information. All relevant participants were interviewed at the subsidiary level (for the five cross-border intra-group transactions) and at the top management level (including three members of the Board of Directors). Similarly, the researcher was granted access to all relevant confidential information regarding the group's TPP.

Another strength of the case study research is that it is a longitudinal study spanning an 18 month period. The study began when the Board of Directors first considered their group TPP. Since then, it has been possible to study the affects of this initial policy, the Board's review of the initial policy and implementation of a completely revised policy, the way in which the TPP caters for recent foreign acquisitions, and the way in which the affects of the TPP have been managed at both the subsidiary level and the top management level.

An additional strength is that the cross-border intra-group transactions are placed into their context. This holistic approach recognises both the organisational context (a fast-growing acquisitive medium-sized company) and the industry context (a competitive, global market dominated by large MNE customers).

Scapens (1990) argues that "Case study methods themselves will not provide the answers to (management accounting practice) problems, but they should provide practitioners with a deeper and richer understanding of the social context in which they work and make them aware of the problems, and the possibilities for solutions" (pp278-279). It is evident in the case study company that the exercise has been useful to both top management and subsidiary management in terms of understanding the organisation context in which intra-group transactions take place, and in terms of identifying potential problems and solutions[347]. In particular, it is hoped that the theory developed in figure 7-5 "can provide a better awareness of the issues which are involved" (Scapens, 1990, p279).

The use of a grounded theory approach itself is a major strength of this study. Rather than testing existing theories (see Yin, 1994, for more information on testing hypotheses using case study research), this case study develops an (emergent) theory and grounds it in the data. The Strauss and Corbin (1990) framework adopted in this

[347] "It was interesting from only being involved in one tenth of the interviews to then see the views that were coming through.....to see the key quotes coming out and reading them one page after the other, it is quite interesting seeing the views that came through and although I'd gone through them with John as you had gone through the project it was quite interesting what is coming out and what they are saying..their perception, and that could help us, not to change the transfer pricing policy but to actually develop their understanding of it...... Because if we know the way that they are perceiving transfer pricing and why they think it is being set up..if they actually knew the reasons why it was being set up it might be better. We can now actually sit down with them and go through things" (I1, 13th November 1998).

study facilitates rigorous qualitative research, leading to an improved substantive theory. Finally, a set of emergent hypotheses are developed in chapter 9 and the substantive theory and the hypotheses are linked to the extant literature.

10.3 Limitations

One potential difficulty associated with case study research is researcher bias. However, care must be taken when trying to account for researcher bias. Maxwell (1996) acknowledges that the researcher cannot eliminate preconceptions or values entirely, and refers to this as inherent reflexivity of qualitative research. Furthermore, if too much attention is devoted to eliminating bias, there is a danger that the study might lose its richness and variety.

The difficulties associated with researcher bias might be magnified in a multi-disciplinary subject area such as ITP where this researcher's initial avenue of investigation related to taxation. However, this researcher recognises this possibility and addresses it in a number of ways. First, a Strauss and Corbin's grounded theory approach has been used to collect, analyse and interpret the evidence provided by the interviewees. Therefore, the research and directions of investigation has evolved over the open, axial and selective stages. These interviews were conducted in the knowledge that this researcher was an independent academic 'grappling' with the affects of the group's TPP and trying to understand how the affects (if any) were managed. Second, independent academics examined and independently coded the initial pilot transcript. Third, a summary of each interview (and this researcher's interpretation) was sent to each interviewee for their comments. Finally, the substantive theory was presented to the company.

Although the researcher interviewed all the key managers identified, it would have been preferable to have spent a longer period of time at each site. However, due to time and financial constraints (for both this researcher and the managers involved), this arrangement was not viable.

10.4 Strauss and Corbin's (1990) grounded theory approach

Strauss and Corbin's (1990) grounded theory approach offers a framework for rigorous research providing that the three stages of coding (open, axial, and selective) based on theoretical sampling are pursued. This researcher adapted this approach by carrying out the three stages of coding at six monthly intervals. The participants at the open coding stage included both managers identified by TR Fastenings Ltd's FD as involved in cross-border intra-group transactions, and managers identified by this researcher on the basis of the FD's description of group activities. The participants at the axial and selective coding stages were identified by this researcher using theoretical sampling and included both continuing and new interviewees.

The application of the Strauss and Corbin approach provided this researcher with some practical difficulties. None of Strauss and Corbin's (1990) examples relate to business or management, so the application of the approach to a completely different discipline posed some initial difficulties which were overcome by reviewing the business literature on grounded theory studies (chapter 5).

Similarly, although the procedures adopted by this researcher at the open coding stage were easier to describe, it is very difficult to communicate the cognitive processes employed by this researcher to develop the three axial paradigms leading to a substantive theory. This is an iterative process which requires continual interplay between data and evolving theory. Although the memos record part of this process, it is difficult to explain how the theory emerged - even though it can be grounded in the data. One solution adopted by this researcher was to discuss the axial paradigms with relevant participants at the selective coding stage and to present the substantive theory and emergent hypotheses to TR Fastenings Ltd's FD for feedback. In addition, the axial paradigms and substantive theory have been presented to a wider group of people (outside Trifast plc) at various conferences and seminars.

In summary, this researcher supports the Strauss and Corbin grounded theory approach. In particular, this researcher emphasises the importance of theoretical sensitivity[348] (including a good knowledge of the relevant literature), theoretical sampling and the three stages of coding. Theoretical sensitivity also enhances the credibility of a researcher trying to arrange access to management and confidential information in a company. This researcher stresses the importance of having both continuing and new interviewees at the axial and selective coding stages; providing a summary of each individual interview to the participants for comment; and the importance of presenting the substantive theory back to the case study company. It is hoped that following the completion of this research, the "grounded theory can be relevant and possibly influential either to the 'understanding' of policy makers or to their direct action" (Strauss and Corbin, 1994, p281).

The inductive, theory generating grounded theory approach was very relevant for understanding ITP in MNEs (as justified in chapter 5). There has been over 40 years of literature and theory relating to ITP, but this knowledge-base is still lacking; the phenomenon is hugely complex and multidisciplinary; and there is definitely a need for a richer understanding of how ITP actually operates in the context of a MNE. Similarly both the axial paradigms suggested by Strauss and Corbin and their emphasis on a change process model fitted the analysis of ITP in MNEs. Strauss and Corbin state that "bringing process into the analysis is an important part of any grounded theory study. By process we mean the linking of sequences of action/interaction as they pertain on the management of, control over, or response to, a phenomenon[349]" (Strauss and Corbin, 1990, p143). This is exactly what the substantive theory in figure 7-5 and figure 9-2 attempts to represent.

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[348] However, given this level of prior knowledge, "the matching of theory against data must be rigorously carried out" (Strauss and Corbin, 1994, p273).

[349] They go on to explain that : "This linking of sequences is accomplished by noting: (a) the changes in conditions influencing action/ interaction over time; (b) the action/interactional response to that change; (c) the consequences that result from that action/ interactional response; and finally by (d) describing how those consequences become part of the conditions influencing the next action/ interactional sequence" (Strauss and Corbin, 1990, p143).

10.5 Future Research

10.5.1 General considerations

There are a number of general considerations which might influence the directions for future research for ITP.

- Theoretical sensitivity and experience gained from this case study suggest that the implementation of a TPP is definitely an evolving process which must take into account continual changes. In particular, over the next few years both UK MNEs and foreign MNEs operating in the UK will need to adhere to the UK's new Corporate Tax Self Assessment (CTSA) rules. The big question is what affect CTSA will have on the existing TPPs of these MNEs?

- There might be some distinct differences in underlying factors and the implementation process between when MNEs employ external consultants to implement a TPP and when a MNEs' top management implement a TPP based on their own analysis. Depending on the way in which the TPP is implemented (external consultants might emphasise tax factors to the exclusion of other factors; top management might implement a TPP based on corporate strategy), it might result in different affects of the TPP and consequently it might require different strategies to manage these affects.

  In an interview with two international tax inspectors at the Australian Tax Office, one of the tax inspectors discussed the merits of a MNE implementing their own TPP : "They might need somebody to facilitate it but the company can do it better than the accountants can. The production manager knows what he is trying to do, the bloke running the warehouse knows what he is trying to do, the guy (overseas) knows what he is trying to do. The board know what the company as a whole is trying to achieve. They know what directions they have set for the various subsidiaries. They know what was in their 5 and 1 year plan. People are preparing budgets in this company. What are they trying to get out of their budget? What are they trying to achieve? All the data's there in the company, its just needing somebody to facilitate the way it is presented and documented. That's when you go to some of these big accounting firms and they come out with a simplistic template and you don't necessarily get value in the answer" (Sydney, 3rd July 1997).

10.5.2 Specific recommendations

The emergent hypotheses set out in chapter 9 under the headings of strategic, tactical and intervening conditions form the basis for future ITP research. Figure 9-2 illustrates that the substantive theory is a dynamic process and it is important to be aware that different companies might be at different stages or at different iterations in their consideration of strategic and tactical decisions. Also there appear to be two distinct levels of decision making at the strategic and at the tactical levels.

One of the overwhelming conclusions is that if these relationships hold then there will be an element of flexibility inherent in a TPP depending on factors such as location and/or nature of the transaction. In turn, this means that there are likely to be some important implications. For instance, MNEs will need to review their TPP (and the exceptions) regularly and carefully; MNEs will need to document the reasons and supporting evidence for each of the exceptions; and, it is unlikely that MNEs will be able to legislate for all possible situations in advance.

Perhaps the most important research finding relates to recommendations about suitable and unsuitable research methods and methodologies. This researcher emphasises the importance of longitudinal case study based studies for conducting ITP research. Furthermore, this researcher emphasises the unsuitability of surveys for understanding ITP in MNEs. The richness and variety of corporate practices discovered for five of Trifast plc's cross-border intra-group transactions could not have been identified using a questionnaire survey. It is argued strongly by this researcher that this assertion is equally applicable to the majority of other MNEs, with the possible exception of those MNEs which focus on a narrow range of products and cross-border intra-group transactions, have a rigid TPP, and absolutely no room for exceptions or negotiation.

At this point, it is important to consider the situations in which these hypotheses could be tested to demonstrate the 'fittingness' and 'plausibility' of the theory.

10.5.2.1 Situations in which the substantive theory/ emergent hypotheses might apply

Trifast plc fits the profile of the 'Ten Percenters'[350], which is a set of companies which represent that proportion of companies with a turnover between £5m and £100m which have experienced rapid growth since the early 1990s[351]. Table 6-10 shows that Trifast plc's turnover and profit figures have a compound growth over the last 5 years of 28.3% and 36.5% respectively. Deloitte & Touche (1997)[352] concluded that "the firms which have grown rapidly are those with the combination of luck and foresight to be in buoyant, often niche markets. They have then exploited this good fortune by really understanding the needs of their customers and focusing on the quality of the product/ service provision" (p2). Trifast plc has concentrated on

[350] The 'Ten Percenters' is a three part series which reports the results of joint research between Professor David Storey (Centre for Small and Medium Sized Enterprises, Warwick University) and Deloitte & Touche.
[351] In 1996, 7,203 UK companies were identified on the ICC/One Source database which were limited, non-subsidiaries, with turnover between £5m and £100m, and with at least four years of records. Of these companies, 708 companies (or nearly 10%) - the 'Ten Percenters' - had experienced at least a 30% growth rate in sales per annum.
[352] The second report is based on telephone interviews with a sample of 156 Ten Percenters.

meeting the needs of customers (often by working with them) and does focus on the quality of the product and any associated service provision.

In a third report in the series, Deloitte & Touche (1998)[353] analyses the sectors and markets, strategy, management of people, and company culture of a sample of Ten Percenters. Some of these findings provide interesting parallels with the substantive theory developed from the grounded theory case study of Trifast plc and allow this researcher to specify a set of circumstances in which the substantive theory and hypotheses can be tested.

- **Sectors and Markets**

Deloitte & Touche (1998) highlights the importance of developing a niche market and satisfying customer demands (including preferred supplier relationships) : "A (second) type of growth for Ten Percenters is the trend amongst giant enterprises towards having a small number of 'preferred suppliers'. These suppliers are normally required to undertake quite a wide range of activities. To become a preferred supplier requires them to obtain this expertise, often achieved by purchasing other companies.....giant enterprises provide a powerful incentive for some small firms to become substantially larger over a short period of time" (Deloitte & Touche, 1998, p8).

These hypotheses could be tested in MNEs operating in niche industries or those MNEs which operate innovative processes (e.g. preferred supplier relationships) to satisfy customer requirements[354].

- **Corporate Strategy**

A number of strategic themes emerge from Deloitte & Touche (1998) including the importance of quality, price, and acquisitions: "Almost all Ten Percenters view 'quality' as either their key comparative advantage, or at least a major comparative advantage which they have over their rivals......Whilst the nature of 'quality' differs from one place to another, the emphasis which is placed upon it is, for virtually all Ten Percenters, paramount.....almost none of the firms attribute their success in the marketplace to primarily a price-based strategy. In about one third of cases firms say price plays virtually no role and so for two thirds of the firms price plays some, but very rarely indeed, a significant role. The firms placing more emphasis upon price are those likely to be selling to a large powerful purchaser, rather than to a wide

[353] The third report is based on in-depth interviews with a sample of 46 Ten Percenters.

[354] According to Collins (1992), TR Fastenings Ltd has developed the long term strategy of becoming a "One Stop Shop" so that TR Fastenings Ltd is now more proactive dealing in redesigns; quality assurance ; direct line feed (DLF) and other services.. Malcolm Diamond also emphasises the importance of providing the role of 'lead supplier' : "Historically manufacturers have about 20 suppliers of fasteners, so they spend lots of time dealing with those suppliers, and running lots of checks. However, we do all that for them, and we now have about 100 companies in the UK who have given us their business" (Manchester Evening News (1/9/95) "UK : Trifast Targets North West for Growth").

range of purchasers or to the general public....In essence most Ten Percenters view competitiveness as a package in which price plays a role, but rarely the key or sole role" (Deloitte & Touche, 1998, pp12-14).

The quality of product is essential for Trifast plc 's large MNE customers - particularly on the direct line feed business or safety equipment. When Trifast is supplying computer manufacturers or the electronics industry, it is vital that defective screws (for instance) do not stop the production line. Similarly, any components which are used in safety equipment (e.g. fire alarms) must work.

Trifast plc operates in a very competitive market in which there is pressure to reduce prices, especially to the large MNE customers (which can set up global sourcing deals at competitive prices). However, the emphasis is not just on price but more on value-for-money. For instance, the price must be competitive but to win a contract the supplier must also be able to 'throw in' additional features such as quality control, direct line feed, and a guarantee about stock availability. Also it depends on whether the product is a standard product or a proprietary product[355].

"About one third of Ten Percenters plan to acquire business as a key element in their growth strategy" (Deloitte & Touche, 1998, p14)

These hypotheses could be tested in MNEs which have adopted corporate strategies which include

- *offering quality products and value-for-money services to large MNE customers; and,*
- *expansion through acquisition strategies.*

Some other specific situations in which the hypotheses should be tested include those MNEs with a:

- **Mix of intra-group transactions**

Trifast plc carries out a small number of large cross-border intra-group transactions, but they represent a variety of goods-related transactions (manufacturing; distribution; bulk buying).

These hypotheses could be tested in MNEs with a similar mix of goods-related cross-border intra-group transactions.

- **Range of intervening conditions**

It would be interesting to test these hypotheses in MNEs so that the impact of some of the intervening conditions on both the affect and the management of the TPP can be tested. These intervening conditions include performance evaluation criteria,

[355] One participant in the Ten Percenters study stated that "It's not particularly price sensitive. There's no business in the world where price doesn't matter and buyers are getting tough but, yes, you don't have to be the cheapest if you've got the quality."

management accounting information (availability and understanding) , exchange rates, deferred consideration on acquisitions, and previous dealings with acquisitions.

10.5.2.2 Situations in which the substantive theory/ emergent hypotheses might not apply

The substantive theory is less likely to apply to MNEs with the following characteristics:

- Larger and long established MNEs for which the levels and directions of flows of the intra-group transactions are very stable and the TPP is 'set in stone'.

- MNEs in which the TPP is subject to no exceptions and in which subsidiary managers have no discretion to either negotiate with each other or to source externally.

- MNEs in which the cross-border intra-group transactions include services, intangibles and financing rather than just the transfer of goods. For instance, ITP in the banking sector includes items such as the location of capital and financial guarantees, and the Features of the Global Market would include high levels of regulation.

- MNEs which have decoupled the management accounts (which are the basis of performance evaluation and management reward schemes) from the statutory accounts. I1 acknowledged that the affect of the TPP would be different if 'two sets of books' were in operation : "The next big jump for us will come, I think we are a long way from it at the moment, where we start to have to do separate management accounts that don't reflect transfer prices..or we make big transfer price adjustments. JE: So two sets of books basically? I1: Yes, we (would) have a set of books that's our management tool and it drives the bonuses.....and then we (would) have a set of books that is the actual profit running around the business" (I1, 13th November 1998). In this researchers experience, this decoupling is quite common for MNEs operating in the banking sector.

10.6 Summary

The value added of this research has been twofold. First, an inductive technique (CBR) was used to analyse a sample of ITP questionnaire surveys. This technique provided a plausible explanation of the characteristics of those MNEs which had, versus those which had not, been subject to a transfer pricing audit by the Inland Revenue. However, the analysis was based on survey data and it is questionable whether this level of data is suitable for understanding how ITP operates within MNEs. Second, a grounded theory study was conducted at Trifast plc. It was established that Trifast plc was an ideal case study company for understanding ITP as a change process within its MNE context. The initial research question was "How do MNEs formulate their ITP policy ?" and this was subsequently refined to ask "What is the affect of a MNE's ITP policy and how does it manage the ITP policy for specific cross-border intra-group transactions?"

The important aspects of the grounded theory study which distinguish this research from previous transfer pricing research included an analysis of international (rather than domestic) transfer pricing, a longitudinal study carried out over an 18 month period with access to any person or subsidiary, a focus on 5 specific cross-border intra-group transactions rather than an overview at the parent company level, interviews with managers at both subsidiary and top management levels, interviews with managers responsible for both 'buying' and 'selling' each of the five transactions, a rich mixture of both standard and speciality products, a variety of countries (including UK, Southern Ireland, Norway and Singapore) and a variety of functions (including manufacturing, distribution, bulk purchasing, and managed accounts), and some very real insights into how the Trifast group sets its TPP and how it subsequently manages the affects of its policy.

Finally, the research has generated a substantive theory (in figure 7-5) and a higher level conceptualisation (figure 9-2) which illustrate the underlying relationships within the ITP process within a MNE and emphasise that the TPP is part of a dynamic process. In addition it has produced a set of hypotheses which might be applicable to companies displaying a specified set of characteristics. These findings allow scope for more detailed and specific research studies in the future. In particular, following the insights generated by this study, there is an *overwhelming need to* conduct further longitudinal grounded theory studies or case studies into the implementation and operationalisation of TPPs in MNEs.

APPENDIX 1 : EXAMPLES OF TRANSFER PRICING POLICIES

BIC (1973) "Setting Intercorporate Pricing Policies" surveyed the transfer pricing practices of more than a dozen US-based companies. Although the report is over 20 years old, some of the observations on how the companies organise their transfer prices are still relevant to the current study. Some of the more pertinent issues are identified from the case studies :

Company A
"Once guidelines have been established at corporate headquarters and the transfer price determined at the group or divisional level, the actual transfers of goods and monies are handled by the shipper and recipient. The controller of each group or division periodically audit the transfer prices to see that they fall within the broad framework of corporate guidelines" (p75).

Company B
"The basic policy relating to transfer pricing is determined at the top executive level...while taxes imposed by the various governments of the world are not a controlling factor in determining transfer prices, they nevertheless are elements of cost to be considered in such determinations; accordingly, the tax department is consulted before any changes in established policy are implemented" (p75).

Company C
".feels that in the area of transfer pricing it is best for decisions to be made at the lowest possible level....each subsidiary is responsible for its own profit and tax situation; as long as the profit picture remains satisfactory, corporate headquarters does not interfere in any fashion" (p75).

Company D
"..determines its transfer pricing policies..via a committee consisting of the group vice presidents of the international division. The implementation of transfer prices is in turn monitored by a committee consisting of the international controller, the domestic controller, and the corporate vice president at the head of the international operations....essentially transfer prices remain at all times a corporate responsibility" (p76).

Company E
"..determines its transfer prices on the basis of a cost-plus formula that originates at headquarters and is developed by the corporate senior vice president in conjunction with the international department and approved by the president....in the area of taxes, virtually no world-wide coordination is done at corporate headquarters" (p76).

Company F
"its transfer price is ... determined by a corporate controller, director of taxes, legal counsel, and the CEO...(then) essentially the transfer price is a relationship between the seller and the buyer...Audits of transfer pricing are made on a periodic basis by the

corporate internal audit department. From time to time there will be a review of the entire transfer price structure by the tax department to determine if the cost-plus formula falls within the range of general US tax guidelines" (p76).

Company G
"..the final say on transfer pricing is by the general manager of the international division, usually in consultation with the international controller and the international tax manager" (p76-77).

Company I
"...maintains a uniform transfer pricing formula developed at corporate headquarters by the international organisation in conjunction with the corporate financial staff....due to tax regulations, there is virtually no deviation from the basic transfer pricing formula....World-wide coordination in taxes is done in a very loose fashion, primarily because one US-based accounting firm handles all tax matters, so ultimately anything related to the tax area will pass through one office....In some countries -especially Germany, the Netherlands, and the UK - company I finds it difficult to get the predetermined transfer price accepted for (customs) duty purposes. These countries are not accepting the intercorporate price as one that has been arrived at in accord with the accepted arm's-length principle, and have demanded increases for duty purposes" (p77).

Company J
"In the area of taxes there is some world-wide coordination, since the corporate tax department virtually operates as its own profit centre, so there is a tendency to maintain close scrutiny on all tax matters" (p78).

APPENDIX 2

THE EXTENT OF GLOBALISATION BY MNEs

Extract from UNCTAD (1997a), - Number of parent transnational corporations and foreign affiliates, by area and country, mid 1990s (latest available year)

Area	Parent Corporations based in country (No.)	Foreign affiliates located in country (No.)	Year
Developed Countries	36,380	93,628	
Western Europe	26,161	61,902	
Japan	3,967	3,405	1995
US	3,470	18,608	1994
Developing Countries	7,932	129,771	
WORLD	44,508	276,659	

APPENDIX 3

THE IMPORTANCE OF FDI AS A MEANS FOR ECONOMIC INTEGRATION

Extract from UNCTAD (1994), Table III.6, p130: The role of FDI in world economic activity, 1960,1975,1980,1985,1991 (%)

Item	1960	1975	1980	1985	1991
World FDI stock as a share of world output	4.4	4.5	4.8	6.4	8.5
World FDI inflows as a share of world output	0.3	0.3	0.5	0.5	0.7
World FDI inflows as a share of world gross fixed capital formation	1.1	1.4	2.0	1.8	3.5
World sales of foreign affiliates as a share of world exports	84[356]	97[357]	99[358]	99[359]	122

[356] 1967 based on US figures.
[357] Based on US and Japanese figures.
[358] 1982 based on German, Japanese and US figures.
[359] 1982 based on German, Japanese and US figures.

APPENDIX 4

THE IMPORTANCE OF INTEGRATED INTERNATIONAL PRODUCTION

UNCTAD (1994) reports a trend towards greater integrated international production (pp137-144):

"In the past, the foreign production of national firms was typically characterised by a clear division of tasks between parent companies and foreign affiliates. This division was a reflection of the fact that, in most cases, foreign affiliates would follow a stand-alone strategy, replicating more or less in total the entire value chain of the parent firm....However, enabled by the liberalisation of the frameworks for international economic transactions, the spread of information technology, and driven by competition, trans-national corporations (TNCs) have begun to redefine the way in which they manage and organise their world-wide productive assets. More specifically, as part of complex integration strategies, TNCs are turning their geographically dispersed affiliates and fragmented production systems into regionally or globally integrated production and distribution networks."

"As an increasing number of functions are organised within a framework of complex integration strategies, this form of international production requires substantial flows of technology, skills, finance (including royalties, dividends and intra-company funds) and goods and services....
Virtually no data exist on exchanges of intangible assets, especially services performed within corporate systems[360] ..as far as the exchange of tangible assets is concerned, some data exists on intra-firm trade[361]."

[360] According to Table III.13 (Germany, UK and the US : technology receipts, 1986-1992) about 80% (over 90% for exchanges with developing countries) of the payment of fees and royalties are intra-firm in the UK and the US and over 90% are intra-firm in Germany.
[361] UNCTAD (1994) reports the extent of US intra-firm trade with intra-firm exports and imports equivalent to one-third and 40% of total US trade.

Appendix 5

TRANSFER PRICING

A strictly confidential survey.

Compiled by: **Jamie Elliott, Assistant Professor of Accounting at the London Business School.**

Supported by: **Systems Union Group Ltd**, author of **SunSystems** financial software.

The Deputy City Editor of the Sunday Times on 9/10/94 reported that:

"British Multinationals are being targeted by the Inland Revenue in a bid to recover more than £1 billion in tax believed to have been underpaid in the past decade....... The Revenue has identified pharmaceutical, electronic, chemical and oil groups as its most fruitful targets."

In light of the above I have designed this survey which provides you, as head of tax of the most significant companies in the chemicals and electrical/electronics industries, with an opportunity to give your views on a number of topical issues.

The survey is divided into 3 sections which are:

1. Organisational Characteristics
2. Transfer Pricing
3. Advance Corporation Tax

The initial findings will be presented at the European Accounting Association and the survey forms part of a larger Transfer Pricing study.

My report should be available by June 1995. If you wish to receive a copy please indicate.

Yes _____ No _____

If you wish to contribute further, or are willing to be involved in an interview, please give details below:

Name: ....

Address: ....

....

Contact telephone no. ....

Your help is greatly appreciated. Please return this document in the envelope provided by the 24th of March.

Please return to:

Jamie Elliott
Assistant Professor of Accounting
London Business School
Sussex Place
Regent's Park
London NW1 4SA
Tel: 0171 262 5050
Fax: 0171 724 7875

London Business School

Systems Union

TRANSFER PRICING

SECTION 1

ORGANISATIONAL CHARACTERISTICS

1. What is the level of annual company sales?

Less than £100 million	___
£100m < sales < £250m	___
£250m < sales < £500m	___
£500m < sales < £1000m	___
£1000m < sales < £5000m	___
Over £5000m	___

2. What is the proportion of internal trade (i.e. between or divisions as a percentage of total company sales?

Less than1%	___
1% < proportion < 10%	___
10% < proportion < 25%	___
25% < proportion < 50%	___
Greater or equal to 50%	___

3. How appropriate are the following descriptions of your company's operations? Please circle:

	Not at all appropriate				Very appropriate
Vertically integrated	1	2	3	4	5
Technologically sensitive	1	2	3	4	5
Speciality products with no intermediate market	1	2	3	4	5
Predominantly UK presence	1	2	3	4	5

SECTION 2

TRANSFER PRICING

In July 1994 both the USA and the OECD published rules on transfer pricing guidelines. If you have no knowledge of these specific guidelines please go to question 7.

Consider the final US S482 rules (published 1/7/94).

4.a) What effect are these rules likely to hav your relationship with the tax authoritie Please circle:

None at all				Very significant	Not applicable
1	2	3	4	5	0

4.b) Are you satisfied with the final US S482 rules? Please circle:

Very dissatisfied				Very satisfied	N/A
1	2	3	4	5	0

4.c) If appropriate, what aspects are you:

Satisfied with:

____

____

Dissatisfied with:

____

____

Consider the draft OECD guidelines (published 8/7/94).

5.a) What effect are these rules likely to have your relationship with the tax authoritie: Please circle:

None at all				Very significant	N/A
1	2	3	4	5	0

5.b) Are you satisfied with the draft OECD guidelines? Please circle:

Very dissatisfied				Very satisfied	N/A
1	2	3	4	5	0

5.c) If appropriate, what aspects are you:

Satisfied with:

____

____

Dissatisfied with:

____

____

6. **With regard to the proposed regulations on transfer pricing, do you agree with the following?**
   Please circle:

	Strongly disagree				Strongly agree	Don't know
The OECD now allows the use of CPM (comparable profits method) in exceptional circumstances - this is not a good move for international agreement	1	2	3	4	5	0
The burden of proof for determining an arm's length price will shift from the tax authority to the tax payer	1	2	3	4	5	0
Requirements for documentation and functional analysis place added onerous burdens on the taxpayer	1	2	3	4	5	0
The real problems will arise when applying CPM to the transfer of services	1	2	3	4	5	0

7. **When determining a transfer price for internal transactions, which areas do you consider that the tax authorities are likely to question you on?**
   Please circle:

	Very unlikely				Very likely	Don't know
• Commissions	1	2	3	4	5	0
Expense						
• Allocation	1	2	3	4	5	0
• Information technology expenditure	1	2	3	4	5	0
• Interest expense Allocation	1	2	3	4	5	0
• Interest paid on Intra-						
• Group loans	1	2	3	4	5	0
• Intra-Group transfer of technology and other intangibles	1	2	3	4	5	0
• Management fees	1	2	3	4	5	0
• Permanent establishments	1	2	3	4	5	0
• R & D	1	2	3	4	5	0
• Royalty evaluation	1	2	3	4	5	0
• Service Fees	1	2	3	4	5	0
• Please specify others:						
....	1	2	3	4	5	0
....	1	2	3	4	5	0

8. **In terms of setting a transfer price for internal transactions, which areas do you find it hardest to defend when challengec**
   Please circle:

	Very easy				Very hard
• Commissions	1	2	3	4	5
• Expense Allocation	1	2	3	4	5
• Information technology Expenditure	1	2	3	4	5
• Interest expense Allocation	1	2	3	4	5
• Interest paid on intra-group loans	1	2	3	4	5
• Intra-group transfer of technology and other intangibles	1	2	3	4	5
• Management Fees	1	2	3	4	5
• Permanent establishments	1	2	3	4	5
• R & D	1	2	3	4	5
Royalty valuation	1	2	3	4	5
• Service Fees	1	2	3	4	5
• Please specify others:					
....	1	2	3	4	5
....	1	2	3	4	5

9. **Is it possible to identify a comparable arm length transaction in your industry?**
   Please circle:

Not at all				To a great extent	[
1	2	3	4	5	·

10. **What is the likelihood that the following length pricing methods might be used in company?**
    Please circle:

	Never				Always	Dc kn
•Variable cost	1	2	3	4	5	
•Variable cost plus	1	2	3	4	5	
• Full cost	1	2	3	4	5	
• Full cost	1	2	3	4	5	
plus	1	2	3	4	5	
• Resale price	1	2	3	4	5	
• Resale - minus price	1	2	3	4	5	
• Market-based: current price	1	2	3	4	5	
adjusted	1	2	3	4	5	
• Negotiated	1	2	3	4	5	
Please specify:						
....	1	2	3	4	5	
....	1	2	3	4	5	

11. Please rank the top 3 pricing methods in order of applicability to your industry. (1 = most suitable).

- Variable cost ______
- Variable cost plus ______
- Full cost ______
- Full cost plus ______
- Resale price ______
- Resale - minus price ______
- Market-based: current price adjusted ______
- Negotiated ______
- Others:

.... ______

.... ______

12. How important are the following factors in the determination of a transfer price? Please circle:

	Very Unimportant			Very Important		Don't Know
• Provide a subsidiary with a fair return on assets	1	2	3	4	5	0
• Subsidiary performance evaluation	1	2	3	4	5	0
• Motivate local management	1	2	3	4	5	0
• Competitive position of foreign subsidiary	1	2	3	4	5	0
• Local market conditions	1	2	3	4	5	0
• Intra-group negotiations between group members	1	2	3	4	5	0
• Protection against foreign exchange losses	1	2	3	4	5	0
• Government price controls	1	2	3	4	5	0
• Stability of transfer price over time	1	2	3	4	5	0
• Need to provide adequate contribution to R & D costs	1	2	3	4	5	0
• Restriction on the repatriation of profits and dividends	1	2	3	4	5	0
• Aggressiveness of tax authority	1	2	3	4	5	0
• Other: Please specify:						
....	1	2	3	4	5	0

....

13. Please rank the top 5 factors in order of importance in determining the transfer price (1 = most important; 5 = fifth most important).

- Provide a subsidiary with a fair return on assets ___
- Subsidiary performance evaluation ___
- Motivate local management ___
- Competitive position of foreign subsidiary ___
- Local market conditions ___
- Intra-group negotiations between group members ___
- Protection against foreign exchange loan ___
- Government price controls ___
- Stability of transfer price over time ___
- Need to provide adequate contribution to R & D costs ___
- Restriction on the repatriation of profits and dividends ___
- Aggressiveness of tax authority ___
- Other: Please specify:..

14.a) Has your company been the subject of an Inland Revenue transfer pricing audit in th last 5 years? Please tick:

Yes ____ No _____ Don't know ____

14.b) If your answer to 14a) was YES:

What areas did the transfer pricing audit concentrate on / query?

....

15. Have you been subject to an IR adjustment over the past 5 years? Please tick:

Yes ____ No _____ Don't know ____

16.a) If your answer to 15 was YES:

What was (were) the adjustment(s) for?

....

....

16.b) Which other tax jurisdiction(s) were involved in the bilateral disagreement(s) involving the UK? (Tick as many as are applicable)

China ____
Germany ____
Japan ____
Russia ____
USA ____
Please specify other:
.... ____

17. How satisfied are you with the following tax jurisdictions' approach to transfer pricing issues?
Please circle:

	Very Dissatisfied				Very Satisfied	N/A Don't know
China	1	2	3	4	5	0
Germany	1	2	3	4	5	0
Japan	1	2	3	4	5	0
Russia	1	2	3	4	5	0
UK	1	2	3	4	5	0
USA	1	2	3	4	5	0
Please specify other:						
....	1	2	3	4	5	0

18. How important do you consider the possibility of obtaining an advanced pricing ruling.
Please circle:

Very Unimportant				Very Important
1	2	3	4	5

19. Have you every tried to obtain an advance pricing ruling?
Please tick:

Yes ____ No ____ Don't know ____

20. How onerous are the documentation requirements needed to justify an arm's length pricing structure in the following regions?
Please circle:

	Not at all Onerous				Very Onerous	N/A Don't Know
China	1	2	3	4	5	0
Germany	1	2	3	4	5	0
Japan	1	2	3	4	5	0
Russia	1	2	3	4	5	0
UK	1	2	3	4	5	0
USA	1	2	3	4	5	0
Other: Please specify						
....	1	2	3	4	5	0

21. What do you consider to be the most important objective of an international system of transfer pricing rules?

....

....

SEGMENTAL ANALYSIS

In the notes to the annual report companies are required (under certain circumstances) to disclos information on sales, profit and net assets by lin of business and geographical location.

22. Does the tax department ever have an input into how the following segments are defined
Please circle:

	Never				Always	N/A
Line of Business	1	2	3	4	5	0
Geographical	1	2	3	4	5	0

23. Does the tax department find the Inland Revenue referring to the disaggregate information in the annual report when negotiating?
Please circle:

	Never				Always	N/A
Line of Business	1	2	3	4	5	0
Geographical	1	2	3	4	5	0

24.a) Do you think that inter-segment pricing policy should be disclosed?

Yes ___ No ___ Don't Know___

If you feel strongly about it, what reasons can you give?

....

....

....

25. Do you think that the level of inter-segment transactions should be disclosed?

Yes ___ No ___

If you feel strongly about it, what reasons can you give?

....

....

....

....

....

....

....

....

SECTION 3

ADVANCE CORPORATION TAX (ACT)

The 1994 Finance Act introduced Foreign Income Dividends (FIDs) to reduce the incidence of surplus ACT.

26. Does your company have a stock of unrelieved surplus ACT?
Please tick:

Yes ___ No ___ Don't know ___

If your answer is NO or DON'T KNOW, please go to Question 28.

27. If your answer is YES, can you attach weights to the relative importance of the following factors to explain the cause of surplus ACT in your company. (They must total 100).

Poor UK profits	___ %
High levels of foreign profit	___ %
High capital allowances	___ %
High dividend payouts	___ %

28. To your knowledge, has your company ever considered distributing FIDs?
Please tick:

Yes ___ No ___ Don't know ___

29. To your knowledge might your company distribute FIDs in the future? Please tick:

Yes ___ No ___ Don't know ___

31. Do you agree with the following questions on FIDs?
Please circle:

	Strongly disagree				Strongly agree
FIDs should always be distributed when a company is in a surplus ACT position	1	2	3	4	5
Companies must always distribute enhanced FIDs to compensate tax exempt institutions	1	2	3	4	5
Tax exempt institutions will disinvest in companies which distribute FIDs	1	2	3	4	5
It will be difficult to estimate the level of allowable FIDs in advance	1	2	3	4	5

Thank you very much for participating in this research study.

Please return this questionnaire to Jamie Elliott Assistant Professor of Accounting, London Business School, Sussex Place, Regent's Park, London, NW1 4SA (Tel: 0171 262 5050).

We would be very interested in any further comments which you may wish to add.

Do you have any general comments on the advantages or disadvantages of FIDs?

....

....

....

....

....

....

....

....

....

If there are any further comments you would lil to make please do so in the space provided below.

Additional comments:

....

....

....

....

....

....

....

....

....

APPENDIX 6 : TRANSFER PRICING - INTER SEGMENTAL PRICING DISCLOSURES

COMPANY	Disclosure	Location	Extract
SMITHKLINE BEECHAM	Yes	Annual Report 1993, Notes to Accounts, p10	...at prices which ensure a fair profit...
GLAXO	Yes	Annual Report 1994, Director's Report, p19	...taxation provisions ...issues that relate to international transfer pricing
ZENECA	Yes	Annual Report 1993, Notes to Accounts, p44	...transfer internally at external market prices ...
WELLCOME	No		
FISONS	No		
MERCK SHARP & DOHME	Yes	Annual Report 1993, Notes to Accounts, p50	... prices based on specific market conditions...
CYANAMID	Yes	Annual Report 1993, Notes to Accounts, p49	..at prices which provide reasonable and appropriate returns based upon the respective properties employed and business conducted ...
MEDEVA	No		
HUTTINGDON INTERNATIONAL	No		
WYETH, JOHN AND BROTHER	No		
ROUSSEL LABORATORIES	No		
GRAMPIAN	No		
COLGATE	No		
CELLTECH GROUP	Yes	Annual Report 1993, p15	...R&D...based on our standard cost ...
BRITISH BIOTECH	No		
CHIROSCIENCE	No		
CANTAB PHARMACEUTICALS	No		
MONSANTO	Yes	Annual Report 1993, p34	... market price basis ...

APPENDIX 7 : Theoretical Sensitivity : Log of Contacts

Date	Position	Organisation	Nature [362]	Duration	Record [363]
25-5-94	Transfer Pricing Manager	Coopers& Lybrand	I	1 hour	FN
14-6-94	Tax Manager	Japanese MNE 1	I / L	1 hour	FN
22-7-94	Tax Partner	Price Waterhouse	Tel		
2-8-94	Transfer Pricing Manager	Price Waterhouse	I	1.5 hour	FN
24-8-94	Director	Unitary Tax Campaign	I	1 hour	FN
25-8-94	Tax Specialist	CBI	I / L	2 hours	FN
29-9-94		Ernst & Young	S	4 hours	FN/D
4-10-94		International Fiscal Association	S	2 hours	FN/D
10-10-94		Inland Revenue	S	1.5 hours	FN/D
11-10-94	International Tax Specialist	Inland Revenue	I	1.5 hours	FN
31-10-94	Tax Manager	UK MNE1	I(1)	1 hour	FN
15-12-94	Tax Manager Tax Manager	UKMNE1 Ernst & Young	I(2) / L	1.5 hours	FN
19-1-95	Tax Manager	UK MNE 2	I	1 hour	FN
6-2-95	Finance Director	UK MNE 3	I	1 hour	FN
29-3-95	Tax Manager	UK MNE 1	I(3)	1 hour	FN
27-4-95	Tax Manager	UK MNE 4	I	1 hour	FN
2-5-95	Tax Manager	UK MNE 5	I (1) / L	3 hours	FN
1-8-95	International Tax Specialist	Inland Revenue	I (2)	1 hour	FN
14-8-95	Tax Manager	Japanese MNE 1	I (2)	1 hour	FN
2-10-95	Tax Manager	Moores Rowland	I (1)	2 hours	FN
6-2-96	International Tax Specialist	Inland Revenue	I (3)	1 hour	FN
27-2-96		Presentation at Transfer Pricing conference (PW)			
3-4-96	Tax Manager	UK MNE 1	I (4)	30 mins	FN
16-4-96	Tax Manager	US MNE 1	I	1.5 hours	FN
27-8-96	Tax Manager	Moores Rowland	Tel		

[362] I = Interview; I (n) = nth interview with that person; L = Lunch; S = Seminar; Tel = Telephone conversation

[363] FN = Field Notes; D = Documentation; SI = Survey Instrument ; T = Tape Recording

10-9-96	Transfer Pricing Partner	Deloitte & Touche (D&T)	I (1)	1 hour	FN
25-10-96	Transfer Pricing Partner	D&T	I (2)	30 mins	FN
28-10-96	Tax Manager	KPMG	Tel	-	-
19-9-96	Transfer Pricing Partner	D&T	I (3)	30 mins	FN
11-12-96	Tax Manager	UK MNE 5	I (2)	1 hour	
21-2-97	Tax Practitioner	-	I (1) / L	2 hours	T
19-3-97	Transfer Pricing partner Transfer pricing manager	KPMG KPMG	I (1) / L	2 hours	T
16-4-97	Transfer Pricing Partner	D&T	I (4)	30 mins	FN
3-7-97	International Tax Inspectors	ATO	I	3 hours	FN / T
4-7-97	Tax researchers	ATAX	I	2 hours	FN
8-7-97	Tax partners	Coopers & Lybrand	I / L	2.5 hours	FN
11-7-97	Transfer pricing manager Economist	D&T(Sydney)	I / L	2 hours	FN
24-7-97	Tax manager	US MNE 3	I	1 hour	FN
24-7-97	Member	ATO Rulings Panel	I	1 hour	FN
7-8-97	MD Tax partner	Australian MNE 1 Coopers & Lybrand	I	1.5 hours	FN
15-9-97	Tax manager	UK MNE 7	Tel		
16-9-97	MD Finance Director	Japanese MNE 2	I	1.5 hours	FN / T
16-9-97	Finance Controller	UK charity	I	30 minutes	FN
17-9-97	Consultant	UK MNE 8	Tel		
18-9-97	Finance Director	Dutch MNE 1	I / L	2.5 hours	FN
1-10-97	Transfer Pricing Partner	D&T	I (5)	15 mins	FN
3-10-97	Finance Director	UK MNE 9	I	45 mins	FN / T
10-10-97		KPMG / Inland revenue	S	2 hours	FN / D
16-10-97	Finance Director	UK MNE 10	I	1.5 hours	FN / T

17-10-97	Finance Director	German MNE 1	I	1.5 hours	FN
23-10-97	Consultant	Pharmaceutical Consultancy	I / L	3 hours	FN
4-2-98	Tax Manager	UK MNE 11	I	1.5 hours	FN
23-3-98	Tax inspector	Customs & Excise	I (1)	45 mins	FN
22-4-98	Tax manager	US MNE 4	I	2 hours	T
24-4-98	Tax inspector	Customs & Excise	Tel		
8-5-98	Tax inspector Tax inspector	Customs & Excise	I (2)/L	5 hours	FN
21-5-98	Transfer Pricing Partner	D&T	I (6)	40 mins	FN
4-6-98		CIMA Workshop	S	3 hours	
24-6-98	Transfer Pricing team	D&T	I	45 mins	FN
10-7-98	Tax manager	US MNE 4	Tel		
27-11-98	Transfer pricing partner & manager	PWC	I / D	2 hours	
28-11-98		Transfer Pricing Conference	S	1 day	

APPENDIX 8 : Pilot Study and Case Study : Log of Contacts

Date	No.	Position	Organisation	Nature [364]	Duration	Record [365]
------PILOT STUDY------						
27-11-96		Tax Partner	Neville Russell	I (1)	1 hour	FN
29-2-97		Tax Practitioner	Self-Employed	I (2)	2 hours	T
10-3-97		Occupational Therapist	Southampton University	I (1)	1 hour	FN
20-3-97		Occupational Therapist (2)	Southampton University	I (1)	30 mins	FN
2-4-97		Tax Practitioner	Self-Employed	-	Tel	
3-4-97		Managing Director	Swiss MNE 1	-	Tel	
14-4-97		Managing Director	Swiss MNE 1	I (1)	1.5 hours	FN
16-4-97		Researcher	Glasgow University			
17-4-97		Occupational Therapist	Southampton University	I (2)	1 hour	FN
8-5-97		Managing Director	Swiss MNE 1	I (2)	1.5 hours	T
7-5-97		Tax Partner	Neville Russell	I (2) / L	2 hour	T
------CASE STUDY------						
15-5-97	I1	Finance Director	UK Company	I	4 hours	FN / T
3-6-97	I2 I3	Manager Manager	Central Supplies	I	1 hour	FN / T
3-6-97	I4	Manager	Manufacturer 1, UK Co	I	1 hour	FN / T
3-6-97	I6 I7	Manager Purchasing manager	Contracts	I	1 hour	FN / T
3-6-97	I1 I9	Finance Director Finance Director	UK Company Group	I (2) I	1 hour	FN / T
12-6-97	I1	Finance Director	UK Company	I (3)	30 mins	FN

[364] I = Interview; I (n) = nth interview with that person; L = Lunch; S = Seminar; Tel = Telephone conversation ; Vid = Videoconference Link
[365] FN = Field Notes; D = Documentation; SI = Survey Instrument ; T = Tape Recording

12-6-97	I5	MD	UK Distributor, subsidiary	I	1 hour	FN / T
13-6-97	I6	Manager	Contracts	Tel		
13-6-97	I4	Manager	Manufacturer 1, UK Co	Tel		
17-6-97	I5	MD	UK Distributor, subsidiary	Tel		
17-6-97	I2	Manager	Central Supplies	Tel		
17-6-97	I3	Manager	Central Supplies	Tel		
18-6-97	I3	Manager	Central Supplies	Tel		
12-10-97	I1	Finance Director	UK Company	I (4)	90 mins	FN / T
18-11-97		Occupational Therapist	Southampton University	I (3)	30 mins	FN
3-12-97	I4	Manager	Manufacturer 1, UK Co	I (2)	1 hour	FN / T
3-12-97	I6 I8	Manager Purchasing manager	Contracts	I (2)	90 mins	FN / T
5-12-97	I1	Finance Director	UK Company	I (5)	90 mins	FN / T
10-12-97	I10	MD	Manufacturer 2, UK co	I	90 mins	FN / T
6-1-98	I10	MD	Manufacturer 2, UK Co	Tel		
16-1-98	I10	MD	Manufacturer 2, UK Co	Tel		
4-2-98	I4	Manager	Manufacturer 1, UK Co	Tel		
4-2-98	I6	Manager	Contracts	Tel		
11-2-98	I4	Manager	Manufacturer 1, UK Co	Tel		
24-2-98	I6	Manager	Contracts	Tel		
5/6-2-98	2 days in Southern Ireland					
5-2-98	I11,I12	MD, Board Director	Foreign Distributor 1	I	2 hours	FN/T
5-2-98	I13,I4,15	Purchasing director	Foreign Distributor 1	I	2 hours	FN/T
20-3-98	I11	MD	Foreign Distributor 1	Tel		

20-3-98	I1	FD	UK Company	Tel		
2-4-98	I13	Purchasing manager	Foreign Distributor 1	Tel		
30-4-98	I1	FD	UK Company	Tel		
13-5-98	I1	Finance Director	UK Company	I (6)	90 mins	FN
10-6-98	I1	Finance Director	UK Company	I (7)/L	3 hours	FN / T
10-6-98	I6 I8	Manager Purchasing manager	Contracts	I (3)	2 hours	FN / T
10-6-98	I2	Manager	Central Supplies	I (2)	1 hour	FN / T
23-6-98	I16 I17	Manager Sales Team	Specialist Supplier UK	I	90 mins	FN / T
1-7-98	I18 I19	Group Purchasing Director MD	UK Group Foreign manufacturer 1	I / Vid	90 mins	FN / T
4-8-98	I6	Manager	Contracts	Tel		
4-8-98	I16	Manager	Specialist Supplier UK	Tel		
7-8-98	I18	Group Purchasing Director	UK Group	Tel		
10-8-98	I8	Purchasing Manager	Contracts	Tel		
12-8-98	I1	FD	UK Company	Tel		
17-8-98	I2	Manager	Central Supplies, UK	Tel		
17-8-98	I16	Manager	Specialist Supplier UK	Tel		
24-8-98	I20	MD	Foreign Distributor 2	Tel		
28-8-98	I20	MD	Foreign Distributor 2	Tel		
2-10-98	I1	FD	UK Company	I	90 mins	FN/T
13-11-98	I1	FD	UK Company	I	105 mins	FN/T
21-12-98	I1	FD	UK Company	Tel	20 mins	FN
12-01-99	I1	FD	UK Company	I	120 mins	FN/T

APPENDIX 9 : Summary Sheet of Interview with I1 (15th May 1997)

Review of the company

- The company is aiming to become the biggest fastener distributor of fastenings in the world. It is dominant in the UK and is gradually moving into Europe, Asia, and America through acquisitions (of owner-managed businesses).
- The management information systems for the UK group are very detailed. The MIS of the acquisitions need to be improved to show more information (e.g. inter-group sales).
- One of the main issues arising from global expansion is the impact on the control by the board of directors. Part of the control issue centres on whether the group can maintain the current culture which highlights the importance of job satisfaction and satisfying customers.
- One of the main strengths of the company is the blue-chip customer base.
- The group closely monitors all subsidiaries, and targets are set for all departments and subsidiaries based on targeted sales; gross margins; contributions.

Transfer Pricing

- The Inland Revenue has recently asked about the transfer pricing policy of the group. It is believed that this interest is due to recent foreign acquisitions (in countries with lower tax rates). In the last 12-18 months there have been 6 acquisitions (including in southern Ireland, in Norway and in Singapore).
- There is no internal tax dept as such. KPMG are responsible for the tax comps and dealing with the tax inspectors.
- SL and the group finance director are ultimately responsible for introducing the group's transfer pricing policy. Also the view is that it is a contentious area which must be implemented by the main board to ensure acceptance.
- There is a view that the manufactured products are the hardest to cater for - partly because the manufacturer will want a larger proportion of the profit.
- For most of the products there is a catalogued standard market price.
- Most services (e.g. Fastening management) are offered to external rather than internal parties. About 70% of the plc's costs (total £2m) are charged as management charges to subsidiaries according to the main board directors' responsibilities.
- The provisional standard transfer price for the group is cost plus 20%
- There is an issue concerning who should benefit from the reduced cost of bulk buying from Thailand.
- The rate of interest on inter-company loans needs to be reviewed.
- The transfer of (refurbished) machines will become an issue in the future.
- There are three main considerations : commercial ; tax ; accountability (in perceived order of importance to the group)

1. Commercial viewpoint

- At the moment each director is charged with maximising their subsidiary's profit, which means they want to sell at the maximum price that they can.

- There is a view that the work force will not understand the reasoning for transfer pricing and motivation will suffer if one part of the company purchases from another part at a price which differs from external market prices.
- It is felt that as the business is driven by staff and motivation the commercial aspect is the most important consideration.

2. Tax viewpoint

- The market price for products is higher in the UK than Singapore and Norway. This means that the subsidiaries cannot buy products from the UK at UK prices and still make a profit in their home market.
- The tax authorities insist on transferring at a market price (with some reduction for cost savings) but the group doesn't want to transfer at high prices if this wrecks the foreign markets.

3. Accountability

- Need to eliminate unrealised profit on inter-group transfers of stock. At the moment this involves about £1.5m pa (about 1000-1500 transactions)but this is likely to increase to about £4m or £5m next year. This becomes a more material amount.
- The transfer pricing policy will determine how easy/difficult it is to keep track of stock (and unrealised profit).

Norway

- Lower tax rates than in the UK.
- Dealt with this company prior to acquisition (and about 10yrs in total).
- Previously products were transferred to Norway at high mark ups (about 60%). The group didn't want to show increased profits in Norway purely due to different transfer prices. There was a concern that Norway are driven by sales and they would just sell higher volumes at lower prices and thus undervalue the product. Therefore maintained the pre-acquisition transfer prices.

Southern Ireland

- 10% tax rate for the manufacturing sub. but a higher tax rate than the UK for the distribution sub. - this creates a transfer pricing issue within Ireland as well.
- The market is limited; there is continual price competition; cannot support UK prices.
- The Inland Revenue doesn't appear to be knowledgeable about this country.

Singapore

- Lower tax rates than in the UK.
- Market prices are lower in Singapore ; and it is cheaper to manufacture in Singapore
- The Singaporean tax authorities are strict on moving profit out of the country.
- Old machines were transferred from the UK to Singapore. However there were different market prices for these machines in the UK and Singapore. Eventually they were transferred at Singapore market price.

Management information systems

- Current mgt information systems do not have the facilities/capabilities to provide all the data required for tax purposes. Much tax data must be kept in parallel with these systems. Self assessment is likely to place an emphasis on increased capabilities.

APPENDIX 10 : Interview Protocol examples

<u>Meeting with I1 on 5th December 1997</u>

Developments since our last discussion
What changes have there been in the TPP since our last discussion ?
What was the outcome of the meeting with International Division?

Review annual accounts
The annual accounts give details of product split : Sourced (31%); Specials (18%) ; Standards (21%) ; Own products (30%)
What are these different types of products ? Which of these is likely to give rise to problematic TPP issues ?

TPP
I understand that there are 2 immediate exceptions to the international cost + 20 TPP:
- Norway / Hank have agreed on a 50/50 profit split. How was this exception agreed ? Who negotiated this exception ? How has the TPP been supported / documented ?
- Singapore / Contracts have a cost + 10 TPP. How was this exception agreed ? Who negotiated this exception ? How has the TPP been supported / documented ?

Budgets / Targets
How are the budgets set each month / year ?
Are the budgets the same as targets ?

What are the targets based on ? Profit / Sales / Gross profit margin (***Is this what is called GP ? Please define GP***)
Will the nature of the targets vary throughout the group ?

What happens if a 'division' misses a target ?

Are targets different for each subsidiary ? Does it vary by country ? Does it vary by acquisition (i.e. different negotiated terms) ? Is it related to deferred consideration ?

Bonuses / PRP
How is performance evaluated ?
How is performance rewarded ?

What is the make-up of a managers pay ?

Do bonuses take TPP into account ? Are there any adjustments for different TPPs (especially as there have been a number of changes over the last year) ?

Management Accounting Information
Mgt accounts are disaggregated into external sales / inter-company / inter-group ?

Do the mgt accounts reflect TPP ? Would other users be aware why a particular division's performance has changed from one period to the next ?
How can / is TPP shown in the mgt accounts ?

OPEN CODES to revisit

1. Business Characteristics

PEOPLE		
Motivation	(Low - High)	8

3. Corporate Structure

SUBSIDIARY DRIVERS		
Level of incentives	(Low - high)	13
Level of evaluation	(Low - high)	1
Profit maximisation	(Low - high)	5
Profitability / margins	(Low - high)	13
SUBSIDIARY RELATIONSHIP		
Relative importance of group profit	(Low - high)	4
Competitiveness (in mkt)	(Not very - very)	17
Length of association	(Short - long time)	3
GROUP PERFORMANCE		
Awareness	(Low - high)	4
DEPARTMENTAL STRUCTURE		
Competition between depts	(Low - high)	2

4. Transfer Pricing Policy

AFFECT OF TPP		
Disincentive Affects	(Low - high)	15
External purchases	(None - All)	16
Impact of tpp	(None - major)	9
Frustration	(None - immense)	3
DETERMINATION OF TPP		
Number of determinants	(Low - high)	2
Relationship to market price	(Same - different)	10
ADMINISTRATION		
Level of exceptions	(Low - high)	12
Need for exceptions	(None - great)	5
Flexibility	(Low - high)	6
Time / resource consuming	(Low - high)	7
Complexity	(Simple - complex)	2
INTERNAL ISSUES		
Rationale	(Poor - good)	9
Level of support	(None - total)	9
Equity	(Unfair - fair)	12

9. Management Tools

MANAGEMENT ACCOUNTING INFO		
Availability	(Restricted - widely available)	2
Understanding	(Poor - good)	3
BONUS SCHEME		
Basis	(Individual - group)	4
Importance	(Unimportant - important)	1

GLOSSARY

ACT	Advance Corporation Tax
ALP	Arm's Length Principle
APA	Advance Pricing Agreement
ATO	Australian Tax Office
BIAC	Business and Industry Advisory Committee
CART	"Classification and Regression Trees" Algorithm
CBR	Case-Based Reasoning
CPM	Comparable Profits Method
CT	Classification Trees
CUP	Comparable Uncontrolled Price
DLF	Direct Line Feed
FDI	Foreign Direct Investment
FID	Foreign Income Dividend
ID3	Interactive Dichotomiser Mark 3
IR	Inland Revenue
IRS	Internal Revenue Service
ITP	International Transfer Pricing
MNE	Multinational Enterprise
OEM	Original Equipment Manufacturers
TNMM	Transactional Net Margin Method
TPM	Transfer Pricing Method
TPP	Transfer Pricing Policy

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