A COMPARATIVE ANALYSIS OF THE EFFECTIVE USE OF TRANSFER PRICING POLICIES IN MULTINATIONAL MANUFACTURING CORPORATIONS IN SOUTHERN GAUTENG

BY

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DECLARATION

I, Siewe Constantain Lendeu (Student No: 209042893) hereby declare that this dissertation for the award of Master of Technology (Cost and Management Accounting) at the Vaal University of Technology, Vanderbijlpark, is my own work and that it has not previously been submitted for assessment to another university or for another qualification and that all material contained herein has been duly acknowledged.

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Signature Date

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ABSTRACT

This study was undertaken to assess the extent to which transfer pricing was effectively used by multinational manufacturing companies operating in the Southern Gauteng region of South Africa. The target participants of the study traded their products across international borders and as such made use of transfer pricing in one way or the other to achieve strategic objectives. Scant research has been undertaken to analyse the degree to which transfer pricing can be used to effectively influence managerial performance. On the other hand there is a wealth of knowledge on the relationship between transfer pricing and taxation. In-depth review of literature showed that even though multinationals formulated their transfer pricing policies to target financial and managerial objectives, self-interest and outside influences tended to hinder the equitable realization of both types of objectives. The study therefore set out to establish whether this is true of Multinational corporations (MNCs) in Southern Gauteng and in the process answer questions about the procedure for formulating transfer pricing policies by these MNCs, the relationship, if any, between transfer pricing and profitability and the use of transfer pricing for performance enhancement and assessment.

The study made use of a mixed methods research methodology to collect and analyze data from 45 MNCs operating in the target geographical area. Of the 45 companies, 15 cooperated fully with the study.Data was collected via the use of questionnaires and follow-up face-to-face and/or telephonic interviews. Collected data was analysed using statistical methods including the Chi Square Test, standard deviation, frequency tables and the Kruskal-Wallis H test. The results from the questionnaire and interviews show that there is no universally appropriate Transfer Pricing Policies(TPP) which applies equally to all organizations in all circumstances. Firms are affected by different environmental factors while striving for tax-compliance and value creation. The fear of falling on the wrong side of tax laws is a major driving force behind transfer pricing policies of MNCs. As such other objectives that are managerial in nature become secondary and tend to be neglected if/when they conflict with the primary objective.

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ACRONYMS

ALP:	Arm's Length Principle
ANOVA:	Analysis of Variance
ATAF:	African Tax Administration Forum
CUP:	Comparable Uncontrolled Price
CUT:	Comparable uncontrolled Price Method for Intangibles
EMEIA:	Europe, Middle East, India and Africa
FDI:	Foreign Direct Investment
GDP:	Gross Domestic Product
JSE:	Johannesburg Stock Exchange
MCS:	Management Control System
MNC:	Multinational Corporation
MPM:	Profit-based method
OECD:	Organisation for Economic Cooperation and Development
OTP:	Operational Transfer Pricing
PWC:	PricewaterhouseCoopers
RPM:	Resale Price Method
SARS:	South African Revenue Service
TNMM:	Transactional Net Margin Method
TP:	Transfer pricing
TPM:	Transfer pricing Method
TPP:	Transfer pricing policy
TPSM:	Transactional Profit Split Method
UN:	United Nations
UNCTAD:	United Nations Conference on Trade and Development

DEFINITION OF KEY TERMS

Arm's Length Principle (ALP): It dictates that the price charged for an intermediate product by a related party should be the same or similar to that charged by an unrelated party in the open market.

Buying Division: A structural division within a corporate entity that buys the intermediate product from a selling division within the same corporate ownership.

Multi-National Corporation (MNC): A business entity whose operations spans several national boundaries and as such is subject to more than one tax code.

Selling Division: This is a structural division within a corporate entity that produces an intermediate product.

Transfer Price: This is the price at which an intermediate product is exchanged between two divisions within one corporate structure.

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

The concept of transfer pricing has hitherto been viewed through the prism of optimal allocation of costs and revenues amongst several divisions of a group (Sikka& Willmott 2010:342), with the ultimate objective of minimizing tax responsibilities and in turn maximizing profits (Urquidi 2008:27). Wagdey (2004:24) states that transfer pricing decisions greatly impact on the global operations of Multi-National Corporations (MNCs), specifically influencing overall revenues and profit. In order for companies to maximise their international operations, the domestic objectives of transfer pricing such as divisional autonomy and managerial motivation, are often sub-optimized in favour of perceived more important international targets such as substantial tax reduction through revenue reallocation in order to maximize profits (Garrison, Noreen & Brewer 2006:574;Sakurai 2002:173).

In view of the current climate of accelerated globalization, many companies find themselves compelled by cut-throat competition to operate across national boundaries (Mehafdi 2000:365). Consequently, transfer pricing has emerged as a major tool used to maximize and misrepresent profits, as well as deliberately shift earnings to low-tax countries (Gresik & Osmundsen 2008:232; Blouin, Robinson & Seidman 2011:2).

This study was largely a comparative assessment of the effective use of transfer pricing policies by manufacturing MNCs. Furthermore, the study shed more light on the assertion that the transfer pricing policies of MNCs, unfortunately, neglects the managerial incentive targets of the entity in favour of a deliberate or unconscious attempt to achieve financial obligations and stay on the right side of the tax constituencies within which the companies operate. For the purpose of this research, data was obtained through questionnaires and interviews. Collected data was statistically analyzed using the following statistical packages: Microsoft Excel and Statistical Package for Social Sciences (SPSS), version 22.0.

1.2 BACKGROUND OF THE STUDY

With South Africa being the economic hub of Africa, many companies operating in the country in general and in Southern Gauteng in particular are multinationals by necessity. These companies, faced with ruthless competition, avail themselves to a wide array of business tools including transfer pricing, to gain and maintain competitive advantage. The level and usage of transfer pricing policies however, vary from company to company. In the majority of multi-national corporations, goods and services are often transferred from one division to another (Tang 1997 p.xv as cited by Urquidi 2008:27). These goods, sometimes known as intermediate products, are considered the object of a business transaction by both the buying and selling divisions involved and the selling division has the option of selling the intermediate product either to the receiving division within the same company or to a separate business entity (Garrison *et al.* 2006:568). The price both parties settle on as fair exchange for the intermediate or finished product is termed the transfer price (Drury 2012:509). International transfer pricing follows the same process except that the goods are exchanged across international boundaries (Elliott & Emmanuel 2000:216). The ideal transfer pricing system is one which propagates goal-congruence within the organization as a whole, and the autonomy of managers within the organization while at the same time generating profits that can provide a reliable and accurate assessment of divisional performance (Langfield-Smith, Thorne & Hilton 2006:582).

Transfer pricing has of late been seen principally as a medium for minimizing tax obligations because it facilitates the exportation of capital to geographical locations with ‘friendly’ or flexible tax laws (Sikka& Willmott 2010:343; Swenson 2000:5). Empirical evidence has shown that the conduct of business operations by autonomous entities operating under the same business umbrella facilitates the reallocation of taxable group profits amongst these same autonomous units using transfer pricing in order to minimize tax obligations and at the same time ensure that the company enjoys the added benefit of lower tariffs (Martini, Niemann & Simons 2007:1; Swenson 2000:6). The MNC thus finds itself in the unenviable position of having to, on the one hand, propagate its international business aspirations, and on the other hand, balancing these business aspirations with optimal transfer pricing and tax-compliant policies that will shield the company’s earnings from excessive tax risk (Przysuski, Lalapet & Swaneveld 2005:11).

Besides tax concerns, most MNCs deliberately or erroneously used transfer pricing for hardly anything else (Clausing 2000:175). As a result, MNCs will more often than not consider only international tax implications when setting transfer prices that are expected to be used to achieve tax-related and non-tax objectives. Myers and Collins (2011:1) contend that by playing a crucial role in divisional and organizational profits, transfer pricing, by inference also impacts on the performance evaluation of managers and is thus at the crux of all decisions that pertain to profit maximization since the evaluation and reward system for divisional and corporate managers in most MNCs today is profit-based. Furthermore, the overriding purpose of transfer pricing is to ensure that the actions and decisions of divisional managers fall in line with corporate objectives (Garrison *et al*. 2006:568). Conclusively, the transfer pricing policies of an enterprise should not only be seen as an accounting tool for profit maximization, but should also be perceived in the light of a management tool that influences decision-making pertaining to the attainment of divisional and overall objectives of corporations.

1.3 PROBLEM STATEMENT

Given that there is an exceptionally high level of external scrutiny on the usage of transfer pricing by MNCs, these MNCs are of late finding it increasingly difficult to use transfer prices to bridge the dual objectives of managerial efficiency and financial performance (Urquidi2008:27). This is principally because the desire for international tax compliance compromises internal managerial considerations as far as setting the optimal transfer price is concerned (Baldenius, Melumad&Reichelstein2004:592). Separate transfer prices for incentive and tax purposes would, in theory, optimize the profitability of the MNC (Hyde 2002:1), but companies are reluctant to take up this dual practice for fear of attracting tax repercussions both from domestic tax jurisdictions and international bodies like the Organization of Economic Cooperation and Development (OECD) (Blouin *et al.* 2011:4;Baldenius*et al.* 2004:592). Consequently the MNC is obliged to undermine one of the core objectives of transfer pricing (managerial efficiency), the very same objective that is supposedly one of the driving forces behind the establishment of transfer pricing policies in the first place (Pfeiffer, Schiller & Wagner 2011:220). This makes it difficult for the MNC to choose a transfer pricing policy that would optimize the objectives of the MNC without any significant drawbacks.

Due to the rapidly evolving economic and technological landscape, most business entities find themselves obliged to operate across national boundaries in order to maximize earnings (Sikka & Willmott 2010:3). At least 60% of this international trade is intra-firm and beyond the scope of outside market forces (Cools *et al.*2008:606). The significance of this is the emergence of 'transfer pricing manipulation' in that transfer pricing is playing an ever-increasing role in the maximization of profits through the deliberate reallocation of earnings to geographical tax havens (Lin & Chang 2010:1216; Clausing 2003:2208).

The above arguments set the groundwork for the emergence of transfer pricing as a key business tool to minimize the effects of tax legislations in the different countries within which MNCs operate (Brem &Tucha 2005:1). Regrettably, in the course of complying with stringent tax regulations and recommendations, MNCs have had to set transfer prices that are ironically hindering the attainment of managerial and incentive objectives which themselves are supposed to be the very reason for the existence of the transfer pricing policies in the first place. This is mainly because the MNC is focused on convincing tax authorities that its 'one set of books' – a single set of transfer prices – is founded not only on tax motives but also on internal objectives (Cools *et al.* 2008:608). This in turn, raises questions of whether one set of transfer prices can effectively fulfill the internal and external goals of the organization since logically, the MNC would be more efficient if it uses two different transfer prices to achieve the two conflicting objectives of managerial motivation and tax minimization (Choe & Hyde2004:399).

1.4 RATIONALE

Bartelsman and Beetsma (2001:1) state that for most companies operating in several tax jurisdictions, a 'race to the bottom' for tax purposes is becoming an increasingly crucial business strategy concern. This ardent desire to minimize taxation is often achieved by shifting income from heavily industrialized economies to tax havens (Smith 2002:161). The majority of Transfer Pricing Methods (TPM) in existence today, are used by MNCs for tax purposes and the Arm's Length Principle (ALP) is considered an international benchmark to determine transfer pricing for taxation purposes (Brem & Tucha 2005:3).

Conclusively, most MNCs use TPMs that they consider would be most beneficial tax-wise. A significant proportion of taxation authorities in the various geographical areas in which these

MNCs are in operation automatically consider the MNC's transfer pricing policies and methods as an attempt to avoid tax, hence the implementation of the ALP. This situation creates an imbalance in the use of transfer pricing to attain managerial incentives and financial objectives of the organization since the former is neglected in favour of the latter. This necessitates an assessment of the extent to which managerial motives of transfer pricing might be suborned by other objectives.

1.5 RESEARCH QUESTIONS

Against the backdrop of the preceding problem statement, this study was aimed at providing possible answers to the following research questions:

- What is the role of transfer pricing policies in management control systems in manufacturing industries in Southern Gauteng?
- Does transfer pricing engender performance (efficiency) and as a result influence performance evaluation?
- Can a single set of transfer prices be used equally and effectively as both a management and an accounting tool?
- What are the steps that can be taken to perpetuate the use of transfer pricing policies beyond its alleged buffering against excessive taxation?

1.6 RESEARCH OBJECTIVES

The ensuing primary, theoretical and empirical objectives will be the principal focus of this research:

1.6.1 Primary objective:

The main objective of this study consists of the following: An assessment of the effective use of transfer pricing policies in the realization of managerial performance objectives on the one hand, and tax and financial objectives on the other, by manufacturing MNCs in Southern Gauteng.

1.6.2 Theoretical objectives:

Pursuant to the primary objective are a number of theoretical objectives:

- A content analysis of literature pertaining to the role of transfer pricing in multi-jurisdictional intra-trade transactions.
- The in-depth appraisal of literal perception of the traditional role of transfer pricing processes above and beyond tax purposes.

1.6.3 Empirical objectives:

Empirical objectives to be attained are as follows:

- Identify and contextualise the managerial and financial objectives of the MNC.
- Identify the MNC's transfer pricing policy with regard to intra-trade dealings.
- Establish the range of possible TPMs available for use and compatible with the company's operations.
- Trace the relationship between the MNC's transfer pricing policy and its objectives for management control and profit maximization.
- Recommend provisions for maximizing the use of transfer pricing.

1.7 RESEARCH DESIGN

1.7.1 Literature review

This section reviewed existing literature that covers the myriad facets of transfer pricing. The study focused on literature that addresses the subject of transfer pricing from the point of view of its role within the management and accounting functions of a divisionalised MNC. Gaps and shortcomings were identified and analyzed viz; literature that deliberately or honestly ignores any other role that transfer pricing policies might play in an organization besides tax avoidance; literature which addresses the impact of international tax regulations on transfer pricing policies of MNCs and literature which assesses the feasibility of using a single set of transfer prices for both performance evaluation and motivation, and tax and financial tenets of an MNC. Pertinent material was obtained from journal articles, textbooks on transfer pricing, conference papers and presentations, previous theses, statistical databases, institutional publications and the Internet.

1.7.2 Research design

Often used interchangeably with the term 'research methodology', a research design is all about establishing a systematic interface that ensures the interrelationship between the study's initial research questions and the empirical data that is accumulated thereon (Yin 2009:24), with the secondary objective of eliminating the impact of nuisance variables (Blaikie 2010:37). The research design thus prevents a possible disconnect between the research objectives and the research conclusions. The study made use of a mixed research which draws from both qualitative and quantitative methodologies. The data used in the study was obtained through questionnaires and interviews. Collected data was statistically analyzed using the following statistical packages: Microsoft Excel, Statistical Package for Social Sciences (SPSS), version 22.0.

1.7.3 Population

By definition, a population is the object that contains the variables that the researcher wishes to investigate (Blaikie 2010:172). For the purposes of this study, the target population was defined as the larger group or pool of cases about which information is to be obtained (Graziano & Raulin 2000:143; Neuman 2006:224). The target population of this research comprises all manufacturing MNCs - based in Southern Gauteng -that make use of transfer pricing policies and procedures in executing trans-national operations. The participant MNCs were selected by means of a step-by-step process:

Initially the names of major entities operating in the study area were obtained from the Johannesburg Stock Exchange (JSE). Then the researcher used McGregor's INET BFA financial database to obtain detailed background information regarding finances, products, sphere of geographical operations and subsidiaries or partners, all in relation to these entities. This information made it possible for the researcher to eliminate all the companies that were glaringly ineligible. Finally the researcher contacted the remaining MNCs individually to confirm that they did/did not make use of transfer pricing in their operations. The participant MNCs were purposely selected because of the size and scope of their transactions regarding the use of transfer pricing policies. They were therefore deemed to be adequately representative of the manufacturing industry as a whole. Given the relatively small number of eligible MNCs within the study area (45 MNCs), the researcher decided to use the whole population as the sample for the study. As a result, this study contains no information regarding how the sample was derived, nor the sampling technique that might have been used.

The province of Gauteng is the economic hub of South Africa, boasting not only the largest concentration of private enterprises in almost all conceivable economic sectors: Johannesburg boasts financial and business services, the eastern and western parts of the province are dominated by manufacturing and mining concerns, and Southern Gauteng mostly features steel, iron and coal production companies (Statistics South Africa 2013:9). Gauteng Province also features the fastest economic growth rate within the country. In the years ranging from 2001 to 2011, the South African Economy grew 3.9% whereas Gauteng Province grew by 4.5% (Statistics South Africa, 2013:9). Figure 1.1 below depicts the geographical delimitation of the study.

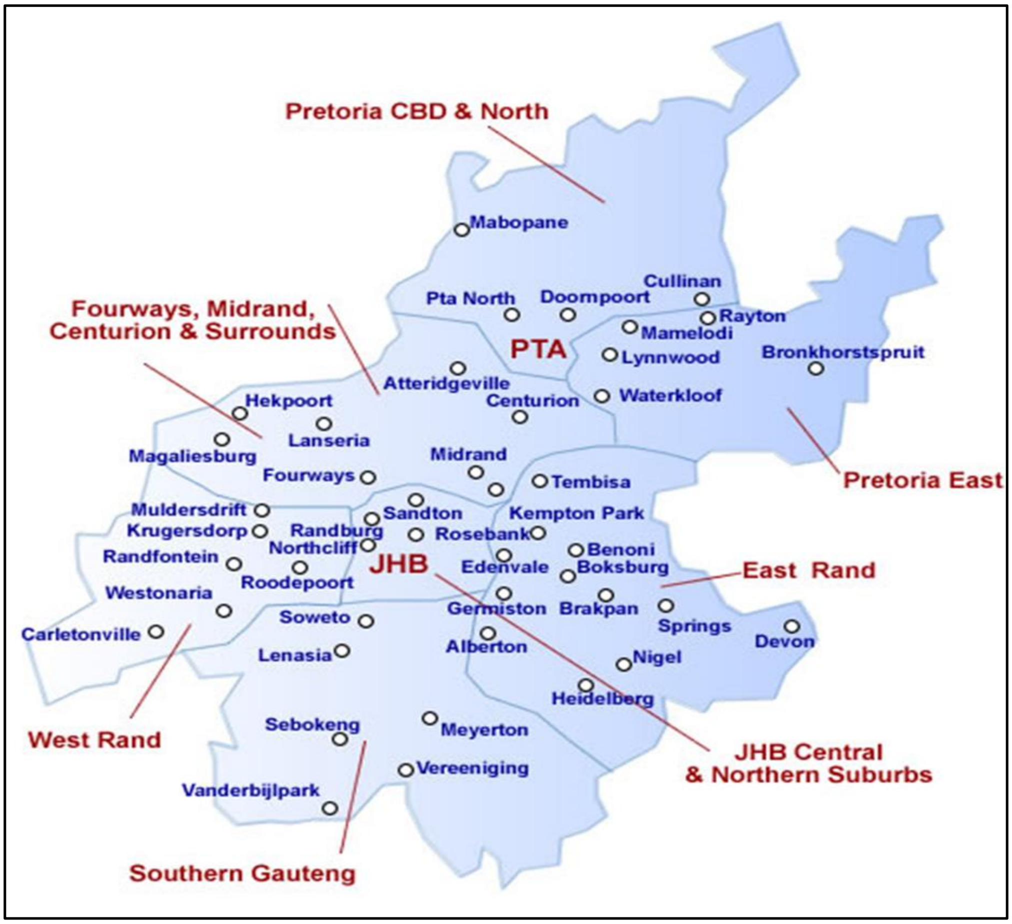

Figure 1.1: Location Map of Southern Gauteng
Source: Adapted from Google Maps

1.8 DATA AND DATA SOURCES

This part of the study deals with all the different types and classes of data that was collected in order to realize the pre-stated research objectives and answer the research questions adequately.

1.8.1 Primary data collection

Primary data collection refers to all information that will be collected first-hand by the researcher solely for the purpose of the study. The following methods will be used in the primary data collection process:

- **Questionnaire**

Self-administered questionnaires are often used when the aim of the researcher is to gather quantitative data with which to test research questions (Tharenou, Donohue & Cooper 2007:22). Questionnaires made up of structured and semi-structured questions constituted part of the data collection techniques of this research. The researcher used pre-testing on three manufacturing MNCs prior to the actual data collection. Pre-testing is aimed at identifying and subsequently rectifying or removing questions that may appear ambiguous and unnecessarily difficult to respondents (Visser, Krosnick, Lavrakas & Kim 2013:419).

- **Face-to-face and telephonic interview**

Face-to-face and/or telephonic interviews comprised one of the data collection instruments that were used in this study. The study availed itself principally to telephonic interviews in collecting data. The researcher conducted face-to-face interviews at the interviewees' place of work. Where personal visits were not possible, telephonic interviews were used. Interviews comprised structured and semi-structured questions.

1.8.2 Secondary data collection

Welman, Kruger and Mitchell (2009:149), define secondary data as any information used by the researcher in the study, but that are collected and organized by persons and/or institutions other than the researcher himself. Secondary data was obtained through documentation that, as described by Tharenou *et al.* (2007:23), involved a detailed study of items like annual financial reports, minutes of meetings, tax returns and any other documented evidence of information which the researcher may consider pertinent to the investigation. As far as this study is concerned, the researcher made use of the JSE and the McGregor INET BFA as the principal sources of secondary data.

1.8.3 Data analysis

In this phase of the research, data was analyzed with the main objective of aligning the findings with the original research questions as effectively and logically as possible (Leedy & Ormrod 2013:284). This was followed by an analysis of the pre-existing relationships amongst and the observed patterns of these relationships amongst the variables at play in the study (Welman *et al.* 2009:210). The data analysis was both quantitative and qualitative in nature.

The data was analyzed in three progressive stages viz; initially to ensure efficient and accurate computerization for statistical evaluation; thence preliminary assessment of the property of data collected, to check for data errors and to describe the sample; finally a substantive assessment using a set of multivariate analytical techniques to prove or disprove the proposed interrelationship amongst all the variables involved in the study (Tharenou *et al.* 2007:190).

Statistical measures such as the mean, standard deviation bar charts and frequency tables were used to assemble and then compartmentalize all the data obtained from the questionnaires and the interviews into meaningful summaries regarding the variables that are under investigation. Multiple regression analysis facilitated the establishment of an interrelationship amongst the variables in the study (Tharenou *et al.* 2007:192). The Crombach Alpha test was also used as part of the factor analysis of the variables that were studied. The statistical software SPSS v22.0 was used as the environment for computing and analyzing data collected in the study.

1.9 VALIDITY AND RELIABILITY

A research study is valid when the researcher is entirely certain that the research instrument is accurately measuring that which it is supposed to measure (Tharenou *et al*. 2007:25). The internal validity of this research was preserved by way of the identification and elimination of nuisance variables which may have had an undue impact on the variables being measured (Welman *et al*. 2009:190), and this was executed using a partial correlation analysis. The following forms of validity were examined: construct, face, content and criterion-related validity. Validity can be further ensured by the use of pattern-matching (Yin 2009:136) whereby a pre-existing observed relationship pattern is compared with a proposed pattern and if the results show a coincidence then it will serve to strengthen the internal validity of the research.

Yin (2009:45) states that reliability will be upheld when another investigator uses the same measuring instruments on the subject(s) and arrives at the same result; in other words, reliability is concerned with how credible the research findings are and the extent to which they can be generalized and replicated under *ceteris paribus* conditions (Welman *et al*. 2009:145). Welman *et al.* (2009:147) propose the use of the Cronbach coefficient alpha which was used during the study to measure the variance on measurements obtained as well as variances of the variables involved.

1.10 ETHICAL CONSIDERATIONS

Tharenou et al. (2007:317) argue that a researcher must see to it that the research design is founded on and follows sound moral and ethical procedures. This research was bound by the following ethical considerations:

- Prior to the commencement of the research approval was obtained from all relevant institutions (Blaikie 2010:31). The researcher obtained permission to conduct the research within the target companies from the appropriate authorities.
- The researcher at all times respected the personality, rights, wishes, beliefs, consent and freedom of the participants (Tharenou *et al.* 2007:317).
- The researcher ensured that participants are fully informed and kept up-to-date about the nature and purpose of the study and have the right of withdrawal from the study whenever they so desire (Leedy & Ormrod 2013:101).
- The researcher will at all times keep all information obtained during the research confidential if so required and will only divulge sensitive information with the permission of the respondent(s) (Welman *et al.* 2009:201).

1.11 CHAPTER OUTLINE

Hereunder is a summary of what the major milestones of the study will be as well as a synopsis of the tasks that will be executed at each point:

- **Chapter One:** this chapter presented an introduction and background to the problem of the study. The chapter also encapsulated a snapshot view of what comprises the rest of the study re: the review of literature, the research methodology, data sources and data collection techniques and the ethical considerations of the research.

- **Chapter Two:** this chapter laid emphasis on assessing contemporary literature dealing with the phenomenon of the use of transfer pricing to achieve the managerial and financial objectives of an MNC operating out of South Africa. The chapter covered the objectives of transfer pricing; the various transfer pricing methods; the tax implications of transfer pricing and lastly the difficulties of using a single set of transfer prices to achieve seemingly conflicting organizational goals.

- **Chapter Three:** this chapter encapsulated the methodological guidelines that provided a framework for the execution of the study. Also included was a description of the relevant target population, study area, data and the appropriate data collection methods that were used in the research.

- **Chapter Four**: this chapter was tasked with the actual collection and subsequent analysis of data pertinent to the study using the relevant statistical techniques and, where appropriate, software packages.

- **Chapter Five:** the principal results of the data analysis in the previous chapter were presented here. Logical conclusions were drawn from these findings and recommendations put forth to stem shortcomings uncovered in the research findings.

1.12 SUMMARY

With the exponential increase in the volume of international trade in recent years, the role of transfer pricing in conducting business for MNCs has become ever more critical. The main objective of this chapter was to lay down the groundwork on the rationale behind the study; shedding light on the obstacles that MNCs are faced with in the implementation of their transfer pricing objectives and the objectives of the research and the methodology that will form the basis for the collection of pertinent data in the study. In a nutshell this chapter drew up a roadmap of how the rest of the study will be conducted.

CHAPTER TWO

LITERATURE REVIEW: TRANSFER PRICING

2.1 INTRODUCTION

This chapter conducts an in-depth assessment of a wide range of publications on the conceptualisation and application of transfer pricing. As a result of the fact that most companies today operate across more than one tax jurisdiction, transfer pricing is becoming more and more important in the daily operations of MNCs. As stated in the preceding chapter, the first theoretical objective is to conduct a content analysis of the study. The focus was primarily on literature that deals with the objectives of transfer pricing, the various transfer pricing methods, their applicability and their inherent shortcomings. The theoretical objective also paid particular attention to a comparative analysis of the emergence and evolution of transfer pricing as a function of management control systems in achieving both managerial/incentive and financial/taxation objectives of a MNC. Mehafdi (2000:367), and Holtzman and Nagel (2014:58) state that transfer pricing is an intricate and layered process that involves several parties and transcends different tax jurisdictions.

2.2 EVOLUTION OF TRANSFER PRICING

According to Eipstein, Howlett and Schulze, M-S., (2007:101),globalization and the reduction in international trading barriers can be traced back to the post-World War II era. The proliferation of transnational firms in international trade has prompted significant research into how these companies conduct business, source for resources and respond and adapt to legislation by local and national governments (Bernard, Jensen &Schott 2006:3; Urquidi 2008:28). These local and national governments have also been substantially impacted on by the activities of MNCs operating within these governments' territorial boundaries (Borkowski 1997b:321). Empirical evidence suggests that transfer pricing has been in use as early as the second half of the 19th century, as proven by research conducted on the Pearson and Knowles Coal and Iron Co. Ltd., in the years spanning 1887-1895 (Boynes, Edwards & Emmanuel 1999:86). Shor and Chen (2009:586) also point out that transfer pricing spans most industries ranging from professional sports to healthcare. The use of transfer pricing became more and more prevalent with the rise of divisionalised business entities (Li &Ferreira 2007:25). As early as 1986, 36% of international trade involving American companies, 55% of trade between the European Union(EU) and Japan, and 40% of trade between the EU and the US was between affiliated companies of the same parent (Cravens 1997:128).

Dating back to 1979, the term transfer pricing was already common enough for negative undertones regarding earnings manipulation to be attached thereto (Urquidi 2008:28). First published in 1995 (OECD 2011b:5; KPMG 2011:4; Siwele 2011:38), the OECD Guidelines represents the very first concerted effort by developed nations to establish a framework for regulating transfer pricing activities (UN Tax Committee, nd.6). Prior to this, and dating back to 1963, the OECD - an organization comprising 34 member countries whose primary objective is to weather the challenges of globalization (Siwele 2011:37) - consistently initiated and amended practical guidelines on the usage of transfer pricing by MNCs (De Ruiter 2012:1). By the end of the 1980s, transfer pricing had become a hugely controversial topic in American political circles (Cools *et al*. 2008:608; Boulogne 2008:12). Transfer pricing legislation was first introduced in Canada, a developed country, in 1979 and embodied the Arm's Length Principle (Pinto 2012:38), a concept which will be discussed later on in the study. Since then, the OECD's Guidelines are being merged into the tax legislation of more and more countries that in turn are continuously strengthening their transfer pricing regulations (Cools *et al*.2008:608).

PricewaterhouseCoopers (PWC) (2011a:1) asserts that, since that globalization has substantially enhanced the volume of cross-border trading, transfer pricing has also become a key bone of contention in developing countries. Amongst all emerging economies, China, the world's most populous nation, has had the fastest rate of economic growth and as such has been the focal point of massive Foreign Direct Investment(FDI), more so than any other emerging economy (Li 2005:17; Agnes 2004:3). FDIs began flowing into China in late 1979 (Pinto 2012:41) and, due to their exponential increase the Chinese government had to enact legislation to contend with transfer pricing issues (Agnes 2004:19). In South East Asia, transfer pricing legislation was first introduced in China in 1991(Pinto 2012:37). However, it was only in 2001, when China joined the World Trade Organization, that the country officially adopted the OECD guidelines to facilitate the regulation of the massive flow of funds across its national borders (Pinto 2012:39).

Agnes (2004:16) notes that emerging economies have continuously found it difficult to deal with transfer pricing manipulations by MNCs principally because of inadequate institutional frameworks in place. According to PWC (2011b:2), an average GDP growth of 5.2% between 2001 and 2010 has made the African continent a fertile ground for investment by MNCs. Given that an increasing volume of this trade is between related parties (South African Revenue Service (SARS) 1999:5), many African countries, including South Africa, Kenya, Morocco and Egypt are devoting more and more resources to the development of viable transfer pricing policies (PWC 2011b:4). Of all the African countries that deal with transfer pricing, South Africa has been at the forefront with regards to enactment and amendment of laws pertaining to how MNCs conduct business within the country (PWC 2009:194). These transfer pricing policies have been and continue to be radically influenced by the OECD, the United Nations and the African Tax Administration Forum (ATAF) (PWC 2011b:4). South Africa first implemented transfer pricing legislation as early as 1995 and SARS has recently made changes to its transfer pricing regulations (PWC 2011b:22).

2.3 ENVIRONMENTAL FACTORS AFFECTING TRANSFER PRICING

There are internal and external environmental factors that determine and influence the adoption and application of transfer pricing by MNCs (Lin & Chang 2010:1219). Tang, (2002: 16) proposes that there may be as many as twenty environmental factors that influence transfer pricing manipulation by MNCs. Holtzman and Nagel (2014:58) point to tariffs, tax laws and host country regulations as the principal motives for transfer pricing strategies by MNCs. In a comparative study of Japanese and American MNCs, Borkowski (1997a:29) found out that overall profit-maximisation, restrictions by the host countries and dividend-repatriation were the main factors that influenced the choice of transfer pricing methods adopted by MNCs in these countries.

Chan and Lo (2004:94) identify seven environmental factors that are critical to transfer pricing decisions taken in emerging economies. These are:

- Difference in income tax rates,
- Minimization of custom duties,
- The interests of local partners,
- Foreign exchange control and risks,

- Restrictions of profit repatriation,
- Risks of expropriation and nationalization and,
- A good relationship with the host government,

Of these seven factors, relationships with the host government, the interest of local partners and foreign exchange controls and risks took precedence in influencing the choice of the perceived transfer pricing method to be used (Chan & Lo 2004:96). Dogan, Deran and Koksal (2013:737), state that in addition to internal variables, external factors like taxation, inflation, competitive advantage, foreign exchange and cash controls are critical for firms that make use of transfer pricing techniques. In addition, the choice of transfer pricing method to use by MNCs tended to hinge on tax compliance with custom regulations and compliance with the financial reporting rules of the host country (Dogan *et al.* 2013:737).

2.4 OBJECTIVES OF TRANSFER PRICING

According to Bernard *et al.* (2006:2), MNCs have both managerial and financial reasons for implementing transfer prices:

2.4.1 Managerial objectives

The major managerial objective of transfer pricing pertains to the establishment of ideal incentive mechanisms in various discrete divisions of a company as well as the elimination of 'double marginalization' (Bernard *et al.* 2006:3), a situation in which separate divisions of the enterprise unnecessarily boost the overall price of the product by individually adding mark-ups to the cost of the product (Park &Lee 2002:608).

Simons (2000:39) asserts that transfer pricing is used to assess and coordinate the workflows of integrated divisionalised entities where responsibility accounting is in use. As such, a solid groundwork for seamless business transactions across the existing profit centres of the organisation is created (Baldenius *et al.* 2004:59). Furthermore, the appropriate usage of transfer pricing often positively influences divisional managers' decisions on the volume of the intermediate product that can be bought or sold internally (Merchant & Van der Stede 2007:277). The use of transfer pricing thus not only serves as a guide for managerial decision-making that is most beneficial to the division and the overall company, it also provides the groundwork for evaluating the performance of divisional managers.

- **Divisional motivation**

Divisional motivation is one of the fundamental objectives of transfer pricing (Drury 2012:509). In this regard, Hyde and Choe (2004:171) declares that transfer pricing serves to motivate divisional managers whose reward and remuneration are tied in with the performance of their respective divisions. The use of transfer pricing allows the selling and the purchasing divisions respectively to keep separate sets of accounts which can be used to assess the performance of both divisions and more importantly, the divisional managers (Roos 2011:488). The transfer price should in theory encourage divisional autonomy and motivate divisional managers since they ought to have the final say on whether or not to trade in the intermediate products, as well as the prices at which these products should be traded (Drury 2012:502; Atrill & McLaney 2007:365). In practice, however, there is often great difficulty in arriving at a transfer price that will benefit both parties to the internal transaction and more importantly, the overall company.

- **Goal-congruence**

Goal-congruence allows for leeway in divisional decision-making, on the condition that divisional objectives are streamlined to corporate objectives. (Vigario 2007:506). Li and Ferreira (2007:10) stress that the inability to streamline the objectives of top and middle-level management has led to the emergence of agency issues and this in turn has necessitated the adaptation of transfer pricing by multidivisional companies to ensure that everyone is in no doubt as to what the goals of the organization are. A survey conducted by Oyelere and Turner (2000:93) on MNCs operating in the United Kingdom revealed that MNCs often consider the overall attainment of corporate goals to be their most important transfer pricing objective. The findings of the survey revealed that senior management often used transfer pricing as means of assessing the performance of branches and thus the degree of success to which branch managers tied their goals to the overall goals of the organization (Oyelere & Turner 2000:95).

Goal congruence is one of the fundamental objectives of transfer pricing in that it ensures that divisional and overall company or group objectives are streamlined thereby making sure that decisions to enhance divisional profitability will at the same time enhance overall company profitability (Vigario 2007:506; Anthony & Govindarajan 2007:230). Cools *et al.* (2008:610) believe that transfer pricing plays a vital goal-congruence function in that it not only provides a framework for aligning the activities of semi-autonomous divisions within a multinational enterprise but it also serves as a conduit for vital managerial decision-making information. Cools and Slagmulder (2005:4) posit that goal-congruence is realized when the transfer pricing system in place creates an environment in which the actions of managers yield benefits to the whole organisation. Divisional managers are therefore expected, with the aid of transfer pricing, to implement policies and achieve targets that are in line with overall company objectives.

In view of the above, transfer prices are expected to be most effective when they are streamlined to the goals of management (Ernst & Young 2003:17). By streamlining production, sales and pricing decisions across varied departments, transfer pricing ensures that individual departmental managers are kept up to date on the value that the goods and services in the transaction have for other departmental heads within the company (Heath, Huddart & Slotta 2009:2; Martini 2008:1).

2.4.2 Financial objectives

The financial objective of a transfer pricing policy, in a nutshell is to maximise profits (Atrill & McLaney 2007:365). This can be done in a variety of ways: profit-maximisation and tax-minimization as well as limiting the negative impacts of foreign exchange controls and cross-border restrictions on capital flight (Bernard *et al*. 2006:2; Lin & Chang 2010:1218). Other financial objectives as per Cools and Slagmulder (2005:2) include: cash flow, sales, minimization of duties and tariffs. The financial implications of transfer pricing is more poignant for MNCs because this financial data is used to evaluate the tax liability of each division, thence the overall tax exposure of the organisation (Choe & Hyde2004:167). Another major financial function of transfer pricing is to quantify the earnings of specific divisions within the company which is in turn crucial for external financial disclosure (Martini 2008:3). Consequently, stakeholders who have a vested interest in the company will have a keen interest not only in the profit-allocation trend of the company, but also with regards to the profit-generation trends of sub-divisions within the company as a whole (Martini 2008:3).

Atrill and McLaney (2007:365) argue that MNCs would be well advised to set their transfer prices such that the larger part of their earnings will be declared in those divisions based on host countries with friendly tax policies. This view on the role of transfer pricing is, to an extent, reinforced by Merchant and Van der Stede (2007:278), who consider global profit-maximization to be one of the most vital determinants of transfer pricing policies, thereby necessitating the use of transfer pricing policies to purposely move profits between company locations. This effectively ensures profit maximization via international tax-minimization.

Transfer pricing can enhance the competitive advantage of an MNC's product internationally because it creates a situation in which the MNC can trade at comparatively low prices in the open market (Lin & Chang 2010:1218). This is evidently because the MNC can use transfer pricing to move its intermediate products or component parts at rates that are attractively low for consumers. Since most MNCs consider profit-maximization to be the overriding business objective of the company as a whole, it stands to reason that the financial and tax motives for using transfer pricing policies will more often than not take precedence over the managerial/non-financial objectives. Still, these policies are always expected to engender decision-making that will maximize divisional autonomy without jeopardizing group objectives (Vigario 2007:505).

According to Baldenius *et al.* (2004:32) if the same price used for profit-maximization is used for managerial performance evaluation and the propagation of divisional autonomy, then the resulting intra company transfers will be too low whenever the arm's length price exceeds the pre-tax unit cost and as such the optimal single transfer price balances the conflicting goals of tax minimization and efficient resource allocation. Vigario (2007:506) however, contends that this delicate balance is often difficult, if not impossible to achieve, since the two objectives of goal-congruence and profit-maximization are often contradictory. So, in theory, a company would be better off using a single set of transfer prices that will serve all its objectives equally and efficiently. In practice however, such a transfer price would not only be difficult to arrive at, but will also be difficult to implement (Mehafdi 2000:366). Figure 2.1 is a graphical representation of the complexities of transfer pricing in a hypothetical MNC with three subsidiaries, as presented by Mehafdi (2000:366). The three subsidiaries are located in three different countries and each subsidiary receives its transfer pricing policy from the Head Office, which is in another country. Only one of the three subsidiaries manufactures the finished product which is sold in the open market. However it sources its production components from the other two subsidiaries who sell these components at a pre-arranged transfer price. However the transfer price must be such that all three divisional managers turn a profit.

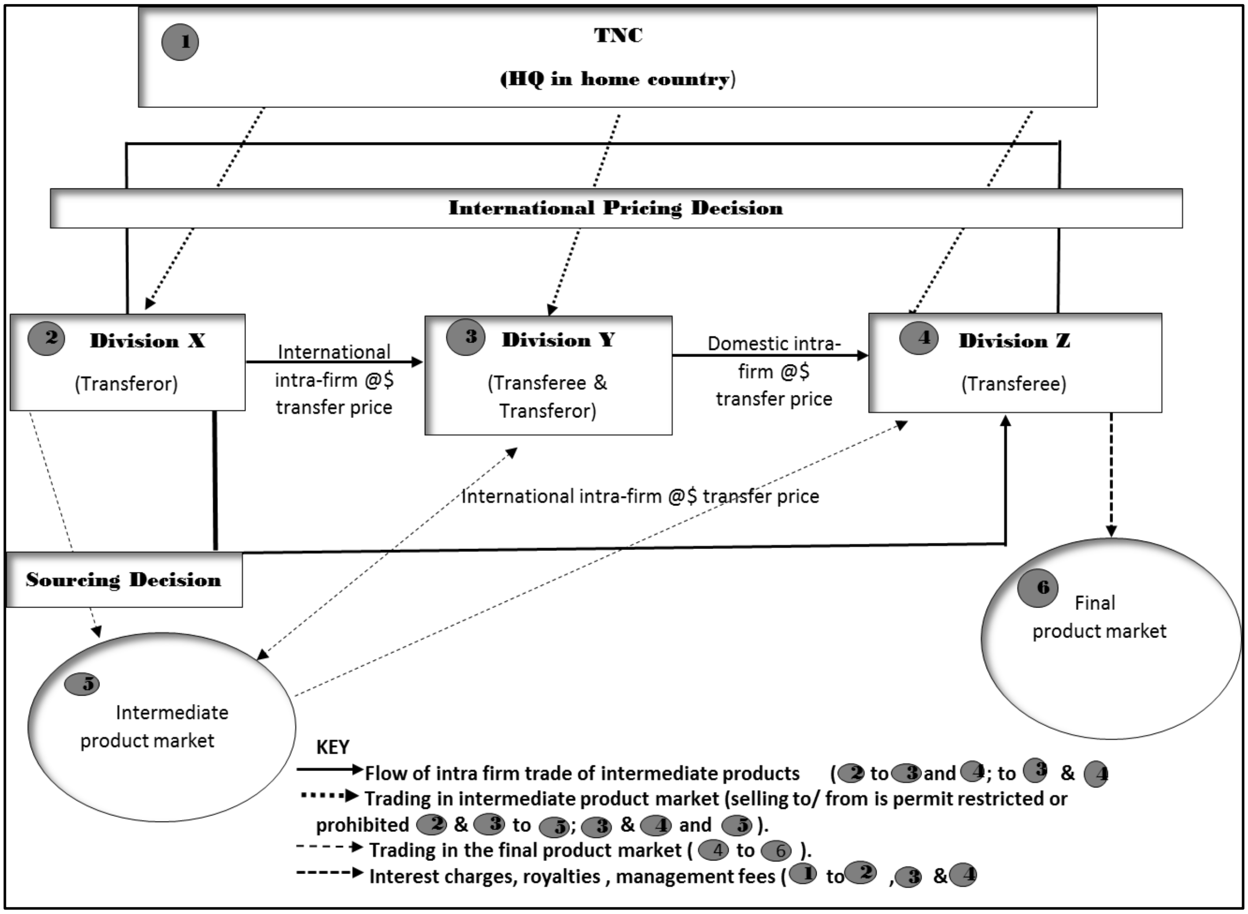

Figure 2.1: The use of transfer pricing in a hypothetical MNC with three subsidiaries
Source: Adapted from Mehafdi (2000:366).

2.5 THE ARM'S LENGTH PRINCIPLE

The Arm's Length Principle (ALP) is the guiding rule which ensures that related parties engaged in a business transaction will apply a transfer price that is similar to a price used by unrelated parties in a transaction in the open market (Sakurai 2002:175; Amerkhail 2006:3; Cools & Slagmulder 2009:159). Set out in Article 9 of the OECD's Model Tax Convention , the ALP requires that connected parties engaged in a business transaction act as if they were unrelated, in other words, the agreed prices must be the same as prices agreed on by independent firms (Holtzman & Nagel 2014:57, Devereux 2013:432). This principle therefore constitutes the framework for business dealings between OECD member states as well as for transactions between OECD and non-OECD member states (Ledur & Chater 2009:271).

The OECD considers the ALP to be the international benchmark for deriving acceptable transfer prices by MNCs (KPMG 2011:3). By comparing the tax liabilities of an MNC's sub-divisions with those of unrelated but similar parties operating in the industry, a tax authority can determine the extent of efficient application of the ALP by the MNC (Cools & Slagmulder 2009:159). Diligent application of the ALP by MNCs will minimize the possibility of artificially shifting earnings between different tax jurisdictions (Ledur & Chater 2009:271). The application of the ALP is often quite contentious because a transfer price that is perceived by an MNC to be in compliance with the ALP may not necessarily be viewed in the same light by the tax authority within which the MNC is operating (Eden 2005:3). Borkowski (2009:37) states that it is glaringly obvious that a transfer price which is tied to the ALP may not necessarily facilitate the achievement of the MNC's financial objectives and may compromise divisional managers whose performance rewards are profit-based. The MNC may therefore find itself trapped in a no-win situation where in compliance with the ALP may therefore come at the expense of the MNC itself and non-compliance opens up the possibility of prosecution.

2.6 TRANSFER PRICING METHODS

Depending on the prevailing internal and external economic situations in existence regarding the intermediate product, as well as corporate policy on transfer pricing, a company can use one of several methods to set its transfer price. More important though is the fact that not only should the transfer price arrived at be the ideal medium for realizing goal-congruence with overall organizational objectives (Vigario 2007:506), but it should also most accurately portray the opportunity cost of the substance of the transaction under consideration (Atrill & McLaney 2007:367). The choice of which transfer price to use also reflects the intended divisional autonomy within the organization as a whole (Li & Ferreira 2007:12). In a nutshell, the choice of which transfer pricing policy to use will always be influenced by the company's business strategy, the overall level of internal autonomy aspired to and allowed, and finally the industry within which the company operates as shown by Table 2.1 (p 22). It can be seen from the table that MNCs that are in favour of divisional autonomy may have to use negotiated/internal market prices, whereas MNCs that prefer more centralized processes would have to make use of cost-based transfer prices.

Table 2.1: A typology of transfer pricing

Low divisional autonomy ←		→ High divisional autonomy
Cost–based transfer price	**Adjusted external market price**	**Negotiated/internal market Price**
Information on supplier costs is referred to while setting transfer prices, for instance, actual full production cost; standard production cost; full production cost plus a markup.	Prices on the external market serve as the referent for determining the values of internal transfers, for instance, market price less a discount; best price to an outsider during a specific period; negotiated price with listed price range.	Managers of the trading profit centers establish a price that is acceptable to both the seller and the buyer before the exchange can be consummated, for instance, negotiated prices between sub-units bidding.

Source: Li and Ferreira (2007:13).

Table 2.2 presents a snapshot of the results on surveys on the usage of transfer pricing methods in the United States over a span of 27 years. A cursory examination reveals that market-based TP methods grew ever more popular over the years whereas cost-based and negotiated methods experienced a somewhat systematic decline across the same time span.

Table 2.2: Result of survey on the usage of transfer pricing policy methods –U.S.A

Percentage using transfer prices on the following bases:	**1979 %**	**1990 %**	**2002 %**	**2006 %**
Market price:	31	32.7	35.5	35
Negotiated:	22.2	22.6	13.7	14
Cost based:	46.8	44.7	42.7	43
Other:	0	0	10	8
Total:	**100**	**100**	**100**	**100**

Source: Adapted from Merchant & Van der Stede (2007:278), Drury (2012:512), Tang (2002:35), and Martini, Niemann and Simons (2007:7).

Martini (2008:4) notes that a transfer pricing policy with strong managerial undertones tends to benefit divisional management but these benefits tend to come at the expense of financial objectives. Hence, even though the majority of companies today operate a single set of transfer prices, for these prices to be optimally effective, the underlying transfer pricing objectives will either be completely managerial in nature, or heavily managerial with faint financial undertones (Martini 2008:4). The choice of which transfer pricing method to use should therefore be determined by the extent to which each method is able to facilitate the achievement of both divisional and overall company objectives. The following paragraphs contain a recap of the major transfer pricing methods in use today:

2.6.1 Market-based transfer pricing

Whenever there exist an outside market for the intermediate product, for maximum decision-making and performance evaluation purposes it is most advisable that the transfer price be set on par with the pre-existing market price of the said product (Drury 2012:503). This is substantiated by Vigario (2007:506) who asserts that the degree of flexibility of demand for the intermediate product in the outside market will determine whether there can be one unique market price for the product. In a perfect market economy where goods and services are homogeneous in nature and there is no one buyer or seller big enough to singularly influence prices, there normally will be one uncompromising market price for the intermediate product (Roos 2011:450). As such, whenever market-based transfer pricing is used, divisional profits are optimized (Drury 2012:504). There are several market-based transfer pricing methods in use today:

- The Comparable Uncontrolled Price Method for tangibles (CUP): a comparison of the value of a transaction between related parties with the value of a similar transaction between unrelated parties (Amerkhail 2006:5).
- The Comparable Uncontrolled Price Method for intangibles (CUT): Same as above except that it applies strictly to intangible goods/services (Ernst & Young 2010:13).
- The Resale Price Method(RPM): a comparison of the price at which the buying division will resell an intermediate product after purchasing it from the selling division within the same company, with the price at which this same product can be bought and resold in the open market (Amerkhail 2006:5).
- The Transactional Profit Split Method: this pertains to allocating a portion of the profit of the transaction to both the selling and the buying divisions respectively in a manner reflective of what would obtain between two unrelated parties (OECD 2011b:8).

- The Transactional Net Margin Method (TNMM): this involves a comparison between the profit margin(using an appropriate base such as cost or sales) that is observed in a transaction between related divisions of a company, with the profit margin that would be observed in a similar transaction between unrelated parties (OECD 2011b:6).

Proponents of these variations of market-based transfer pricing insist that they are best because they give little or no room for manipulation and make it easier for divisional managers to avoid unnecessary conflicts (Chan & Lo 2004:97).

The general rule of transfer pricing proposed by Drury (2012:509) indicates that whenever there is a perfectly competitive market for the intermediate product, the transfer price of the product should comprise the marginal (variable) cost of the product plus the opportunity cost of the product. The opportunity cost of the product in such a case will be the sales revenue that is forgone by the selling division as a result of its decision to sell the intermediate product to the purchasing division within the company instead of selling it on the open market at pre-existing market prices. Roos (2011:491) uses the following example to illustrate this:

Given:

- Unit A of the Paper Company manufactures and sells A4-size blank paper sheets for use in printers and copiers.
- Unit A incurs variable costs of R65 in manufacturing each box of paper. Unit B of the Paper Company incurs an additional cost of R20 warehousing and distributing cost per box of paper.
- A standard box of A4-sized paper sells in the open market for R75.
- A perfectly competitive market exists.

According to the general rule, the price at which Unit A should sell each box of A4-sized paper to Unit B should be the marginal cost per box of (R65), plus the opportunity cost of selling to Unit B instead of the open market (R10), meaning a box of paper will be sold by Unit A to Unit B at the current market price of R75.

The OECD Guidelines (2010:22) prescribes, whenever possible, the use of the Comparable Uncontrollable Price (CUP) method for all MNCs since this is the most direct and concise method that would faithfully comply with the recommendations of the ALP. Often considered to be the most commonly used market-based transfer pricing method, the CUP method is currently used by MNCs for more than 30% of transactions involving tangible goods, financial services and licensing agreements (Ernst & Young 2003:17).

However, even though widely perceived as the best mechanism for instigating managerial efficiency and motivation, the use of market-based prices is often hazardous for certain transactions, specifically where new products are concerned since similar products do not exist in the external market and it is therefore impossible to get an external reference price that is supposed to form the basis of the company's new product (Li & Ferreira 2007:15; Urquidi 2008:31). Moreover, arriving at an optimal transfer price can be rather trying for several reasons viz: overall company policy may prevent divisions from buying intermediate products from the open market; the intermediate product available in the open market may not be of the technological specifications and functionality as required by the company's division and lastly the company's overall competitive advantage may be compromised if it attempts to align its intermediate product pricing with those available in the open market (United Nations Conference on Trade and Development (UNCTAD) 1999:17). Consequently, MNCs may find themselves using cost-based transfer prices as a last resort (Li & Ferreira 2007:15; Urquidi 2008:31). The different variants of cost-based transfer pricing will be examined in detail in the ensuing paragraphs.

2.6.2 Cost-based transfer pricing

There exist several variations of cost-based transfer pricing methods and formulae but they all share the common trait of using the manufacturing or purchase cost of the product as the starting point in establishing its intermediate price (Lee 2000:15). When cost-based transfer prices are being calculated, standard, not actual prices should be used in order to avoid transferring production inefficiencies from the selling to the purchasing division (Anthony & Govindarajan 2007:235), and actual costs tend to only become available at a stage when the transfer price of the intermediate product has already been computed (Baldenius, Reichelstein & Sahay 1999:68).

- **Marginal cost transfer pricing**

Marginal cost transfer pricing is a method that is commonly used by companies who have spare capacity (Atrill & McLaney 2007:368). It is also advisable for use when it is difficult to estimate the market price of the object of the transaction or because of its uniqueness to one particular company (Langfield-Smith *et al.* 2006:583). This method is applied by setting the transfer price at a price equal to the variable cost of the product. Merchant and Van der Stede (2007:282) state that the marginal or variable cost that will reflect the transfer price may be an approximation of the standard or actual cost of the product; standard costs would be used to set the transfer price if the transaction has not yet been undertaken, and actual costs would be used if the transaction has already been executed (Anthony & Govindarajan 2007:233). Unfortunately, there is scant management accounting literature on the most appropriate time to use either the standard or the actual cost of the product in setting its transfer price (Pfeiffer, Schiller & Wagner 2011:220).

Drury (2012:506), however, cautions that the variable cost can only be optimized if it is intended for short-term use. Merchant and Van der Stede (2007:281) also emphasize that even though the use of marginal cost greatly simplifies the whole transfer pricing process, it is also inherently unreliable as far as pricing decisions are concerned since earnings cannot be traced back to individual divisions involved in the trade. In addition, the selling division does not recover the full cost of the intermediate product (Roos 2011:492). Consequently, the ease of use of marginal cost transfer pricing is outweighed by the tendency of business operations to be characterized by sub-optimal performance and poor decision-making whenever this transfer pricing method is used (Garrison *et al.* 2006:572).

- **Full cost plus transfer pricing**

The use of full product costs in setting transfer prices is often quite attractive to managers since the tendency is to view product-related decisions as long-term decisions (Drury 2012:508) and a full product cost would make a sound foundation for long-term estimations. The problem with full cost plus transfer pricing is that if there are several divisions involved in a transaction, the price which the final division will have to pay for the intermediate product will be grossly bloated because each successive division adds a profit mark-up to the intermediate product (Drury 2012:508).

Roos (2011:492) uses the following example to illustrate the implications of using a cost-based transfer pricing system:

- Unit A of the Paper Company manufactures and sells A4-size blank paper sheets for use in printers and copiers.

- Unit A incurs variable costs of R65 in manufacturing each box of paper. Unit B of the Paper Company incurs an additional cost of R20 warehousing and distributing cost per box of paper.
- Unit A's fixed cost is R5 per box while Unit B's fixed cost is R1 per box.
- The Paper Company has a policy of adding 20% to cost in calculating cost-based transfer prices.
- The transfer price per box of paper based on marginal cost will be: R65 x 1.2 = R78.
- The transfer price per box of paper based on full cost will be: (R65+R5) x 1.2= R84.

It should however be noted that if both the selling divisions have significant decision-making autonomy, then the use of cost-based transfer pricing may not be profitable for the overall company (Roos 2011:492). This is because both divisions have the option to buy or sell the intermediate product at a higher or cheaper price from the outside market which may be profitable for the individual division but not necessarily profitable for the overall company (Roos 2011:492).

2.6.3 Negotiated transfer pricing

Negotiated transfer pricing was compelled into existence by the sometimes overwhelming intractability of the implementation of the other methods of transfer pricing and are usually most appropriate where several market prices exist for the intermediate product (Drury 2012:508). Fundamental economic theory dictates that in such circumstances the selling and buying divisions will be unwilling to sell at prices respectively below and above those in existence in the market (Kachelmeier & Towry 2002:572), but because this often leads to huge differences in profits, divisions within the group are encouraged to engage in intra-group bargaining for a 'fair' transfer price that will lead to a more equitable distribution of earnings thereby making it possible to achieve the much-needed balance between economic and social concerns (Kachelmeier & Towry: 2002:572). Furthermore, because the negotiated transfer price creates the impression of fair allocation of earnings and resources, the potential for conflict amongst parties to the transaction is greatly reduced (Ghosh 2000:662).

Despite these perceived benefits of negotiation, the OECD frowns on transfer prices based on this method since it is of the opinion that sustained unencumbered negotiating does not constitute sufficient compliance with the ALP (Cools & Slagmulder 2009:159). As a result it is uncommon for negotiation to be used as a basis for setting transfer prices between sub-divisions or between a parent company and its sub-division (Choe & Hyde 2004:178).

The benefits of negotiated transfer pricing should however be tempered by two main drawbacks: firstly MNCs feel that a lot of time and money is wasted on the mandatory negotiation - haggling - process and this situation is compounded when the transaction is repetitive and/or there are several divisions involved (Baldenius *et al.* 1999:82; Bailey & Collins 2005:276); secondly, the benefits of negotiation can only be truly enjoyed when all the parties to the transaction have equal and complete knowledge regarding the value of the object of the trade; where this is not fulfilled, one of the parties will have an unfair advantage and this may create conflict (Baldenius *et al.* 1999:82).

2.6.4 Differential or dual transfer pricing

Differential or dual transfer pricing is often used when no other transfer pricing method is appealing to the parties to the transaction (Roos 2011:497). The selling division records the transaction using what it deems to be a fair price and the buying division does the same using a different price (Roos 2011:497). Essentially, the same intermediate product is priced at two or more different rates depending on the number of divisions involved in the transaction (Johnson & Pfeiffer 2008:1). The tendency is for the selling division to record a transfer price set at marginal cost plus a mark-up whereas the buying division records a transfer price set only at the marginal cost of the intermediate product (Johnson & Pfeiffer 2008:1). Such an arrangement is considered to create performance incentives for both divisions involved in the transaction since everyone is recording a profit from the transaction (Johnson & Pfeiffer 2008:2).

Despite the fact that dual pricing tends to facilitate internal transactions, it should be used with caution because it is often misleading and the motives behind such transactions create conflict between divisional and corporate management (Bailey & Collins 2005:276). Besides, divisional managers find themselves operating in artificial conditions which have no bearing to real world prices (Roos 2011:497).

Transfer pricing in practice can be rather controversial because different divisional managers often tend to have conflicting opinions about what the transfer price should be and who should make the final decision on whether or not to buy the intermediate product (Horngren, Datar, Foster Rajan & Ittner2009:794). Consequently, MNCs have to manage the tension that may arise between, on the one hand, the requirement to treat divisions as profit centres for international tax purposes and, on the other hand, the need to implement different types of responsibility centres for management control purposes. To date, transfer pricing literature has largely ignored this problem.

Taking into consideration the fact that the transfer price serves as a system for both the efficient allocation of internal resources and managerial performance evaluation and reward (Li & Ferreira 2007:11), the choice of the actual transfer price virtually guarantees the emergence of internal and unhealthy dispute (Brickley, Smith & Zimmerman 2001:438). This is often the case in situations in which the divisional managers are unable to find a common ground with regards to the transfer price of the intermediate product (Anthony & Govindarajan 2007:243).

2.7 CONTEXTUALIZATION OF TRANSFER PRICING

Market forces dictate transaction prices between unrelated parties but where related parties have to deal with each other, the object of their transactions are impacted by forces outside of the market *re:* the transfer price (Urquidi 2008:28). A transfer price is defined as the price or amount charged by one business unit for an internal product bought by another business unit within the same overall divisionalised organization (Langfield-Smith *et al.* 2006:582; Eden 2005:2). Succinctly put, a transfer price is the price at which divisions within a multinational trade with each other across national borders (Sakurai 2002:174). Transfer pricing is therefore the value that is placed on the object of any transaction, be it a good or service, that is traded between related or affiliated parties outside of the open market.

The general rule of transfer pricing advocates an amalgamation of two main costs; the cost incurred in manufacturing and distributing the product (this is usually estimated at marginal cost) on the one hand, and on the other hand the profit forgone by the supplying division as a result of its decision to manufacture and sell the intermediate product to an internal division rather than the open market (otherwise known as opportunity cost) (Langfield-Smith *et al*. 2006:584). Eden and Smith (2001:4) posit that the majority of companies base their transfer prices on production costs or the market prices of related products. A transfer price set along these variables should therefore achieve crucial managerial and financial objectives for each individual division and for the company as a whole in a congruent manner.

Because an MNC retains an almost exclusive preserve in the setting of its transfer prices, it finds itself with several tempting opportunities to manipulate these transfer prices to minimize international taxation and custom duties (Eden 2005:2; Currie 2005:1). However, when the intermediate product is traded between two related entities located across different tax jurisdictions, then the transfer price of that intermediate product is used not only to reallocate taxable earnings but also for coordinating actions of divisional managers (Baldenius 2006:367). The reference here is to the phenomenon of transfer pricing manipulation, defined by Eden and Smith (2001:4) as a situation in which MNCs deliberately set the prices of the product either too high or too low in an effort to evade government regulations. It is therefore possible that whenever a company's operations cut across several countries (as is the case with MNCs), transfer pricing will not only be used to value the object of internal transactions *per se*, but it also plays an increasingly important role of juggling the allocation of earnings between these countries so as to minimize exposure to taxation.

The perceived role that transfer pricing plays in the deliberate reallocation of resources between several tax jurisdictions has become even more accentuated in the background of the recent turbulent economic climes that have plagued the world. This is because, on the one hand, MNCs have become more desperate to maximize profits and stay in business while on the other hand, international tax jurisdictions have become all the more determined to ensure compliance with tax regulations (Ernst & Young 2010:5). Against this backdrop, the possibility of an MNC running afoul of tax authorities is even more likely (Ernst & Young 2010:18). A MNC may therefore find itself in the unenviable position of having to use transfer prices set principally with tax compliance in mind, to achieve goal congruence and motivate divisional managers.

Eden and Smith (2001:5) state that transfer pricing was the most crucial issue that MNCs had to deal with in the 1990s as far as international taxation was concerned. According to a survey conducted by Ernst and Young (2010:1) on MNCs, transfer pricing is increasingly becoming one of the most challenging issues facing MNCs today. From the results of the survey, 78% of respondents felt that transfer pricing documentation is more vital today than it had ever been before; 32% of respondents felt that transfer pricing was the top priority challenge facing their group and 74% of parent respondents and 76% of subsidiary respondents believe that transfer pricing will be absolutely critical or very important to their organization in the next two years (Ernst & Young 2010:4). One possible conclusion is` that the motives behind a company's choice of which transfer pricing method(s) to use, as well as its application is becoming more and more crucial to the survival of the company.

2.7.1 Transfer pricing as part of management control systems

Transfer pricing often works hand-in-hand with responsibility accounting whereby each division is responsible for its revenue, profit, or cost, depending on which centre it is (Lee 2000:1). Management control systems are formalized information-based routines that enable managers optimize their responsibilities (Foster 2007:908). Management Control Systems (MCS) not only serve to bind strategic planning and control, but also to facilitate the provision of information/data that is crucial to managerial decision-making (Asel 2009:4). MCS therefore ensure that employees of an organization do not engage in practices that will lead to conflict with the overall objectives of an organization (Malmi & Brown 2008:289). In a nutshell, MGS are implemented to ensure that resources are appropriately estimated and efficiently allocated; tasks are properly executed and there is feedback to facilitate better decision-making in the future. This is implemented via the use of responsibility accounting/centres wherein managers of specific divisions or departments within an organization are directly responsible for the performance of everything and everyone within that division (Horngren *et al*. 2009:124). This in turn makes it possible to evaluate the performance of semi-independent divisions within a company (Horngren *et al.* 2009:799).

Kaplan (2006:1) identifies five different responsibility centres: the profit centre, the investment centre, the standard cost centre, the revenue centre and the discretionary expense centre. Profit centre managers are responsible for the revenue and cost functions within their sphere of operation and, as a result, for the profit of the division (Merchant & Van der Stede 2007:272). Transfer pricing is a profit centre tool that is used to improve on the performance of the cost and revenue functions of the profit centre within a management control environment in an organization (Anthony & Govindarajan 2007:52). Transfer pricing also impacts on cost centres since it influences the cost of an intermediate product supplied by the selling division within an organisation (Cools & Slagmulder 2005:7). Because it affects both the cost and revenue centres within the organisation, the importance of setting the appropriate transfer price can never be over-emphasized, especially in situations where the volume of intracompany transfers is significant (Merchant & Van der Stede 2007:277).

Table 2.3(p 32) reasserts the evolving nature of the highest priorities of transfer pricing motives as indicated by the parent companies of MNCs over a period of six years spanning 2007 – 2012.

Table 2.3. Transfer pricing priorities

Transfer pricing priorities	**2007**	**2010**	**2012**
Tax risk management	50%	50%	66%
Effective Tax Rate optimization	11%	18%	27%
Cash tax optimization	11%	7%	6%
Alignment with management/operational objectives	18%	20%	14%
Performance measurement	7%	5%	1%
None of these	3%	0%	1%

Source: Ernst and Young (2013:14)

From Table 2.3 above it can be clearly seen that the time and resources spent by MNCs to contend with top objectives like managing their tax risks and optimizing their effective tax rates comes at the expense of other objectives like goal congruence and performance measurement.

Table 2.4 (p33) depicts the importance/role of transfer pricing as viewed by parent MNCs operating in South Africa and globally. Quite clearly the South African government is playing catchup to the developed countries with regards to audits and adjustments. However a higher than normal proportion of South African MNCs believe that transfer pricing will be critical in future. A disproportionately large number South African MNCs also believe that the overriding objective of transfer pricing policies is tax risk management. The implication is that the formulation of transfer pricing policies would be geared more towards tax-related objectives.

Table 2.4: The role of transfer pricing

	South Africa (Parents)	EMEIA (Parents)	Global (Parents)
Importance of transfer pricing			
Transfer pricing is the most important tax issue for their group	30%	33%	30%
Transfer pricing will be “absolutely critical” or “very important” for their group in the next two years	80%	75%	74%
Transfer pricing documentation is more important now that it was two years ago	60%	79%	74%
Audit experience			
Transfer pricing policy has been examined by a tax authority in any country since 2006	40%	73%	68%
Examinations resulting in an adjustment (known outcomes)	0%	33%	30%
Transfer pricing documentation viewed as adequate upon audit	50%	68%	69%
Tax authority threatened to impose penalties	N/A	30%	35%
Penalties were imposed (known outcomes)	N/A	18%	19%
Conducted a risk assessment since 2006	80%	71%	67%
Tax authority requested access to intercompany agreements during audit	75%	86%	84%
Tax authority requested access to operational personnel during audit	50%	45%	49%
Service transactions have undergone review	50%	70%	66%
Intercompany financial transactions have undergone review	75%	51%	42%
Transfer pricing strategies and practices			
Highest priority in driving transfer pricing strategy is tax risk management	60%	50%	50%
Transfer pricing documentation is prepared concurrently, on a globally coordinated basis	40%	49%	41%
Use pan-regional comparable sets across multiple jurisdictions	0%	29%	27%
Use pan-regional sets, but with exceptions for specific jurisdictional requirements	30%	30%	31%
Trends in transfer pricing approach and enforcement			
Awareness of OECD discussion draft on the allocation of profits to permanent establishments	90%	69%	65%
Awareness of US cost-sharing regulations	20%	29%	37%

Source: Ernst and Young (2010:44)

Table 2.5 (p34) gives an indication of the extent of the range of transfer pricing methods favoured by various companies when dealing with tangible goods.

Table 2.5: Transfer pricing methods preferred in transactions involving tangible goods

Transfer pricing methods used in establishing tangible goods pricing (parents)	
Cost plus	30%
Benchmark of third parties (CUP Method)	27%
Profit-based method (MPM/TNMM)	23%
RPM (resale price method)/resale minus	11%
Profit split	3%
Other	6%

Source: Ernst and Young (2010:13)

Table 2.6 below shows the transfer pricing methods favoured when intangible goods/services are at stake in a transaction.

Table 2.6: Transfer pricing methods preferred in transactions involving services

Transfer pricing methods used in establishing service transaction pricing (parents)	
Cost plus	52%
Benchmark of third parties (CUP Method)	21%
Profit-based method (MPM/TNMM)	11%
At cost	8%
Value-based services	2%
Other	6%

Source: Ernst and Young (2010:13)

Table 2.7 (p 35) denotes the transfer pricing methods preferred by parent companies with regards to the licensing of intangible goods.

Table 2.7: Transfer pricing methods used by parent companies for establishing intangible goods licensing

Transfer pricing methods used in establishing intangible goods licensing (parents)	
Third party benchmark agreement between the company and an unrelated party	22%
Third-party benchmark agreement between two parties unrelated to the company	21%
Profit-based method (MPM/TNMM)	21%
Profit split	9%
Other	25%
Don't know/not stated	3%

Source: Ernst and Young (2010:13)
N.B: figures rounded down

A divisionalised business entity operating in a single tax authority would find it attainable to use its transfer pricing policies for profit maximization as well as for incentive and performance evaluation purposes (Cools *et al*. 2008:606). However, MNCs conduct a significant volume of trade internationally (Klein & Schmidtke 2008:1) and therefore beyond the physical scope of the open market. The prospect of significant losses in tax revenue to these MNCs has evidently coerced the tax authorities concerned into laying down more and more explicit ground rules to ensure compliance with OECD Guidelines on transfer pricing (Ernst & Young 2003:5). The pressure to comply with and provide proof of compliance with tax regulations is enormous (Cools *et al.* 2008:606). This results in most MNCs implementing transfer prices that are considered to be tax-compliant but which are not ideal for performance evaluation or for use as an incentive (Brem &Tucha 2005:30).

Results from a global survey carried out by Ernst and Young (2003:4) on international transfer pricing show that the vast majority of MNCs consider transfer pricing as being of primary importance when dealing with international tax issues. A similar majority asserted that amendments to transfer prices are done mostly only after a transfer price audit by a tax authority. By implication, MNCs give priority to international tax issues when determining transfer pricing policies. This number jumped by 32% to 66% of respondents who now consider tax risk management their overriding transfer pricing motive (Ernst & Young 2013:3). With MNCs using a single set of transfer prices, divisional managers tend to defer to corporate management in the setting of transfer prices that will pass the scrutiny of tax authorities (Cools &Slagmulder2005:7). 60% of South African parent companies and 50% of global parent companies consider tax risk management to be the overriding factor guiding their transfer pricing strategy (Ernst & Young 2010:44).

Is it then possible to use one set of transfer prices that would encompass both internal managerial as well as external accounting objectives? A company operating in an environment that is characterised by taxation on international transactions will have enormous financial incentives to choose a transfer price that is different from what it would have chosen if the same company was aiming solely for internal transactions within a unified tax jurisdiction OECD (2005:24). Consequently a single transfer price would prove woefully incompetent if it is used to achieve both objectives (Choe & Hyde 2004:402). This implies that even though a majority of MNC's use a single transfer price (Ernst & Young 2003:17), internal managerial and incentive duties are subjugated to the alleged more important external tax objectives (Cools & Slagmulder 2009:180). This intractability is compounded in situations in which the transfer pricing policy and rates are dictated to seemingly semi-independent divisions by corporate management (Mehafdi 2000:367).

Moreover, MNCs must grapple with the corporate hurdle of having to choose a transfer price which, on the one hand, leads to the realization of the company's business strategy and internal incentives, and on the other hand, provide a satisfying answer regarding international taxation (Urquidi 2008:27). Transfer pricing perpetuates enormous tax savings in the short term, but in so doing it compels the negligence of the internal coordination of the company thereby putting its long-run profitability in jeopardy (Li & Ferreira 2007:10; Martini 2008:21). It is therefore more prudent and profitable in the long run for an MNC to set its transfer prices based on objectives that are more skewed towards managerial goals since the benefits of such a decision are sure to outweigh the benefits of a tax-compliant transfer price (Martini 2008:21).The majority of MNCs currently avail themselves to a single transfer price both for reasons of simplicity and self–defense in contentious situations with tax authorities (Baldenius e*t al.* 2004:594; Cools & Slagmulder 2009:28). On the other hand, it would make more business sense for the MNC to make use of two sets of transfer prices to be able to fully optimize its incentive and tax functions respectively (Choe & Hyde 2004:165) and in recent years, more and more MNCs are "decoupling" their transfer prices. These companies advocate the use of two sets of transfer prices: one for internal managerial purpose and the other for external trade and tax purposes (Ernst & Young 2003:19). The choice of the appropriate transfer price can therefore never be over-emphasized since the wrong transfer price will create incentives for divisional managers that are detrimental to the company as a whole, that is, goal congruence will be impossible to achieve (Currie 2005:1).

2.8 CONCLUSION

The main purpose of this chapter was to analyze literary content that focused on transfer pricing. The history, evolution, objectives and types of transfer prices were dealt with in detail. The controversies surrounding the concept were also touched on and the review of literature also exposed the intransigencies faced by MNCs when trying to stay on the right side of national and international laws on transfer pricing. The subsequent chapter focuses on the research methodology that constituted the backbone for the collection and analysis of data in the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This phase of the study is concerned with the examination of the necessary approaches that were adopted to facilitate and maximize the collection and analysis of data. The rationale of the previous chapter was to assess literature that dealt with the phenomenon of transfer pricing: its emergence, evolution, role in the transactions of Multinational Corporations (MNCs) and its strengths and weaknesses pertaining to the achievement of pre-stated objectives by users. The current chapter is tasked with adapting the appropriate research design. The target population as well as the sampling techniques and samples are elucidated. The sources of data as well as the valid data-collection methods are explained in detail. The researcher will also shed light on the relevant techniques that will be used to analyze collected data in the subsequent phases of the study.

3.2 RESEARCH DESIGN

This study made use of a mixed research design: ex post facto and exploratory descriptive design with a case study methodology. Burns and Grove (2001:223) are of the opinion that designing a study enables researchers to plan and implement the study in a way that will facilitate the realization of the intended results. This consequently increases the chances of obtaining information that could be associated with the real situation.

With regards to the phenomenon of transfer pricing, the design helps to identify, analyze and describe the extent to which the management control functions of transfer pricing is being compromised as a result of efforts by MNCs to comply with international tax requirements. The identified factors are then categorized into individual perceptions, contributing factors and variables affecting the likelihood to which the management control functions of transfer pricing comply with international tax requirements.

3.2.1 Mixed research method

A mixed methods research design is a procedure for collecting, analyzing, and "mixing" both quantitative and qualitative research methods in a single study either concurrently or sequentially (Stange, Crabtree& Miller 2006:292). Consequently the researcher is able to follow a line of inquiry to understand a research problem (Stange *et al*. 2006:292). Figures 3.1and 3.2 (p 42) show the steps used in formulating and carrying out the mixed research design for this study. Both figures were created by the researcher based on information gleaned from the relevant sources as referenced.

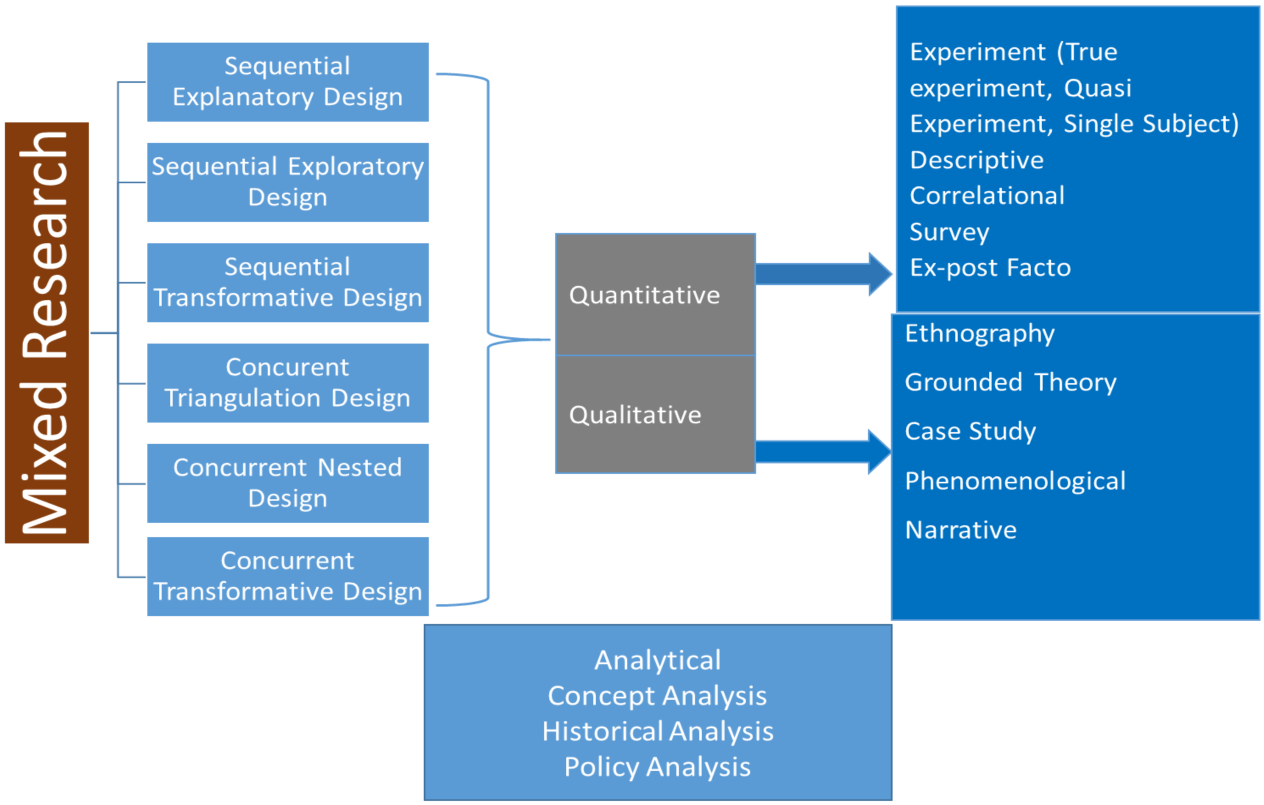

Figure 3.1: Research design encapsulated
Source: Adapted from Creswell (2003:14); Creswell and Plano (2011:61-81), and Saunders, Lewis and Thornhill (2012:167).

Figure 3.1 details the various types of research designs - Sequential explanatory, sequential exploratory, sequential transformative, concurrent triangulation, concurrent nested and concurrent transformative - available for use in the mixed research process. The sequential explanatory design involves the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. This means that qualitative and quantitative data are not combined (mixed) in the data analysis; rather, integration takes place when the findings are interpreted (Creswell & Clark 2011:71). In general, results are interpreted in ways that usually give more weight to the quantitative component. The separate phases of design, data collection, and reporting for qualitative and quantitative data are considered strengths, because of the ease of implementation. The weaknesses of this approach are encapsulated in the time and resources needed for separate data collection phases (as opposed to only collecting qualitative or quantitative data) and the expertise needed to integrate the qualitative and quantitative findings (Creswell 2003:153).

In a sequential exploratory design, quantitative data is used to enhance and complement qualitative results. This is very helpful where the researcher seeks to enhance the extent to which data can be generalised, which may or may not be guided by a theoretical perspective (Creswell 2003:154). Creswell (2003:154) further advocates instrument construct wherein a research instrument is tested on a small number (pilot study) displaying the same characteristics as the population, in order to gauge the degree reliability of the instrument with regards to the quality of the data collected, and, where necessary, thereafter modifying the instrument, based on the results obtained. With sequential transformative design, qualitative or quantitative data may be collected first. Both types of data are analyzed separately, and the findings are integrated during the interpretation phase. This approach is often used where the views and perspectives of a diverse range of participants are needed for a deeper understanding of a process that is changing (Creswell 2003:155; Creswell & Clark 2011:72).

The concurrent triangulation design is used when the focus is on confirming, cross-validating, or corroborating findings from a single study (Creswell 2003:155). Qualitative and quantitative data are collected concurrently, so that weaknesses in one kind of data are ideally offset by strengths of the other kind. Equal weight is given to the both kinds of data in mixing the findings, although one kind of data can be weighted more heavily (Creswell 2003:155). The qualitative and quantitative data are analyzed separately, and mixing takes place when the findings are interpreted. The strengths of this approach include the ability to maximize the information provided by a single study, for example, when interest is in cross-validation, and a shorter data collection period compared to the sequential data collection approaches (Creswell 2003:155). Weaknesses include complexity associated with collecting qualitative and quantitative data at the same time and the expertise needed to usefully apply both methods. Discrepancies between the qualitative and quantitative findings may also be difficult to reconcile.

Concurrent nested design involves qualitative and quantitative data being collected concurrently and analyzed together during the analysis phase. Greater weight is given to one kind of data, in the sense that one kind of data is typically embedded in the other. However, there may or may not be a guiding theoretical perspective. Strengths of this approach include the shorter data collection period and the multiple perspectives embedded in the data, whereas weaknesses include the level of expertise needed to execute the study successfully, especially in mixing the qualitative and quantitative data within the data analysis, and difficulties in reconciling conflicting results from the qualitative and quantitative analyses (Creswell 2003:156).

The concurrent transformative design involves a clearly defined theoretical perspective that guides the methodology. In this approach, qualitative and quantitative data are collected concurrently and can be weighted equally or unequally during the integration of findings. Qualitative and quantitative data are typically mixed during the analysis phase. The strengths of this design include a shorter data collection period. Weaknesses include the need to transform data so that they can be mixed in the analysis phase as well as difficulties in reconciling conflicting results using qualitative and quantitative data (Creswell 2003:157).

With the plethora of mixed research designs available to the researcher, Figures 3.2 (p42) and 3.3 (p43) show the steps that were employed by the researcher to arrive at the most appropriate research design that served as the conduit for the collection and analysis of data in the study.

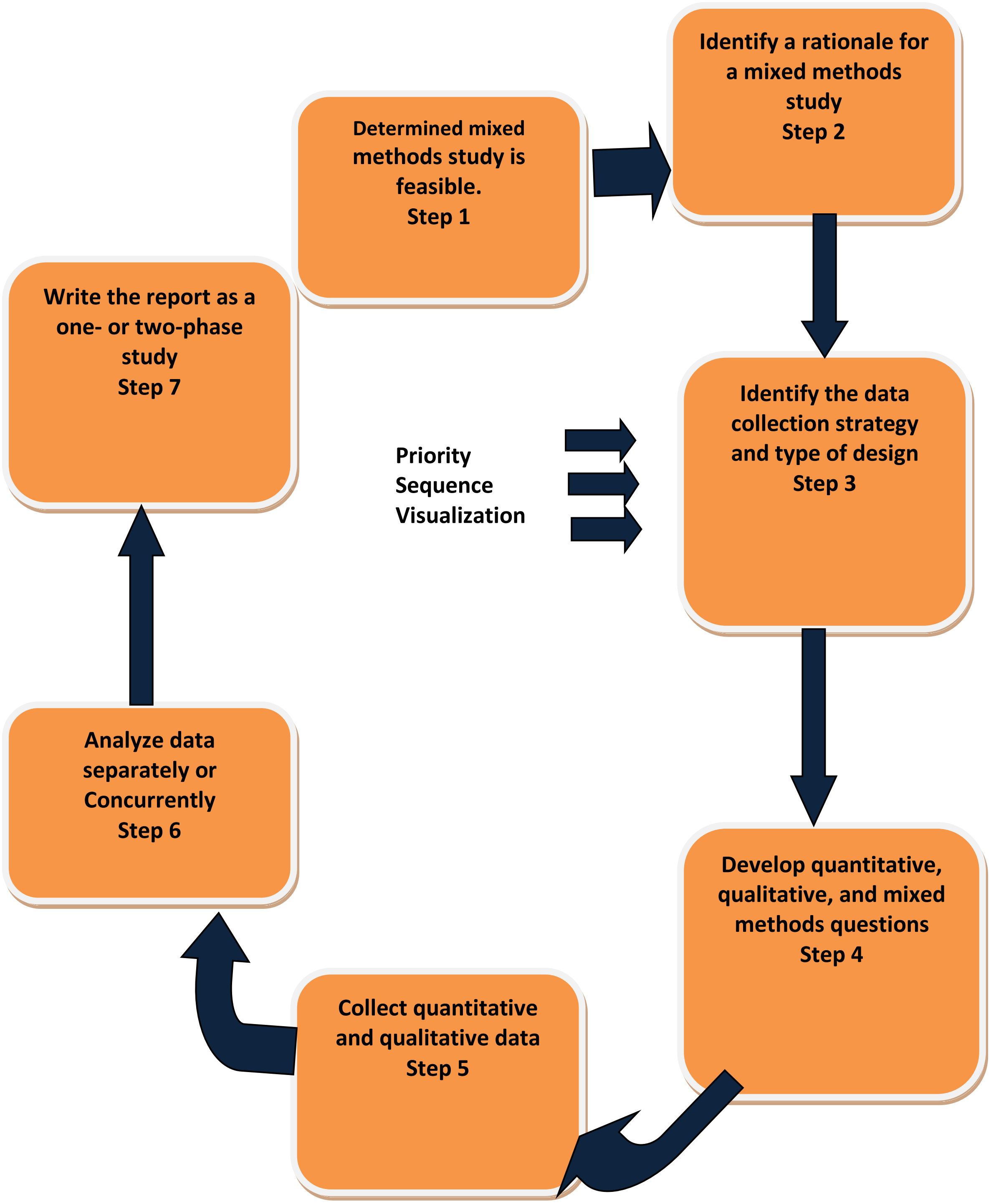

Figure 3.2: Steps followed in choosing a Mixed Methods research design
Source: Adapted from Creswell(2003:14); Creswell & Clark (2011:61-81) and Saunders *et al.* (2012:167*)*.

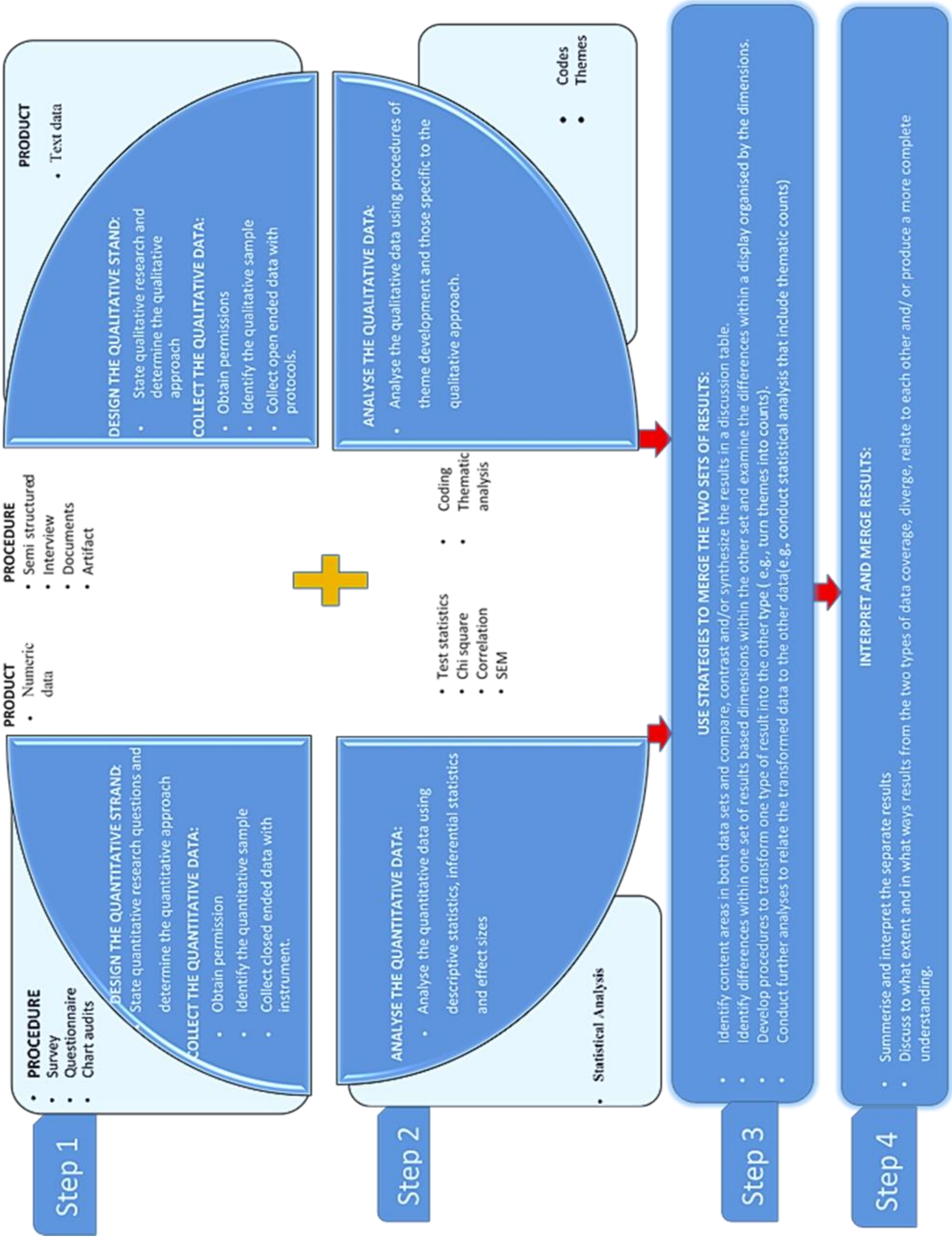

Figure 3.3: Concurrent Triangulation Visual Model
Source: Adapted from Creswell (2003:14); Creswell and Clark (2011:61-81), and Saunders *et al.* (2012:167).

The concurrent triangulation design was chosen for this study. The rationale for choosing this design is that the combination of quantitative and qualitative data provides the researcher not only with a better understanding of the research problem, but also grants enough insight to address said research problem. Hence it aids in obtaining different but complementary data on the same topic thereby making it possible to assess the research problem from different angles (Bergman 2008:27). In addition, a combination of both qualitative and quantitative techniques provides data that can be both numeric and narrative. It also addresses research questions related to conformity and to exploratory research. The mixed method uses both probability sampling which is commonly used in quantitative data collection, and purposive sampling, commonly used in qualitative studies.

The mixed method design is practical and provides multiple viewpoints. The inherent variation in data collection leads to greater validity and ensures that there are no 'gaps' in the information/data collected. This also ensures that pre-existing assumptions by the researcher are less likely to colour the study (Creswell 2014:76). In the mixed method study, both quantitative and qualitative data collection methodologies are utilised; this includes interviews, questionnaires, performance tests, observation, and follow-up. The data collection methods used for this research, which is embedded within the mixed research method, are explained in the subsequent paragraphs.

- **Quantitative method**

The quantitative method is one of the research methods used in data collection and analysis. This method assesses a phenomenon by looking principally at quantities or amounts which are then analysed using some kind of generally acceptable measurement standard(thermometer, scale) or designed measures of psychological attributes or behavioural patterns (questionnaires, tests and rating scales) (Leedy & Ormrod 2013:97).Quantitative research has the following characteristics:

- There is a single reality that can be defined by careful measurement.
- It is usually concise.
- It describes, examines relationships, and determines causality among variables where possible.
- Statistical analysis is conducted to reduce and organise data, determine significant relationships and identify differences and/or similarities within and between different categories of data.
- The sample should be representative of a large population.

- Reliability and validity of the instruments are crucial.
- Comprehensive data collected by employing different methods and/or instruments should result in a complete description of the variable or the population studied.
- It provides an accurate account of characteristics of particular individuals, situations or groups.

(Blanche, Durrheim & Painter 2011:132; Saunders *et al.* 2012:162; Burns & Grove 2001:192).

Data collection methods employed in a quantitative study includes measuring instruments such as questionnaires, checklists, indexes and scales. A structured questionnaire was employed as a quantitative data collection instrument, so as to gain information. This information includes the types of transfer prices used by the MNC, what guides the choice of the method used in particular transactions and if the transfer pricing policy is effectively utilized as per its objectives. The information collected using the questionnaire represents the respondent's preferences and experiences with regards to the transfer pricing methods used by the MNC within which the respondent operates. Furthermore, using this design brings together the differing strengths and non-overlapping weaknesses of quantitative methods (large sample size, trends, generalization) with those of qualitative methods (small sample, details).

- **Exploratory descriptive design**

The exploratory research study uses open flexible questions in order to identify new meanings and to explore factors related to the subject matter under study (Saunders *et al.* 2012:171). The exploratory research design tends to follow an inductive approach whereby the researcher, aided by a series of observations, is able to arrive at a logical conclusion as to the nature and behavior of a particular phenomenon (Blanche *et al.* 2011:44). The researcher deemed this approach to be suitable for gaining a better understanding of why the management control objectives of transfer pricing are compromised as a result of efforts by MNCs to comply with international tax requirements. Within the context of an exploratory study, the researcher can, after observing the chosen phenomenon, develop instruments that will accurately measure the important variables within that phenomenon thereby leading to credible conclusions (Murray & Beglar 2009:51).

Descriptive research provides an accurate account of characteristics of a particular individual, event or group in real-life situations (Leedy & Ormrod 2013:190). A descriptive design may be used for the purpose of developing theory, identifying problems with current practice, justifying current practice, making judgments, or determining what others in similar situations are doing (Leedy & Ormrod 2013:190; Teddlie & Tashakkori 2009:24). The purpose of a descriptive design is to provide the perceptions and views of the respondents about the phenomenon studied (Leedy & Ormrod 2013:190). This study sought to identify and describe factors that motivated the usage of a particular transfer pricing method by the MNC in the study. According to Elahi and Dehdashti (2011:2), an exploratory descriptive research design has the following objectives:

- Developing a more precise formulation of a vaguely identified problem.
- Gaining perspective regarding the breath of variables operating in a situation.
- Establishing priorities regarding the potential significance of various problems.
- Gaining management and researcher perspective concerning the character of the problem situation and
- Identifying and formulating alternative courses of action;

- **Survey**

The Survey research is defined as a research method where data is gathered from a selected group of people, in their natural environment, for a specific purpose (Graziano & Raulin 2000:139). It is acknowledged as an outstanding method of gathering information from a sample of individuals with the aim of learning about and understanding their ideas, knowledge, feelings, opinions, attitudes and self-reported behaviour (Fontana & Frey 2005:698; Graziano & Raulin 2000:140; Neumann 2006:43).

A survey strategy is mostly associated with deductive research and tends to be used in exploratory and descriptive research. The use of questionnaires in surveys gives room for the collection of standardized data from a sizeable population in an economical manner. Data collected here ensures ease of comparison, and is very easy to explain and understand. This method allows for data to be collected and analyzed quantitatively with descriptive and inferential statistics. Results from data can be used to suggest possible reasons for a particular relationship and to produce models of such relationships (Saunders *et al.* 2012:177). Findings from surveys can be generalized since it is possible to generate findings that are representative of the whole population. Following the development and administration of the survey instrument, interviews were conducted to gain deeper insights into a series of issues pertaining to the use of transfer pricing within MNCs.

- **Qualitative methodology**

Qualitative methodology refers to research that produces descriptive data. This data is generally the participant's own written or spoken words, pertaining to their experience or perception. Qualitative research encompasses a range of philosophies, research designs and specific techniques including in-depth qualitative interviews, participant and non-participant observation, focus groups and document analyses (Pope & Mays 2006:95). Given this range of data types, there are also diverse methodological and theoretical approaches to study design and data analysis such as phenomenology, ethnography, grounded theory, action research, case studies and a number of others (see Figure 3.2, p42). The researcher's perspective as well as theory also play a key role in qualitative data analysis and in formulating the bases on which generalisations to other contexts may be made.The most frequently used techniques of data collection employed in qualitative research include textual analysis, interviews and observation.

3.3 SAMPLING AND RESEARCH SITE

Yin (2012:71) defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used.

The unit of analysis is a critical factor in case study research. It is often focused on a system of action rather than an individual or group of individuals. Case studies can also be selective, focusing on one or two issues that are fundamental to understanding the system being examined. A key strength of the case study method is the use of multiple sources and techniques in the data gathering process. The researcher determines in advance what evidence to gather and what analysis techniques to use with the data to answer the research question. The data gathered is largely qualitative, but may also include quantitative data. Tools to collect data can include surveys, documentation review, observation and even the collection of physical artefacts (Yin 2012:71).This study made use of some of the data collection instruments that are typically used in case study research designs namely questionnaires and interviews. For the purposes of this study, the units of analysis comprised all Manufacturing MNCs located in Southern Gauteng trading across national boundaries and practicing transfer pricing.

3.3.1 Population

A population is defined as the entire set of individuals having some common characteristics or who meet the sampling criteria for inclusion in a study (Burns & Grove 2001:366; Polit & Hungler 2001:467).The population group used for this study consisted of all manufacturing MNCs operating in the Southern Gauteng area and that made use of transfer pricing policies in achieving corporate objectives. Products manufactured by these MNCs ranged from petrochemical products dairy products to stationery and heavy duty mining equipment. In view of the fact that the prospective population was rather small, the researcher decided to make use of the whole population as the sample. This negated the need for any sampling technique or sample. The participants in the study were identified by means of a vigorous whittling-down process whereby:

- The researcher obtained a comprehensive list of all MNCs operating in Southern Gauteng from the JSE.
- Then the researcher made use of the McGregor INET BFA financials website to secure substantial information on the listed MNCs in terms of sphere of operations, products, partners, subsidiaries and financial statements. This information made it possible for the researcher to discard any listed MNC which did not meet selection criteria.
- Lastly the researcher contacted (both by phone and email) the rest of the prospective participants to confirm that they do practice transfer pricing. MNCs that provided a negative response were also struck off the list. At the end of this process, 45 MNCs were left on the list and these then comprised the population for the study. To ensure the accuracy of the background information obtained from McGregor INET BFA, this information was carefully cross-referenced with information available on each MNC’s website.

The nature of the questions asked in the survey questionnaire and the follow-up interviews required that the participant MNCs choose a representative respondent who was knowledgeable about company transactions and divisional trade, had a firm grasp of the MNC’s TP system and was involved to a reasonable degree in TP decisions. Consequently most of the respondents chosen by the participant MNCs to supply data tended to be either finance controllers or finance managers. In two instances, the participant MNC was found to employ a full-time transfer pricing specialist who thereby facilitated the process of supplying data for the study.

3.3.2 Pilot Study

A pilot study is a smaller version of the proposed study in preparation for the major study and does not form part of the eventual population group used in the final research study (Burns & Grove 2001:49). Pilot study is used to refine the questionnaire so that respondents have no problems understanding and answering them as well as solving data recording problems (Saunders *et al.* 2012:451). Furthermore, it helps in assessing the validity and likely reliability of the data that will be collected. Following the advice of Bell (2010:15), a pilot test was carried out for this research. Questionnaires were given to experts in the field of TPP and some Tax officials for comments on the suitability and representativeness of the questions. Comments were added on to the questionnaire. A pilot test was carried out in four MNCs using TP.

3.4 DATA COLLECTION INSTRUMENTS

Data is defined as information obtained during the course of an investigation or study (Leedy & Ormrod 2013:2). Data collection instruments refer to devices used to collect data such as questionnaires, tests, structured interview schedules and checklists (Teddlie & Tashakkori 2009:229-236; Bergman2008:139). Data for this research was collected mainly from primary sources.

3.4.1 Primary data collection

Primary data consists of a series of original data collected by the researcher. Primary data collection was accomplished through the use of questionnaires and interviews.

The main primary data collection instrument in the study is the questionnaire survey. Creswell (2014:155) defines a survey design as a means of obtaining numerical data regarding attitudes, trends and possibly opinions from a sample that is representative of a larger population. The questionnaire was designed to gather information about the MNCs’ transfer pricing methods and how effective they were in management control. Self-administered questionnaires are often used when the aim of the researcher is to gather quantitative data with which to test research questions (Tharenou *et al.* 2007:22). Each of the participant respondents were mailed one questionnaire.

This was done to prevent skewness in the data collected in case some of the MNCs filled disproportionately large number of questionnaires. Questionnaire surveys has the following advantages:

- Variables can be measured without substantial loss of time and/or money (Engel &Schutt, 2014:159).
- Questionnaire surveys tend to be appealing when there is a large population to which findings from the sample can be extrapolated (Engel & Schutt, 2014:159).
- Surveys tend to be versatile in that they can be applied to a wide of range different studies (Engel & Schutt, 2014:159).
- Allows for the collection of highly standardized data, thereby making comparative analysis rather easy to accomplish (Saunders *et al.* 2012:174).
- Responses can be submitted on computer mark sheets, making data capture much less tedious (Murray & Beglar 2009:45).
- It is easy to incorporate photos and drawings where necessary to achieve clarity in responses (Murray & Beglar 2009:45).
- Allows for the possibility to ask different types of questions, for instance questions that can be answered using a rating scale or open-ended questions (Murray & Beglar 2009:44).

A good questionnaire should, according to Leedy and Ormrod (2013:203) have the following characteristics:

- Questions should be as brief as possible.
- Questions should be easy to read, understand and answered.
- Instructions on how to tackle the questionnaire should be simple and unambiguous.
- The purpose of each question should be obvious to the respondent, especially when the subject matter is of a sensitive nature.
- Questions must not come across as being unnecessarily presumptive.
- Questions must be completely objective in that they must not give the respondent the impression that a specific answer is preferable over others.
- There must be built-in checks for consistency, for instance, by asking the same question repeatedly in different ways.

Given these distinct advantages of the mailing survey approach, a questionnaire was chosen as the primary survey instrument for a number of reasons, amongst others: firstly, mailing enabled the researcher to contact respondents who might otherwise be inaccessible in other ways. Secondly, foreign subsidiaries are geographically dispersed. Compared with other ways such as personal interviews, questionnaire surveys enable the sampling of a large population at lower cost. Thirdly, this research required, in part, the views, judgments or appraisals of other persons with respect to the phenomenon of transfer pricing.

Notwithstanding these obvious advantages, the questionnaire as a survey instrument does have limitations. These include:

- Survey research sometimes fails to convince cynical readers regarding the purported correlation between/amongst variables being studied (Redelmeier, Thiruchelvam & Lustig 2015:35).
- Results obtained from a survey research sometimes are not replicated when subsequently tested in experimental studies (Redelmeier, Thiruchelvam & Lustig 2015:35).
- Low response rate and response bias. Response bias is potentially greater in mail surveys than with other methods because respondents can more easily ignore mail questionnaires than a polite, but persistent, interviewer. Response bias occurs when one subgroup is more or less likely to cooperate than another (Visser *et al*. 2013:248).

Email-based surveys on the other hand are survey instruments that are delivered through electronic mail applications (Fricker & Schonlau 2002:347). Email-based surveys are generally seen as being delivered faster and more cheaply (Fricker & Schonlau 2002:347), saving the time that the conventional surveys require for photocopying questionnaires, stuffing envelopes, and addressing outgoing mail .

Besides the cost, e-mail surveys save the researcher a lot of time that would have been spent to capture the data after the data-collection phase; when e-mail surveys are used, the data-collection and data-capture processes are combined (Statistics Canada 2010:45). In addition email surveys are convenient for the respondent and take very little time and energy to complete, assuming that the respondent is tech-savvy and has the proper hardware and software access (Statistics Canada 2010:45). Moreover, an e-mail survey can be sent to a thousand persons in almost the same it would take to send to ten persons and the respondents can receive, complete and resend the completed survey, thereby dramatically cutting into the turnaround time for the data collection process (Simsek & Veiga 2001:220). The quick response rate was valuable at the pilot-testing stage of this survey development because it aided instrument clarification before the final survey can be launched. A number of issues such as the possibility of incompatible software, respondents' comfort level with software and attachment process, potential for limited access within target population and confidentiality issues may decrease return rate. In order to increase response rate and for the e-mail survey to be of a high quality, the researcher followed the subsequent steps:

Firstly, sampled members/potential respondents were notified about the incoming questionnaire through an e-mail or postal prior to their arrival. Prior notification not only seeks permission but also includes: a social utility appeal that emphasizes the worthiness of the survey; an egoistic appeal that stresses the respondent's place and importance in completing the survey, and an appeal to help the researcher in completing an important project (Simsek & Veiga 2001:228). Also a line indicating the sponsor of the survey, a person or persons to contact for questions or clarifications, expected date of the survey, and a statement indicating the strict confidentiality of the respondents identity will be included.

Another problem associated with e-mail survey is E-mail Filtering which creates the possibility that e-mails may not be received and different email software that defined how e-mails are edited, processed, received, or viewed. The researcher used a trustworthy e-mail address, with the institutions name, which the recipient server will recognize and trust because they have provided useful information. E-mail survey delivery often requires that large numbers of e-mail messages be delivered over a short period of time. Some spam filter algorithms look specifically for large numbers of similar e-mail messages delivered over a short period of time and delete them. Thus, many e-mail messages will not be received by the intended recipients (McConkey, Stevens, & Loudon 2003:80; Royal 2005:410). Hence a delay was introduced between sending of each message so that messages will not arrive in bulk. In addition, slight changes were made to the subject title of each message.

The issue of safeguarding respondents' anonymity and data integrity and taking measures that alleviate respondents' anonymity concerns is particularly important in the Internet environment in which actors have potential access to one another's personal information. To maintain anonymity as strictly as possible, the researcher suggested to respondents that they can use anonymous remailers to send the completed survey so that the recipient cannot identify their real names or e-mail addresses. Remailer computers were set up through trusted third parties to receive incoming electronic mail, strip the messages of the sender's identifying information, and forward the data to the researcher.

The typical disadvantage of the low response rate and potential response bias inherent in mail survey (e-mail and posted) were carefully considered by the researcher and addressed through various well-established techniques, including postage-paid self-addressed return envelopes, a short questionnaire, follow-up reminders (phone calls, e-mails), and non-response bias tests. Hence both methods were employed to obtain the highest quality of data.

- **Development of the questionnaire**

The development phase of the questionnaire is critical to the success of the whole data collection process. The questionnaire (Appendix C, p121) was divided into three sections: A, B and C. Section A consisted of questions relating to general information on the respondent and the company. This part of the questionnaire was designed to collect general information on the company and related party transactions. It addressed the nature and frequency of intercompany and/or international transfers, which generally can involve up to four types of transactions. These are the payments and/or receipts arising from the transfer of tangible goods, intangibles, financing and services.

Section B: questions in this section dealt with the nature and frequency of usage of varied transfer pricing methods as well as the person(s) involved in choosing the TP method employed by the company. It also looked at factors governing the choice of TPPs.

Section C: these questions focused on seeking to know if the choice of TP method exposed the MNC to the risk of being audited by regulatory bodies and whether or not the particular method chosen would be susceptible to changes given different scenarios.

The contents of sections B and C took account of and adapted items from previous studies, such as Leedy and Ormrod (2013:202-204). The survey used closed structured questions in most cases. The remaining questions were open-ended in nature. A five point Likert-like scale was used for most of the questions.

The questionnaire development consisted of drafting, pretesting and pilot-testing the questionnaire. In its draft form, containing previously identified TP methods and environmental variables, the questionnaire was checked by the researcher's Supervisor. Contacts were also made with staff members of international professional services dealing with TP. Their comments and suggestions were incorporated into a revised questionnaire for a pilot test.

- **Face-to-face and telephonic interviews**

Face-to-face and telephonic interviews were used to gather follow up information on the data garnered in the questionnaires. Survey questionnaires should not contain too many questions otherwise the prospective respondent will be discouraged by the time and effort that would be needed to complete such an arduous questionnaire. Since a questionnaire survey or structured interview is narrow in scope and content, this part of the investigation was designed as semi-structured interviews that would enable complex information to be collected.

The purpose of the interviews was to collect information that would clarify the qualitative aspects of transfer pricing: the possibility of being audited by the South African Revenue Service (SARS) and the inherent costs/benefits of preparing for such a possibility; the possible restrictions and/or negative consequences that arise from compliance with the ALP; the practicality of using only one set of transfer prices for both internal and external transactions and the importance of transfer pricing where transactions cross national borders as opposed to when transactions are conducted within the territorial boundaries of one country only. A common concern regarding the qualitative method is that it provides little basis for scientific generalization (Yin 2003:10). To overcome this flaw and to permit the generalization of the main findings from these interviews, a survey was initiated, based on part of the findings from these interviews, together with items from an archival analysis.

Face-to-face and telephonic interviewing was considered appropriate for this study because the researcher's primary focus was in gaining insight and understanding (Gillham 2000:11; Ritchie & Lewis 2003:138) of how and why various TP methods were used and if they meet the objectives of the said methods. Interviewing was chosen for the current project because it provides the opportunity to generate rich data. Language-use by participants was considered essential in gaining insight into their perceptions and values; contextual and relational aspects were seen as significant in understanding others' perceptions; data generated can be analyzed in different ways which will be subsequently espoused. Hereunder are the questions that comprised the interview phase of the data collection process:

1. *How long have you been working in the field of transfer pricing*? This question was aimed at shedding light on the degree of expertise and knowledgeability of the respondent regarding the MNC's transfer pricing policies.
2. *What, in your opinion, is/are the greatest obstacle(s) that businesses face in implementing their transfer pricing policies?* Here, the respondent was expected to shed light on the issues that make it difficult for the MNC to maximize the execution of its transfer pricing policies.
3. *Is SARS being unnecessarily strict in its regulation of transfer pricing practices?* This question was aimed at getting an idea of the nuances of the relationship between the MNCs on the one hand and SARS on the other especially given that actions taken by SARS regarding transfer pricing definitely impacted on the transfer pricing policy formulations and objectives as determined and achieved by the MNCs.
4. *Does the use of TPP potentially increase profitability for your group? If so, how?* This question was used to assess whether the cynicism displayed by government organisations and international bodies regarding the "true" objective of transfer pricing – earnings reallocation – is justified.
5. *Is transfer pricing a truly effective tool in assessing and improving managerial performance? Please explain your answer*. The researcher sought to use this question to address the possibility that for some MNCs, managerial objectives of transfer pricing are considered vital when compared to more important objectives that are of a financial nature.
6. *Given that a significant volume of trade by your group is across different tax jurisdictions would your group be more efficient if it established and used transfer pricing policies solely for the purpose of profit maximization and tax compliance?* The aim here was to understand if and how trading across national borders – and therefore across different tax jurisdictions – made the design and implementation of transfer pricing policies more difficult.
7. *If your group were able to use its TPPs to reallocate its earnings would that negatively impact on its non-financial objectives for transfer pricing?* Another question aimed at figuring out any possible ulterior motives for the use of transfer pricing by the MNC. In other words, the entity's activities after successful earnings repatriation would determine whether or not earnings repatriation was the true motive for the MNC's devised transfer pricing policy.

8. *In your opinion what is at the core of all the differing opinions/controversy surrounding transfer pricing today?* The overriding purpose of this question was to see if the MNC was willing to take a frank look at all the controversial issues surrounding transfer pricing and, where possible, take some responsibility for the suspicious way transfer pricing is regarded today.
9. *Should companies be allowed greater freedom by SARS and the OECD in the choice and implementation of varying transfer pricing methods as demanded by the particular business circumstances?* Here the researcher wanted an idea of what the MNC felt would be conducive circumstances within which it could devise and implement its transfer pricing policies without necessarily worrying about stepping on the wrong side of the law.
10. *How do you assess whether or not your transfer pricing policies are meeting varied group objectives?* This speaks to the importance of the MNC's transfer pricing policies. If the MNC is serious about making use of its policies then the MNC would not retain these transfer pricing policies if they did not satisfactorily achieve pre-stated objectives.
11. *What steps are normally taken if TPPs do not achieve pre-stated managerial objectives?* The researcher used this question to assess the options available to the MNC in cases where it was satisfied with the performance of its transfer pricing policies.

3.5 DATA COLLECTION

3.5.1 Questionnaire administration

Survey-based research has a number of limitations associated with it. These include sample bias, position bias and respondent subjectivity. One potential major weakness of a survey study is a possible non-response error (Cooper & Schindler 2001:302). In order to improve the mail response rate, Cooper and Schindler (2001:302) suggested ten concurrent techniques, a variation of which will be used in this research:

- Reduce questionnaire length,
- Survey sponsorship,
- Return envelopes,
- Postage,
- Personalization,
- Cover letters,
- Anonymity,

- Size, reproduction and colour,
- Incentives,
- Deadline dates,

Cooper and Schindler (2001:306) are of the opinion that short questionnaires should obtain higher response rates than longer questionnaires. This survey questionnaire was designed to a short questionnaire while still enabling all relevant information to be collected. Cooper and Schindler (2001:306) also suggested that an "official" or "respected" sponsorship increases response rates. The researcher enclosed a cover letter of the questionnaire survey, and made reference to the Vaal University of Technology that provided scholarship for this research. Moody (2003:12) noted that the inclusion of a stamped, return envelope encourages response. Self-addressed postage-paid envelopes were sent out to respondents.

Since the names of individuals were not available, the questionnaires were addressed to the finance controller in each company, who is most likely to be directly involved with TP policy and administration as suggested by Borkowski (1997a:47).

With regards to cover letter inclusion in the mailed out questionnaire, its influence on response rates has received almost no experimental attention. That notwithstanding, Cooper and Schindler (2001:306) believe that the cover letter is the most logical vehicle for persuading individuals to respond. The questionnaire was accompanied by a covering letter (Appendix A, p 119) which stressed the importance of the study, the confidentiality of the responses provided by each company, the support of the University, and when to return the questionnaire.

Research has shown that the promise of anonymity, questionnaire size, method of reproduction and colour have little effect on response rates (Cooper & Schindler 2001:71 *in* Moody 2003:12). The survey design allows the completed questionnaire to be anonymously returned to researcher. Hence the researcher cannot know who completed a particular questionnaire. Confidentiality is promised to the respondent and an identity number will be fixed on the returned envelopes of these companies for the purpose of collecting archival data on each respondent firm.

Cooper and Schindler (2001:306) believe that when a monetary incentive is sent out with the questionnaire, the response rate increases. Given the limitation of the research budget and the position of the potential respondents (i.e., financial controllers), the researcher did not offer any monetary incentives. Rather, a nonmonetary incentive was supplied namely: providing a copy of the summary results from the survey (if requested).

Cooper and Schindler (2001:71) noted that deadline dates do not increase response rates, but they do serve to accelerate the rate of questionnaire return (Cooper & Schindler 2001:71). In view of this, deadline dates were provided at every stage of the survey process. Cooper and Schindler (2001:71) further stress the importance of follow-ups to improve response rates. Follow-ups were made to respondents so as to have a better response rate.

- **Questionnaire distribution and response rates**

The edited and final questionnaires were sent by post and email, with explanatory letters to the finance controllers of 45 subsidiaries operating in Southern Gauteng. To secure a viable number of returns, follow-up letters to the companies were also sent. The first follow-up letters were sent two to three weeks after the initial mail out. These follow up packages consisted of a short cover letter, a copy of the questionnaire, and a return stamped envelope.

3.5.2 Interview

In addition to the questionnaire, face-to-face interviews were carried out by the researcher whereby visits were made to the respondents' place of work for the collection of relevant data by means of a series of pre-arranged set of structured and semi-structured questions (Appendix B, p120). Telephonic interviews were used when a face-to-face interview couldn't be arranged with the relevant respondent. The researcher conducted these interviews with the same individuals within the MNCs who filled the questionnaires. This was done not only to corroborate the information in the questionnaires but also to ensure that respondents in the interview sessions were knowledgeable enough about transfer pricing to provide good quality information.

The decision to interview only the questionnaire respondents also facilitated the avoidance of skewness in the data that might have arisen due to a disproportionately large number of interviewees in some respondent MNCs. Interviews comprised semi-structured and structured questions. The semi-structured questions were open-ended in nature. The questions were inspired by organizational transfer pricing literature, literature on management control systems, evolutions in international tax law and market situations. At the same time, the questions were open enough to instigate the exposure of unexpected elements. The aim of using semi structured interviews was to ensure flexibility in how and what order questions were asked, and in whether and how particular areas might be followed up and developed with different interviewees. This allowed the interview to be shaped by the interviewee's own understandings as well as the researcher's interests.

Structured interview questions restrict opportunities for bias from the interviewer. It allows for the development of a common context by using the same questions, in the same order, with the same cues and prompts (Smith 2011:20). This helps in eliciting information about the specific topic (De Vos 2002:297). This method was chosen to ensure consistency.

An interview schedule was designed with key questions which were grouped thematically to be used for reference and as prompts if necessary. It was hoped that by writing these down beforehand they would be used more spontaneously in the interview without the need to refer to the schedule explicitly. In order to refine the research question and to select a suitable site for the main study, a preliminary investigation involving four MNCs was undertaken. The preliminary contacts confirmed the relevance of the topic and were useful in gaining experience in interviewing financial controllers.

The researcher started by introducing the purpose of the survey, authenticating his claims with proof of his status and commitment as a Masters student at Vaal University of Technology (School Identity and proof of registration if necessary), and offering a description of the study areas. This was followed by a detailed explanation of the nature of the academic research and guaranteed the confidentiality of the information the interviewee will disclose. These would have probably alleviated concerns about the potential misuse of survey data.

Blanche *et al.*(2011:298) noted that the use of a tape recorder to record interviews could influence respondents' answers in that it could detract from the intimacy of the situation. Consequently, to hold these interviews in an unrestrained and open way, it was decided not to use tape recordings when discussing topics that were sensitive to the respondent.

3.6 DATA ANALYSIS

The research design of this study includes both quantitative and qualitative data collection instruments. Therefore the procedures relevant for the analysis of both types of data are used. While the questionnaire survey data are subjected to rigorous statistical analysis, data gathered from answers in interviews to open-ended questions are edited and organized into interview reports. Data collected are measured and analyzed with the ultimate objective of syncing findings to the original research questions as efficiently and logically as possible (Leedy & Ormrod 2010:284) and analyzing the pre-existing relationships amongst and the observed patterns of these relationships amongst the variables at play in the study (Welman *et al.* 2009:210). The analysis will be both quantitative and qualitative in nature.

The data was analyzed in three progressive stages viz: initially to ensure efficient and accurate computerization for statistical evaluation; thence cursory assessment of the property of data collected, to check for data errors and to describe the sample; finally a substantive assessment using a set of multivariate analytical techniques to prove or disprove the proposed interrelationship amongst all the variables involved in the study (Tharenou *et al.* 2007:190).

3.6.1 Quantitative analysis

Data collected was coded and analyzed with software - Statistical Package for the Social Sciences (SPSS version 22.0) and Microsoft excel. Descriptive statistical measures comprising the mean, standard deviation and ratios as well as frequency tables were used to assemble and then compartmentalize all the data obtained from the questionnaires and the interviews into meaningful summaries regarding the variables that are under investigation.

Multivariate analysis makes use of the following: correlation coefficient and multiple regression analysis. Correlation approximates the extent to which a change in one variable is accompanied by or causes a change in the other variables in the study (Welman *et al.* 2009:82) whereas a multiple regression analysis attempts to establish an interrelationship between three or more variables in the study (Tharenou *et al.* 2007:192). The objective of the regression analysis is to find the nature of the relation between x and y from the data and use the relation to predict the response variable y from the input x. If a linear relation emerges from the plotted data, the calculation of the numerical value of the regression (r) will confirm the strength of the linear relation. This value shows how effectively y can be predicted from x by fitting a straight line to the data. The coefficient of determination (r^2), expresses the strength of the relationship between the X and Y variables. The intercept (height above the origin of a line) and slope (the amount of Y increase whenever X increases by a unit) determines a line. The least square line is close to the points in terms of minimizing the amount of vertical distance. The slope X indicates the average rate of change. Equation of the least square line is given by:

$$\mathbf{y = mx + c} \qquad 3.1$$

Where:

y = vertical axis values

x = horizontal values

m = gradient of the line (changes in a given time)

c = vertical axis intercept (constant).

This study makes use of the correlation coefficient to establish whether or not transfer pricing policies indeed cause a change in the managerial and financial objectives of the organization given the categorical or ordinal nature of the data that was collected in this research, nonparametric statistics was used as the main test technique for the analyses. These included The Chi-Square and the Spearman's Correlation Coefficient tests, the Kruskal-Wallis H test, standard deviation, principal component analysis and the Cronbach's alpha reliability test. These tests were individually used to analyse different parts of the data collected in the study.

A *chi-square test* of homogeneity was used to test for non-response bias on the rate of return data. This test will ascertain whether or not there are significant differences between early and later respondents in each company on the basis of type of industry and the TP methods used. The Chi Square (X^2) test was employed to test the difference between an actual sample and another hypothetical or previously established distribution, such as that which may be expected due to chance or probability. Chi Square can also be used to test differences between two or more actual samples. Computational Equation 3.2:

$$\mathbf{X^2} = \sum \frac{\mathbf{(O-E)^2}}{\mathbf{E}} \qquad 3.2$$

Where:

χ^2 = value for Chi Square.

O = observed frequency

E = expected frequency**.**

The Equation reads as the value of Chi Square equals the sum of O-E differences squared and divided by E. The more O differs from E, the larger χ^2 is. When χ^2exceeds the appropriate critical value, it is declared significant.

3.6.2 Qualitative analysis

The main source of the qualitative data was interviews (telephone, face-to-face interviews). They involved in-depth discussions on transfer pricing issues with different respondents to gain a broad perspective on the issues from different points of view. Data analysis consisted of two phases:

Firstly, the interview data was summarised based on the research objectives and questions. This was done in order to develop a summary report identifying key information directly relevant to the research questions. This process was facilitated with the use of notes and memos containing all relevant information.

Secondly, the data was analyzed to provide explanation using applicable and valid analytical techniques. The aim of this phase is to address the research questions. Maximum care was taken to protect the identity of organizations used in this study and in other constituent parts of the research.

3.7 VALIDITY AND RELIABILITY

A research study is valid when the researcher is entirely certain that the research instrument is accurately measuring that which it is supposed to measure (Tharenou *et al.* 2007:25). The internal validity of this research was preserved or ensured by way of the identification and elimination of nuisance variables which may have an undue impact on the variables being measured (Welman *et al.* 2009:190) and this will be executed using a partial correlation analysis. The nature of this specific study, TP choices and aims of such choices within MNCs in southern Gauteng, aimed at getting as wide a scope as possible of information on the interpretations, experiences and actions of the participants regarding their choices of TP, what factors influenced such choices and if they are fulfilling the objectives of such TPP dictated that the following criteria be taken into account to ensure the quality of the research that was undertaken.

3.7.1 Credibility and conformability

These refer to the degree to which the researcher demonstrates that the results obtained and conclusions made are believable from the perspective of the research participants, and the degree to which the results can be confirmed or corroborated by others. This assessment of research findings is seen as the most important criterion for the assessment of qualitative research (Patton

2002:93). The whole process of surveying the MNCs is intended to get individual views and insights into the problem of TP. In the process of analyzing the data these ideas and responses were not judged and therefore nothing was edited or left out.

Although the individual participants will not examine the analyzed data, the results will be provided to them if they so requested.

3.7.2 Consistency and dependability of data

In order to check the dependability of procedures and data used, the quantitative criterion of reliability is reformulated (Flick 2009:224). There was a detailed discussion and exposition of the methods employed in conducting the research, providing the motivation for the choice of data collection and recording techniques, and fully explaining the contexts of the research and the procedures for analysis and synthesis of results, all of which constitute the expected "auditing trail" (Flick 2009:232; Patton 2002:93) to ensure consistency and dependability of data.

3.7.3 Transferability

Transferability can be defined as that quantitative criterion of external validity, which implies the degree to which research results can be generalized to other participants, situations, times and places (Graziano & Raulin 2000:187). Transferability criteria involve attempts to determine whether the researcher has provided sufficient information about the context and assumptions underlying the research to allow the reader to assess the potential transferability of the findings to other similar settings. Transferability therefore concerns the applicability or the fittingness (Saunders *et al.* 2012:194; Kelly 2011 *in* Blanche *et al.* 2011:380) of qualitative research findings to other contexts and settings, rather than to the number of times that the study is or can be replicated (Trochim 2006:139).

Findings can, for example, be transferred (generalised) in cases where improvements to existing programmes are feasible or changed policy decisions suggested from the patterns observed or lessons learned from the investigation (Patton 2002:93). These conditions will be applicable for this particular study since it aims at not only investigating the current use of TP within MNCs, but also seeks to provide suggestions for factors that can influence the choice of TPP. Thus results obtained will be transferred / applied to other situations that may arise within MNCs using TP.

Yin (2009:45) states that as far as case study research is concerned, reliability will be upheld when another investigator uses the same measuring instruments on the same case and arrives at the same result; in other words, reliability is concerned with how credible the research findings are and the extent to which they can be generalized and replicated under *ceteris paribus* conditions (Welman *et al.* 2009:145). Welman *et al.* (2009:147) propose the use of the Cronbach alpha coefficient and the split-halves test. The Cronbach alpha coefficient will be used during the study to measure the variance on measurement obtained as well as variances of the variables involved. The split-halves test will be implemented by splitting the test into two equal halves and then testing for correlation in both halves which in turn will indicate the significant levels of reliability or the absence thereof.

3.7.4 Transparency

Transparency aims primarily at allowing the reader to see the basic processes of data collection, keeping records of all the procedures throughout the investigation, and providing for access to interviews, transcripts and so forth (Moravcsik 2014:48). The data collection and analysis methods are described in this chapter and provide a clear view of the processes that were followed. Furthermore, examples of the interview schedules are attached as appendices to this manuscript.

All trends considered in this study were tested for 'significance'. Statistically, a result is called significant when it is unlikely to have occurred by chance. Most often, in statistical hypothesis testing, the significance level of a test is the maximum probability, assuming the null hypothesis, that the statistic would be observed. Therefore the significance level is the probability that the null hypothesis will be rejected in error when it is true (Type I error) or the null hypothesis is accepted in error when it is false (Type II error). The significance of a result also called its p-value; is said to be more significant as the p-value gets smaller. Significance is usually represented by alpha, denoted by the Greek symbol, α. The various levels of significance called the p-value, often used are 5%, 1% and 0.1%. If the results of a test of significance gives a p-value lower than α -level, the null hypothesis is rejected. Such results are casually referred to as ‘statistically significant’.

3.8 OTHER RESEARCH-RELATED ISSUES

The following paragraphs addresses further issues involved in ensuring the quality of the research results.

3.8.1 Researcher bias

Bias can be introduced in a research study by the researcher through influencing participants in some way or another, selecting data that best supports the theory/hypothesis, using statistical techniques that best show the particular results predicted, or bringing personal perspectives into the analysis and interpretation of data (Flick 2009:226; Graziano & Raulin 2000:195; Struwig & Stead 2001:145; Patton 2002:93). In order to minimize such bias, a scrupulous application of data collection and analysis will be carried out to ensure the quality of the methods applied in conducting a research study and analyzing its results.

In order to enhance the credibility of the investigation the researcher will be open and honest with the participants and to clarify all aspects of the research topic with them before the interview commences (Flick 2009:136).

Impartiality is proven *inter alia* by providing a comprehensive description of the research methods and procedures applied, to verify the thoroughness of the investigation and the conformability of the data that has been collected (as discussed in paragraph two of p 28), which in turn maximizes accuracy and minimizes bias (Patton 2002:93).

3.8.2 Non-sampling errors

Non-sampling errors are all errors that cause variability and bias in a survey except for those attributable to sampling method and sample size (Fienberg 2003:1) They include non-response error, measurement error, and coverage error. Non-response error occurs when some members of the targeted sample do not respond to the survey (Saunders *et al.* 2012:267). Measurement error occurs when there is a change in the way data is collected or when there are deliberate or intentional changes made to collected data (Saunders *et al.* 2012:329). Measurement errors that might have occurred in relation to the surveying instrument were prevented by developing a reliable scale to collect survey information. Systematic measurement errors due to respondents systematically refusing to answer certain questions, give incomplete answers, refusing to follow instructions, under-reporting or over-reporting, or choosing certain categories more often than others (Saunders *et al* 2012:267), were dealt with in follow up mails and telephone conversations.

3.8.3 Triangulation

The strength of triangulation in qualitative research lies mainly in the area of data analysis since it adds credibility to and creates confidence in any conclusions drawn by the researcher (Patton 2002:556). The central idea of triangulation is the combination of different methods, theories, to study the same phenomenon, with the aim of testing for consistency in the results (Balnaves & Caputi 2001:95; Patton 2002:556). The methodology of this study is grounded in accepted standards, thereby ensuring the quality of the methods and the results that will be obtained. The verification, validation, consistency and credibility issues that are addressed by means of triangulation (Patton 2002: 556) were thoroughly accounted for by other means, as seen above, hence triangulation will be regarded as an alternative to validation.

3.9 CONCLUSION

The back bone of every successful research study is a sound and effective research methodology. A research methodology needs to be carefully designed, based on a theoretically well-grounded framework and practically tested for internal and external validity. In this study, the development of the questionnaire consisted of drafting, pretesting and pilot testing. Pretest and pilot tests produced a survey form that was more usable and reliable. Variables of the questionnaire were drawn from previous studies and, samples were randomly drawn from directories. The objectives of the qualitative study are to describe the TP system used by MNCs and to illustrate its effectiveness in restricting tax evasive practices. The analysis has been limited to the research questions addressed within this study. Validity of the findings were insured by asking respondents to review a draft interview report to correct any misunderstanding or inconsistency.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.1 INTRODUCTION

The principal objective of this research is to examine the effective use of transfer pricing policies in the realization of managerial performance objectives on the one hand, and tax and financial objectives on the other of MNCs in Southern Gauteng. This chapter presents the results of the statistical analysis performed on the data collected through a questionnaire survey and interviews. Results are based on responses from 15 companies which provided complete questionnaires and responded to interview questions. The chapter begins by presenting the findings from the survey on transfer pricing methods used and their degree of importance, as well as the frequencies and factors influencing the choice of transfer pricing (TP) policies by the respondent firms. Survey results are presented next, followed by the results from interviews. This chapter is structured as follows: the position and expertise of the responding MNC's representative; the structure of the MNC and its trade capacity, followed by factors influencing the choice of transfer pricing methods (TPM). TP and managerial and goal congruence are presented first followed by discussion of the research findings. The last part of this chapter deals with the findings from interviews.

4.2 SURVEY RESPONSE AND ANALYSIS

Forty five questionnaires were mailed out to the selected MNCs in the Southern Gauteng region. Individuals who filled the questionnaires were in charge of transfer pricing planning for their respective companies, including transactions with affiliated parties and/or subsidiaries or parent companies, as the case may be. Of the forty five questionnaires sent out, fifteen came back completely filled, seventeen were partially filled and thirteen companies did not respond. This resulted in a response rate of 33.4%, representative of the 15 completed questionnaires. The completed questionnaires can be further categorized as follows: 9 were paper based and 6 were filled electronically. Partially filled questionnaires were discarded because valid judgment cannot be made from partial responses. The 15 MNCs used for analysis were given alphabetical codes ranging from A-O.

4.2.1 Company profile

Table 4.1 presents the position of the respondent MNC's representative within the organization, the MNC's subsidiaries, the nature of transfer pricing, and revenue classifications of the respondent MNCs. It can be seen, in Panel E of Table 4.1 below that the distribution for transfer pricing (TP)-related transactions varies among the fifteen MNCs. In order to determine the importance of transfers to the respondent companies, each respondent was asked to estimate the levels of transfers from their respective subsidiaries. Evidently there is a similarity in the ranking of responses for all fifteen MNCs.

Table 4.1: Company Profile

A	B	C	D	E	
Company	**Respondents position**	**Number of Subsidiaries**	**Estimate of products manufactured**	**% Goods and services traded**	
A	Chief financial officer	450	12	Tangible goods	60
				Services	25
				Financing	10
				Intangibles	5
B	Transfer pricing specialist	36	16	Tangible goods	58
				Services	34
				Financing	6
				Intangibles	2
C	Financial controller	20	94	Tangible goods	72
				Services	20
				Financing	6
				Intangibles	2
D	Financial controller	200	350	Tangible goods	60
				Services	20
				Financing	15
				Intangibles	5
E	Financial controller	23	5	Tangible goods	75
				Services	20
				Financing	3
				Intangibles	2
F	Head: international tax and transfer pricing	67	14	Tangible goods	85
				Services	10
				Financing	4
				Intangibles	1

Table 4.1: Company Profile continued

A	B	C	D	E	
Company	**Respondents position**	**Number of Subsidiaries**	**Estimate of products manufactured**	**% Goods and services traded**	
G	Financial controller	10	8	Tangible goods	90
				Services	5
				Financing	3
				Intangibles	2
H	Financial controller	10	6	Tangible goods	86
				Services	11
				Financing	2
				Intangibles	1
I	Financial controller	29	7	Tangible goods	90
				Services	5
				Financing	3
				Intangibles	2
J	Financial controller	8	38	Tangible goods	88
				Services	8
				Financing	2
				Intangibles	2
K	Chief financial officer	42	14	Tangible goods	79
				Services	11
				Financing	8
				Intangibles	2
L	Financial officer	26	7	Tangible goods	80
				Services	18
				Financing	1
				Intangibles	1
M	Financial officer	53	13	Tangible goods	84
				Services	10
				Financing	5
				Intangibles	1
N	Financial officer	10	15	Tangible goods	90
				Services	4
				Financing	3
				Intangibles	3
O	Financial officer	43	10	Tangible goods	75
				Services	15
				Financing	7
				Intangibles	3

From Table 4.2 below it can be seen that the transfer of tangible goods is the most common TP-related business activity for MNCs. The transfer of services is the second most common activity, while the transfer of financing is the third. The transfer of intangibles constituted the smallest share of TP-related business activity. Note that the Mean is calculated based on the estimated number of times each type of transfer takes place within a specific time frame.

Table 4.2: The frequency of different types of transfers

Type of Transfer	Mean	Standard Deviation
Tangible goods	4.28	1.11
Services	3.14	1.28
Financing	2.37	1.23
Intangibles	1.89	1.23

4.2.2 Choice of transfer pricing method

MNCs delegate decision-making authority to the divisional managers so that these managers can design financial control systems that would coordinate decisions throughout an organization thereby ensuring overall goal-congruence, and guide the behavior of employees in the execution of important tasks. The study ensured that individuals who filled the questionnaires within the respondent MNCs were tasked with decision-making regarding crucial issues like the type of transfer pricing method typically employed by the MNCs as well as the manner in which these respective transfer pricing methods would be implemented.

Table 4.3: Decision-making on choice of transfer pricing method

No.	Decision-making on choice of TPM	Frequency	%
A	Corporate executives only	4	27
B	Corporate and divisional executives equally	3	20
C	Mostly corporate executives with minor divisional input	8	53
D	Mostly divisional executives with minor corporate input	0	0
E	Other: ______________________________	0	0
Total		15	100

N.B Figures have been rounded

Results from Table 4.3 above show that 53% of MNCs have their choice of transfer pricing method decided at the corporate executive level with some input from divisional managers. The other 27% leave such decisions exclusively to executives, while 20% share equal power in the decision making process. It is worth noting here that MNCs for whom it is policy that the choice of transfer pricing methods be done at the corporate executive level may be putting themselves at a disadvantage since divisional managers are very often more aware of the intricacies of activities on the ground, and can be relied upon to present a more realistic picture of their sphere of operations.

In measuring the degree of influence of the subsidiaries on transfer pricing decisions, respondents were asked to measure the extent of their influence on the decision-making process regarding the appropriate transfer pricing method to use. Table 4.4 below shows that 60% of MNCs have a little influence in the transfer pricing decision. 26.7% of MNCs have an average influence and 13.3 % had complete influence in the choice of TP implemented by the MNC.

Table 4.4: Degree of influence on the choice of TP by subsidiaries

Degree of influence/%	No influence at all	A little influence	Neutral	Average influence	Complete influence	
Degree of influence by subsidiary	0	9	0	4	2	0
%	0	60	0	26.7	13.3	33

From Tables 4.3 (p 70) and 4.4, it can be seen that decisions regarding the choice of the TP used by MNCs are made by the corporate executives with very little influence from subsidiaries.

4.2.3 Frequency of usage of transfer pricing method (TPM)

MNCs do not limit themselves to one transfer pricing method for all their transactions. In most instances it is simply a case of choosing the method that would be most suitable to the specific business transaction without generating any unforeseen legal stumbling blocks for the MNC. There were noticeable differences between the fifteen firms regarding the TPMs most commonly used in each of the MNCs. To ease and clarify the process of drawing specific conclusions, the TPMs were grouped into four classes as seen in Table 4.5 (p 72). These classes were further split into market and non-market transfer pricing method. There is no clear-cut empirical evidence to suggest that negotiated transfer pricing falls firmly within either of these two sub-categories. Al-Eryani and Alam (1990:416), as well as Tang (1997:25) treated negotiated pricing as a non-market-based method whereas Chan and Chow (2001:99) grouped negotiated and market based methods. In this research, negotiation pricing approaches such as negotiations based on costs were classified in the market-based method group. In percentage terms, the respondent firms are more non market-oriented in their choice of transfer pricing with 66% favouring this stance while 33% of the respondents opted for market-based methods.

Table 4.5: Frequency of usage of transfer pricing method

Method	Type	Frequency	%
Market-based transfer prices	Market based	4	26.7
Marginal Cost-based transfer prices	Non market based	7	46.6
Full Cost-based transfer prices	Non market based	3	20
Negotiated transfer prices	Market based	1	6.7
Total	Market Based	5	33.4
	Non Market based	10	66.6

There were noticeable differences in the frequency of use of different transfer pricing methods by the fifteen respondent MNCs.

- **The Chi Square Analysis**

The Chi Square Analysis was used to test for variations in the choice of transfer pricing and frequency of use. Supplementary analyses classified transfer pricing methods into four classes: market based, marginal cost based, full cost based and negotiated transfer pricing methods. The four classified methods were further grouped into two broad methods; market and non-market based transfer pricing method. Table 4.6 shows results of the chi-square analysis.

Table 4.6: A Chi Test analysis on transfer pricing method used

Method	Observed	Expected
Market Based	5	7.5
Non Market Based	10	7.5
Total	15	
Chi Square = 0.196705602 Mean = 7.5 Standard Deviation = 2.5		

The results in Table 4.6 above show the Chi Square test result as 0.196. This provides evidence that there are statistically significant differences across the 15 MNCs in their choice and usage with regard to the TPMs used by MNCs at the aggregated levels. The result is significant at the 5% level.

4.2.4 Degree of importance of company objectives in TP formulation

In order to assess the degree of importance of Transfer Pricing Policies (TPP) to the various MNCs, 6 selected variables were used in designing an instrument for data collection. A 5-point scale was used by respondent MNCs to rate the importance of each of these possible determinants of the methods adopted for international TP. Figure 4.1 below shows the relative importance attached to these variables by the sampled MNCs. The rankings of importance were made according to the mean scores of the variables. The mean for each variable was based on a 5-point scale using 1 for extremely important; 2 for very important; 3 for important; 4 for slightly important and 5 for not important. In using the recode function in the Statistical Package for Social Sciences (SPSS), the original Likert-like code was reversed. That is, on the 5-point scale, a 1 is recoded as a 5, a 2 is recorded as a 4, a 3 as a 3, a 4 as a 2 and a 5 as a 1. Respondents were asked to rate the degree of importance of various transfer pricing policies (TPP) to their companies. Six variables were chosen and the importance of each variable to the respective MNCs is shown in Figure 4.1. It can be seen that of the six variables, profit maximization was the most important determining factor in the choice of transfer pricing. Regarding managerial motivation, 80% of the respondent MNCs posited that it was important and 20% were of the opinion it was neither important nor unimportant. On the issue of goal congruence, 40% of companies said it was neither important nor unimportant; 40% said it was important and 20% said it was very important to the company's objectives. 53% of the respondents said departmental assessment was important; 27% said it was neither important nor unimportant and 20% considered it very important. 53% said tax minimization was important to them; 40% considered this variable very important and 7% said it was neither important nor unimportant.

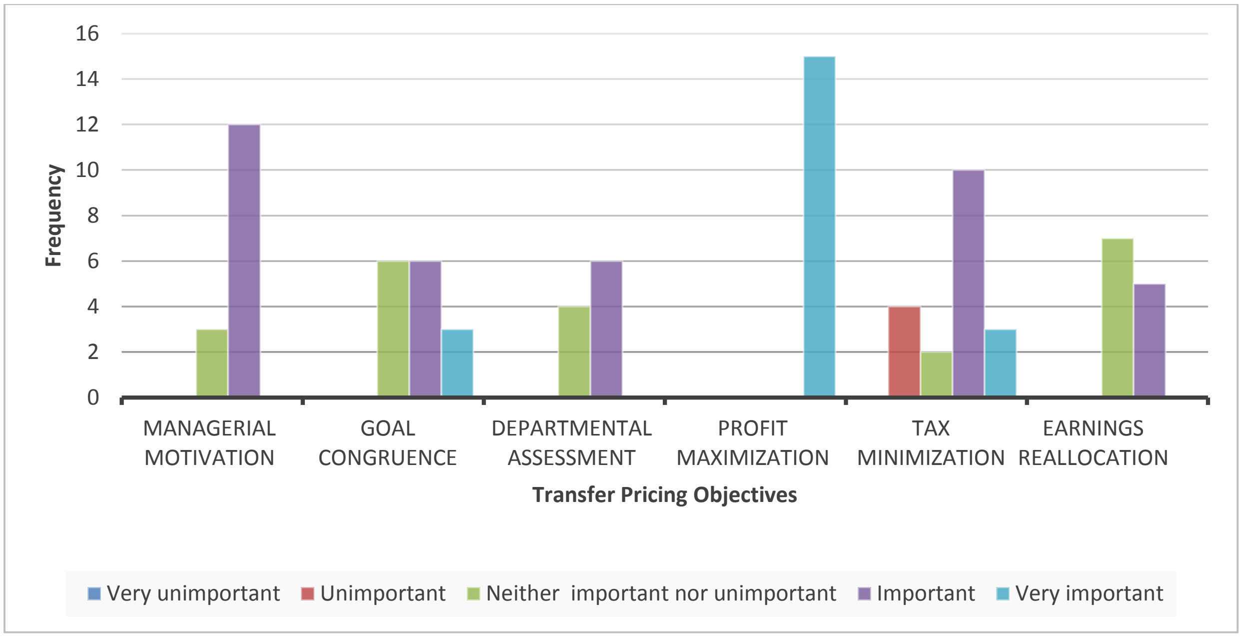

Figure 4.1: Importance of Transfer pricing policy

In order of importance, what takes precedence in the formulation of TPPs is shown in Figure 4.2.

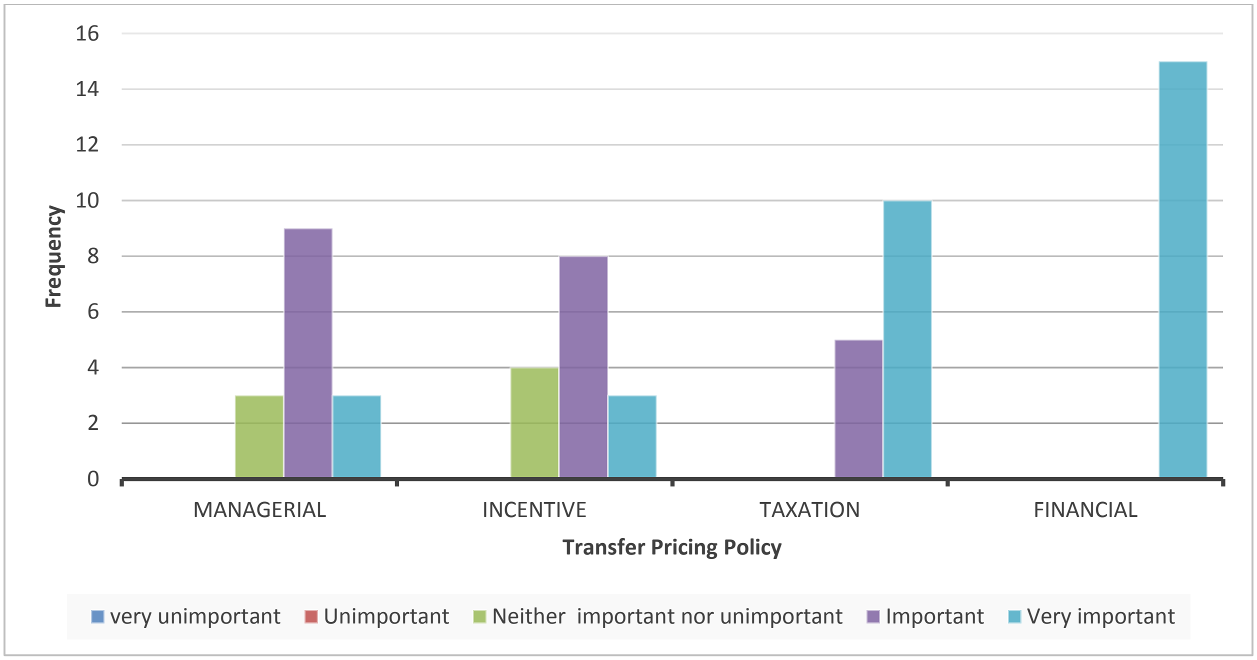

Figure 4.2: Importance of transfer pricing policy

4.2.5 Environmental factors affecting the choice of TP method

The ever-changing environmental conditions of existing markets engender a rather unstable and unpredictable global trading market. It is therefore only rational to expect that the factors which actually govern the policies adopted for TP would vary not only across time but also with geographical location. A single, universally efficacious method of international TP does not exist. If it did, the governments of host countries could marshal their defenses with greater effectiveness and the whole issue of international TP would be far less controversial and deeply concerning than it actually is.

In this study, environmental variables were introduced to measure their influence and trends in the choice of TPMs employed by MNCs. Therefore, to discover the realities in practice, nineteen environmental variables were selected in designing an instrument for data collection. A 5-point scale was used by respondent MNCs to rate the importance of each of these possible determinants of TP methods adopted for subsidiaries within South Africa, outside South Africa and by unrelated companies in the open market. Table 4.7 (p77) shows the relative importance attached by the sampled MNCs for all these variables. The rankings of importance were made according to the mean scores of the variables. The mean for each variable was based on a 5-point scale using 5 for extremely important; 4 for very important; 3 for important; 2 for slightly important and 1 for not important. Thus the higher the number, the greater the importance of that variable to the MNC.

For subsidiaries within South Africa, it can be seen that compliance with tax law and regulations was perceived by the respondent MNCs as an extremely important variable influencing transfer pricing decisions. The low standard deviation for this variable indicates that there was relatively significant agreement among respondents on the importance of legal considerations. Variables considered very important included 'corporate profit of the subsidiary', 'competitive position of the subsidiary' 'overall profit to multinational group'. Variables considered to be moderately important by the respondent MNCs comprised ‘maintenance of cash flows', 'tax authority transfer pricing audits', 'performance evaluation', 'differences in income tax rates', 'good relations with host government', 'restrictions on repatriation of income', 'rates of customs duties', 'foreign currency exchange controls', 'existence of local partner' , ' import restrictions' and 'price controls of host government'. Variables which were considered only slightly important included 'political and social pressure', and ' royalty restrictions’.

With regards to unrelated companies trading in the open market, ‘compliance with tax laws and regulations’, ‘corporate profits of the subsidiary’, ‘overall profit to the group’,‘competitive position of the subsidiary’ and ‘tax authority TP audit’ were considered very important. ‘Maintenance of cash flows’, ‘difference in income tax rates’, ‘performance evaluation’, ‘restriction on repatriation of income’, ‘foreign currency exchange control’, ‘good relationships with the host government’, ‘import restrictions’ ‘existence of local partner’, ‘price controls of host government’, ‘royalty restrictions’, ‘goal congruence of the group’ and ‘managerial incentives’ were considered most important. Slightly important variables were ‘political and social pressure’ and other factors.

‘Compliance with tax laws and regulations’, ‘corporate profits of the subsidiary’, ‘overall profit to the group’, and ‘competitive position of the subsidiary’ were considered very important in the TP decisions when dealing internationally. ‘Maintenance of cash flows’, ‘tax authority’, ‘TP audit’, ‘difference in income tax rates’, ‘performance evaluation’, ‘restriction on repatriation of income’, ‘foreign currency exchange control’, ‘good relationships with the host government’, ‘import restrictions’, ‘existence of local partner’, ‘price controls of host government’ were all considered important.

The ranking of the importance of each of the environmental variables by the respondent MNCs as seen in Figure 4.3 below was done according to the mean scores of the variables as shown by Table 4.7 (p77). The standard deviation indicates the extent of agreement in the rating of individual variables among the respondents.

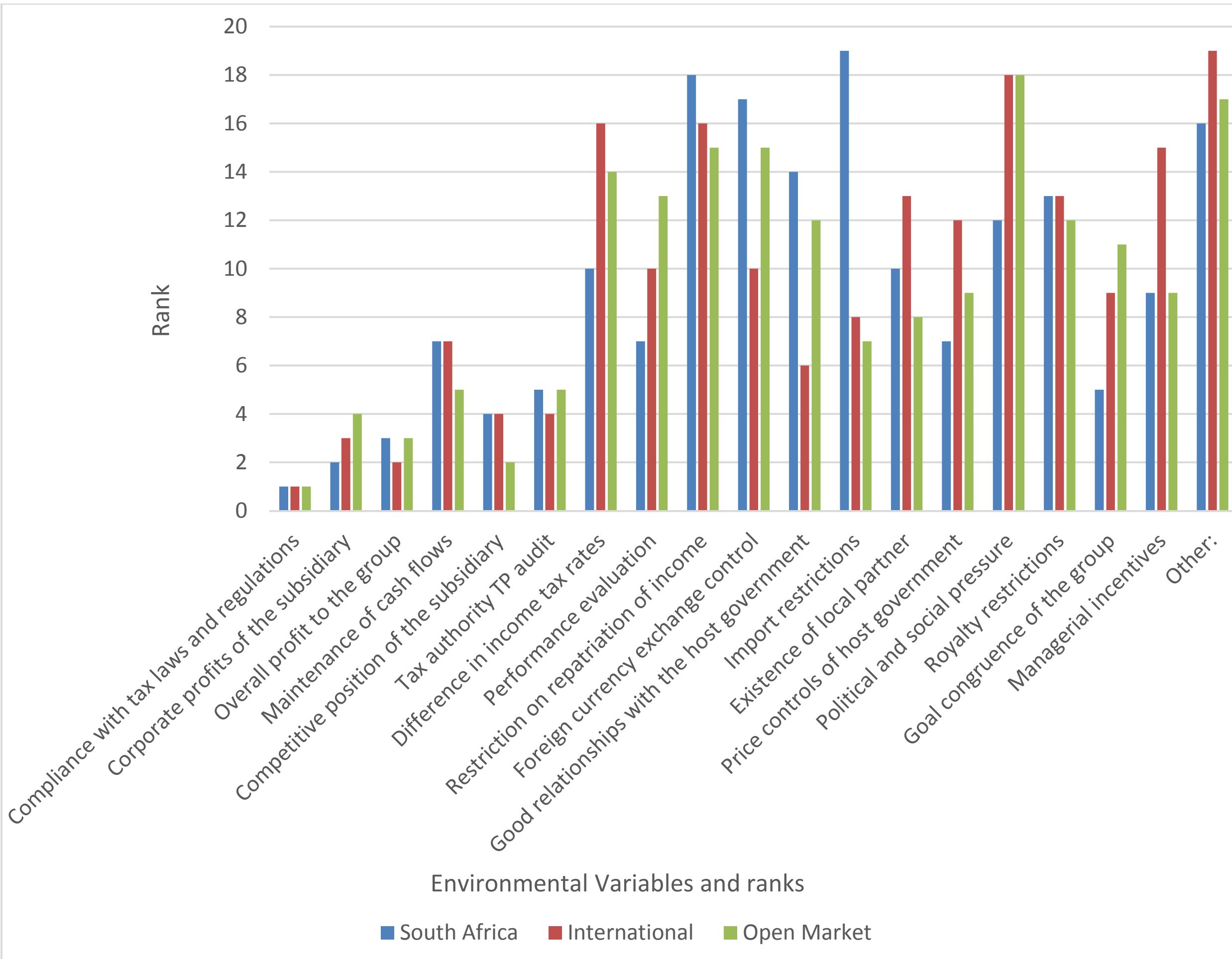

Figure 4.3: Environmental variables ranked by their importance by respondent companies

Table 4.7: Comparison of ratings of the importance of environmental variables

Region	South Africa			International			Open Market		
Environmental variable	**Mean**	**SD**	**Rank**	**Mean**	**SD**	**Rank**	**Mean**	**SD**	**Rank**
Comply with tax law and regulations	4.05	1.166	1	3.38	1.09	1	4.07	0.83	1
Corporate profit of the subsidiary	3.38	1.09	2	3.14	1.21	3	3.65	0.97	4
Competitive position of the subsidiary	3.31	1.37	3	3.28	1.34	2	3.91	0.91	3
Overall profit to multinational group	3.04	1.23	7	2.79	1.32	7	3.50	0.09	5
Tax authority transfer pricing audits	3.30	1.23	4	3.26	1.08	4	4.04	0.84	2
Maintenance of cash flows	3.05	1.16	5	3.26	1.08	4	3.50	0.09	5
Performance evaluation	2.86	1.32	10	1.82	1.11	16	2.09	1.25	14
Differences in income tax rates	3.04	1.25	7	2.12	1.33	10	2.47	1.36	13
Restrictions on repatriation of income	2.09	1.25	18	1.82	1.11	16	2.07	1.26	15
Foreign currency exchange controls	2.43	1.26	17	2.12	1.33	10	2.07	1.26	15
Existence of local partner	2.51	1.24	14	2.86	1.32	6	3.24	1.12	12
Rates of customs duties	2.07	1.26	19	2.55	1.40	8	3.37	1.16	7
Import restrictions	2.86	1.32	10	1.97	1.20	13	3.26	1.08	8
Political and social pressure	3.04	1.23	7	2.00	1.15	12	2.78	1.13	9
Price controls of host government	2.78	1.13	12	1.71	0.97	18	2.65	1.32	18
Royalty restrictions	2.71	1.42	13	1.97	1.20	13	2.65	1.32	12
Goal congruence of the group	3.05	1.17	5	2.43	1.46	9	2.71	1.42	11
Managerial incentives	2.96	1.35	9	1.95	1.30	15	2.78	1.13	9
Other:	2.47	1.36	16	1.69	0.98	19	1.95	1.30	19

According to the rankings in Table 4.7, the most important variable affecting TP policies in the three scenarios are 'comply with tax law and regulations'. The other factors varied in their level of importance depending on the nature of the TPP. For example, 'comply with tax law and regulations' was considered a very important variable by both the Open Market and International scenarios, whereas it was considered extremely important for subsidiaries in South Africa. In addition, differences exist in the rankings of each pair of the environmental variables.

The Kruskal-Wallis H test ("one-way ANOVA on ranks") was used to determine if there are possible statistically significant differences in the ranking of the environmental variables. The results of the test are presented in Table 4.8 (p 78).

Table 4.8: Results of Kruskal-Wallis H

Environmental variables	N	Median	Ave Rank	Z
Competitive position of the subsidiary	1	1.369	18.0	1.46
Comply with tax law and regulations	1	1.166	4.0	-1.10
Corporate profit of the subsidiary	1	1.089	1.0	-1.64
Differences in income tax rates	1	1.248	10.5	0.09
Existence of local partner	1	1.242	9.0	-0.18
Foreign currency exchange controls	1	1.261	13.0	0.55
Goal congruence of the group	1	1.167	5.0	-0.91
Import restrictions	1	1.317	14.5	0.82
Maintenance of cash flows	1	1.157	3.0	-1.28
Managerial incentives	1	1.346	16.0	1.10
Other:	1	1.363	17.0	1.28
Overall profit to multinational group	1	1.228	6.5	-0.64
Performance evaluation	1	1.317	14.5	0.82
Political and social pressure	1	1.228	6.5	-0.64
Price controls of host government	1	1.134	2.0	-1.46
Rates of customs duties	1	1.258	12.0	0.37
Restrictions on repatriation of income	1	1.248	10.5	0.09
Royalty restrictions	1	1.422	19.0	1.64
Tax authority transfer pricing audits	1	1.229	8.0	-0.37
Overall	19		10.0	
H = 17.95 DF = 18 P = 0.009				
H = 18.00 DF = 18 P = 0.006 (adjusted for ties)				

Since the value of $p = 0.006 < .05 = \alpha$, we conclude there are statistically significant differences in the ranking of these variables in the three scenarios, the environmental measure being significant at the 1 % level.

A Cronbach analysis based on an R-type, principal components factor analysis that is orthogonally rotated (Varimax procedure) was performed on these data so as to overcome the potential problem of multicolinearity and to identify a relatively small number of underlying dimensions or behavior traits as well as internal consistency. Given that factor analysis is concerned with relations among observations, it commonly starts with a matrix of correlations as its input. The correlation matrix of environmental variables is shown in Appendix D (p 127). Variables that are positively correlated include 'overall profit to the group' and 'corporate profits of the subsidiary', 'compliance with tax law', 'cooperate profits of the subsidiary', 'import restrictions', 'competitive position of the subsidiary', 'political and social pressure', 'tax authority TP audit', 'good relationships with the host government', 'foreign currency exchange control', 'price controls of host government', 'foreign currency exchange control', 'import restrictions', 'price controls of host government' and 'existence of local partner'. The high correlation of these environmental variables provided justification for performing a factor analysis.

Table 4.9 below shows results of the factor analysis carried out. Factorial analysis can be used to analyse a large number of variables in order to assess the effects of some "underlying" factors that cannot be measured directly (i.e., they are not directly observable), when these 'factors' influence some variables we can measure. In both cases, our goal is to summarize a large number of variables into a very limited number of "Factors". The communality column shows the degree to which the factors account for or explain each of the variables. The Eigen value of each factor is the sum of squares of the factor's unrotated loadings and is normally used to compute the fraction of total variance in the variable explained by the factor (Camiz, Gomes, Gomes & Senna 2015:117). The percentage of total variance summarized by each factor is equal to its Eigen value divided by 19 (the number of variables).

Table 4.9: Principal Component Factor Analysis of the Correlation Matrix Rotated Factor Loadings and Communalities Varimax Rotation

Variable	Factor1	Factor2	Factor3	Communality
Overall profit to multinational group	-0.601	-0.628	0.106	0.767
Tax authority transfer pricing audits	0.054	-0.896	-0.132	0.824
Maintenance of cash flows	-0.046	-0.782	-0.241	0.671
Performance evaluation	0.049	-0.675	-0.061	0.462
Differences in income tax rates	0.823*	-0.252	-0.157	0.766
Restrictions on repatriation of income	-0.605	-0.109	-0.492	0.620
Foreign currency exchange controls	0.131	-0.086	-0.678	0.484
Existence of local partner	0.016	0.525*	-0.192	0.218
Rates of customs duties	-0.326	0.122	-0.018	0.122
Import restrictions	0.931*	0.134	0.025	0.884
Political and social pressure	0.916*	-0.199	0.239	0.936
Price controls of host government	0.886*	-0.040	0.166	0.814
Royalty restrictions	0.929*	0.007	0.145	0.884
Goal congruence of the group	0.181	0.033	0.522*	0.212
Managerial incentives	-0.781	-0.086	-0.262	0.686
Other:	0.641	0.272	-0.183	0.518
Overall profit to multinational group	0.878*	0.267	-0.019	0.843
Tax authority transfer pricing audits	-0.102	0.254	-0.493	0.318
Maintenance of cash flows	0.008	0.082	0.510*	0.175
Variance	6.7237	2.8275	1.6532	11.2044
% Var	0.354	0.149	0.087	0.590

Cronbach's coefficient alphas for reliability were estimated for each of the factors to ascertain the degree to which variables constituting each factor shared a common core as well as the extent to which items in the questionnaire related to each other. Cronbach's alpha is based on the average inter-item correlation. Tables 4.10 below and 4.11(p81) show the reliability held for each item comprising the three factors. Items in Factor 1, had a high reliability while the rest of the two factors were satisfactory. For Factor 1, based on the adjusted total means, the most dominant environmental variables within this factor were, import restrictions; political and social pressure, price controls of the host government; royalty restrictions; overall profits of the multinationals. For Factor 2 it was existence of local partner and Factor three was goal congruence of the group and maintenance of cash flow.

This means that the respondents who placed a great deal of importance on import restrictions; political and social pressure, price controls of the host government; royalty restrictions; overall profits of the multinationals also tended to regard other variables that loaded highly on Factor 1 as important. The factor analysis thus show the variation in the application of TPP by MNC's across different scenarios. Factor analysis searches for such joint variations in response to unobserved latent variables.

Table 4.10 (p81) shows results of the Cronbach's alpha reliability test carried out on the individual environmental variables and Table 4.11 (p81) shows results of reliability carried out in South Africa, Open Market and International scenarios.

Table 4.10: Cronbach's Alpha Reliability Analysis

Cronbach's alpha = 0.5423	Adj. Total Mean	Adj. Total St dev.	Item-Adj. Total Corr	Squared Multiple Corr	Cronbach's Alpha
Compliance with tax laws and regulations	52.933	3.822	-0.4299	0.9155	0.6186
Corporate profits of the subsidiary	53.133	3.552	0.2384	0.8410	0.5293
Overall profit to the group	53.111	3.550	0.1436	0.7035	0.5345
Maintenance of cash flows	53.756	3.491	0.1174	0.7217	0.5400
Competitive position of the subsidiary	53.200	2.905	0.8103	0.8697	0.3479
Tax authority TP audit	53.556	3.793	-0.4003	0.7685	0.6086
Difference in income tax rates	54.089	3.579	0.0772	0.4682	0.5414
Performance evaluation	54.133	3.628	-0.0683	0.6203	0.5549
Restriction on repatriation of income	54.200	3.703	-0.2821	0.3944	0.5757
Foreign currency exchange control	54.711	2.974	0.6361	0.9167	0.3947
Good relationships with the host government	54.422	3.209	0.7466	0.9605	0.4321
Import restrictions	54.244	3.105	0.7058	0.8499	0.4104
Existence of local partner	54.711	2.785	0.7292	0.9364	0.3386
Price controls of host government	54.111	3.563	0.1083	0.3887	0.5383
Political and social pressure	54.911	4.061	-0.6558	0.7825	0.6845
Royalty restrictions	54.378	3.393	0.4333	0.7838	0.4928
Goal congruence of the group	54.311	3.260	0.6382	0.9048	0.4517
Managerial incentives	54.089	3.673	-0.1769	0.6412	0.5746
Other:	55.200	3.653	-0.1412	0.3735	0.5625

Table 4.11: A Summary of Variables and Cronbach's Alpha Reliability Analysis

Cronbach's alpha = 0.8140 Omitted Item Statistics Omitted Variable	Adj. Total Mean	Adj. Total St Dev	Item-Adj. Total Corr	Cronbach's Alpha
Compliance with tax laws and regulations	16.000	4.359	-0.9934	0.9474
Tax authority TP audit	17.000	3.464	0.5000	0.8000
Restriction on repatriation of income	18.000	2.646	0.9820	0.6857
Foreign currency exchange control	17.667	3.215	0.9878	0.7355
Good relationships with the host government	17.667	3.215	0.9878	0.7355
Import restrictions	18.000	2.646	0.9820	0.6857
Royalty restrictions	17.667	3.215	0.9878	0.7355

A result of 0.54 was obtained for individual variables. This is considered low. Consequently the variables were further analyzed as per scenario and yielded a result of 0.84 which is an acceptable level of reliability and consistency as shown in Table 4.11 above.

4.2.6 Degree of importance of transfer pricing in formulating and implementing company's management control systems

From a management control point of view, TP is considered useful for assessing and coordinating the workflows of interdependent organizational units that are each held accountable for their financial performance (Simons 2000:28). Literature on management control systems (MCS) has focused on the role of transfer pricing in achieving goal congruence as well as the functions of TP regarding measuring and evaluating divisional managers' performances. Transfer pricing policies must therefore help achieve the goals and objectives of the MNCs. The aim of this question was to investigate how MNCs handle the management control role of transfer pricing within the context of the formulation and implementation of management control systems. To be able to assess the degree of importance of TP in formulating and implementing the company's management control systems, respondent MNCs were asked to state the degree of importance of transfer pricing, specifically within the context of the formulation and implementation of management control systems. Table 4.12 (p 82) shows the responses of the MNCs. It can be seen that 86.67 % of respondents perceived TP as important in the formulation and implementation of management control systems. Only 13.3% viewed it as very important.

Table 4.12: Degree of importance of transfer pricing in formulating and implementing MNC's management control systems

The degree of importance of transfer pricing in formulating and implementing your company's management control systems is					
Importance Rating	Not important	Slightly Important	Important	Very Important	Extremely Important
Degree of importance	0	0	13	2	0
%	0	0	86.67	13.33	0

4.2.7 Frequency in the usage of more than one pricing methods

Companies were asked how often and in which circumstances they use different set/multiple sets of transfer pricing methods. Given the different regulatory and non-regulatory factors that can influence the determination of transfer prices, MNCs sometimes face conflicting requirements. As a result, MNCs are usually not able to uniformly achieve all pre-stated objectives. This in turn leads to scenarios in which objectives that are considered less consequential are neglected in favor of other weightier objectives.

Table 4.13: Frequency in usage of more than one set of TPs

How often does your company use different prices for its internal and external business transactions?					
Frequency	Never	Sometimes	Fairly often	Often	All the time
Degree of frequency	0	0	0	6	9
%	0	0	0	40	60

Results from Table 4.13 show that the majority of MNCs - 60% - use more than one set of transfer pricing for both internal and external transactions all the time. On a milder scale, 40% use it more often. Therefore MNCs are in the habit of using more than one TP method for external and internal transactions. This goes further to illustrate that MNCs need more than one transfer price to meet the goals of the company.

Furthermore as seen in table 4.14(p 83), all fifteen MNCs, were of the opinion that they should be allowed to use a single set of transfer pricing for both its external and internal transactions. 66.67% of those MNCs advocated for such practices to be allowed for all their transactions while 33.33% wanted this to be carried out often. If this were to be so, then a clear definition of 'often' has to be put in place which will be acceptable and suitable for such transactions.

Table 4.14: Frequency in using one set of transfer prices for both internal and external transactions

How often should business entities be allowed to decide, without repercussions, on whether to use a single set of transfer prices for both internal and external transactions?					
Frequency of decision-making	Never	sometimes	Fairly often	Often	All the time
Degree of frequency *(Tick)*.	0	0	0	5	10
%	0	0	0	33.33	66.67

4.2.8 Transfer pricing and strategic objectives of MNCs

MNCs were asked to gauge the importance of TP in attainting the strategic objectives of their company. Table 4.15(p84) shows that 66.67% of MNCs viewed TP as being critical while 33.33% of respondents considered TP very critical.

Table 4.15: Importance of TP in achieving strategic objectives of MNC

How critical is the role of TPPs in achieving the strategic objectives of your group?					
Importance of TPP	Not critical	Slightly critical	Critical	Very critical	Extremely critical
Degree of Importance	0	0	5	10	0
%	0	0	33.33	66.67	0

According to these MNCs, TP are critical in the attainment of strategic objectives of the company but not extremely critical. This implies that even though they need it, they can do without it given a different set of conditions, and/or there are other policies that can better achieve their objectives.

4.2.9 Transfer pricing meeting the aims and objectives of the group

MNCs were asked if their choices of TP were meeting the aims and objectives of the group. Results from Table 4.16 show a varied response amongst the fifteen companies. 13.34% of the respondents stated that their chosen TP was slightly successful in meeting their aims and objectives.

Table 4.16: TPP meeting the aims and objectives of the group

Degree to which your choice of current TPP meets the aims and objectives of the group					
Success of TPP	Completely unsuccessful	Slightly successful	Successful	Very Successful	Extremely successful
Degree of success	0	2	5	8	0
%	0	13.34	33.33	53.33	0

N.B: figures rounded up

The choice of TP chosen by 33.33% of the respondents stated that their choice of TP achieved successful results for the company, and 53.33% had very successful results from their choice of TP. Though all experienced success from their choices of TP, there were variations to the degree of success.

4.2.10 Success rate of TPPs in motivating and encouraging divisional managers' performance

Optimal performance not only lies at the heart of any managerial process and organizational construct but it is also a critical concept in the strategic management field. Performance can be defined as the achievements of a business entity (Phillips & Moutinho 2000:371) or as "the way an organization operates vis-a-vis other similar organizations in the same industry, with emphasis not only on traditional financial indicators of performance, but also on important non-financial indicators as well" (Khatri & Ng 2000:68). Therefore MNCs must take all steps deemed necessary to ensure that those responsible for the effective management of the company are adequately motivated and encouraged so that they in turn can excel at their tasks. One such method for assessing managerial effectiveness is the use of TPP.

MNCs were asked about the success rate of TPP as a tool in motivating and encouraging the performance of divisional managers. Responses from MNCs indicated that although TPPs are being used to motivate and encourage the performance of divisional managers, the level of success is varied. From Table 4.17 6.6% indicated they were slightly successful; 66.66% said they were successful and 26.66% percent were very successful. Based on these results it can be said the success rate is moderate.

Table 4.17: TPP influencing the performance of divisional managers

How successful has your company been in using TPPs to motivate and encourage the performance of divisional managers?					
Success in use of TPP	Completely unsuccessful	Slightly successful	successful	Very Successful	Extremely successful
Degree of success	0	1	10	4	0
%	0	6.6	66.66	26.66	0
Variable Percent Mean St Dev Variance CoefVarSkewness Kurtosis					
freq 100 3.00 4.24 18.00 141.42 1.54 1.95					

4.2.11 Obstacles in the implementation of TPPs

The planning, development and appropriate implementation of TPPs are important aspects in a MNC's operations. Developing a transfer pricing policy that both meets the requirements of tax authorities as well as the company's goals and objectives can be difficult. MNCs must not only plan and choose appropriate TPPs, they also have to meet the challenges of implementation and ongoing maintenance in a complex and ever-changing corporate environment. TPPs require widespread and transnational coordination at a level that is often more complex and more demanding than other aspects of the MNC's activities.

When asked about the challenges that the respondents faced in the implementation of TPPs, the answers given include:

- Legal contracts constraint

- Price Lists
- Acquisitions and Integration
- Compliance with Local Country Tax Rules
- Human Resources
- Information Technology
- Compliance

Therefore, besides having the challenges of choosing appropriate TPPs that meet the aims, goals and objectives of the company, MNCs have to make sure that these policies are properly implemented and maintained.

4.2.12 Audits

Based on the extremely high level of attention that international regulatory bodies place on the activities of MNCs, the likelihood of an MNC being audited is high. For most MNCs the question is not if there will be an audit, but when. As such, it is the responsibility of financial executives to take a proactive approach to transfer pricing. From Table 4.18 below it can be seen that 66.67% of MNCs have been audited at one time or another and have been the focus of attention by tax authorities within the past five years.

Table 4.18: Attention gained from choice of TPP

How much attention has been focused on your company's use of TPP within the past five years?					
Attention on use of TPP	Completely no attention	Inattention	Neither attention or inattention	Some attention	A lot of attention
Degree of attention	0	0	5	10	0
%	0	0	33.33	66.67	0

4.2.13 Cost versus benefit in preparing audit documentations

The aim of transfer pricing documentation is to meet statutory requirements in order to provide sufficient justification for transfer pricing positions taken during a specific time period. To meet this objective formal transfer pricing documentation reports (whose contents and structure vary by jurisdiction) have to be kept, as well as legal agreements, supporting invoices and any other specific supporting documents relating to intercompany transactions. This seemingly straightforward task may prove to be a substantial burden for a tax department, as the required documents are likely located across the enterprise. Around the world, transfer pricing regulations are being stringently enforced in order to generate new streams of tax revenues. This in turn increases the administrative and compliance burden faced by MNCs. Given that tax laws undergo rapid and continuous changes, and vary from one jurisdiction to the next, the cost of compliance increases significantly. With each tax change or new law, a business has to interpret the new rule, apply it appropriately and implement changes in its internal systems. In addition to technology to automate the process, a company requires a team of professionals to keep track and stay up to date on these changes on a regular basis. Respondents were asked to weigh the cost of preparing audit documents against perceived benefits. The results of their responses are shown in Table 4.19.

Table 4.19: Cost versus benefits of preparing audit documents for TPP purposes

How do you rate the cost/benefit relationship for your company with regards to the preparation of audit documentation for transfer pricing purposes?					
Cost/benefit relationship	Costs greatly outweigh benefits	Costs somehow outweigh benefits	Cost equal benefits	Benefits somewhat outweigh costs	Benefits greatly outweigh costs
Degree of success	0	5	10	0	0
%	0	33.33	66.67	0	0

Results from Table 4.19 show that there are benefits derived from the preparation of audit documents. 66.67% of the MNCs responded that the cost equals the benefits while 33.33% said the costs somewhat outweigh the benefits. From these results it can be concluded that, even though there are some inconveniences in the preparation of the documents, MNCs do benefit from having organized documents and data. By creating an end-to-end transfer pricing practice comprised of data, policy, pricing and documentation, organizations are able to reduce the costs associated with an audit.

4.2.14 Importance of TPPs in international operations

Transfer prices serve to determine the income of both parties involved in a cross-border transaction. Table 4.20 shows the importance of TPP to each respondent MNC if it was not trading across international borders.

Table 4.20: Importance of TPPs to company when not trading internationally

How important would be the use of TPPs if your company did not operate across different tax jurisdictions					
Importance of TPP	Completely unimportant	Slightly Important	Important	Very Important	Extremely important
Degree of importance	0	10	5	0	0
%	0	66.7	33.33	0	0

From Table 4.20 (p87), 66.7% of respondents said TPPs would have been slightly important to the company if they were not dealing internationally. 33.33% were of the opinion that TPP will be important to them.

4.2.15 Importance of TPPs in achieving Managerial Targets

This question sought to address the issue of how important TPP will be to the MNC in achieving its managerial targets if it was not operating across international boundaries. Responses are presented in Table 4.21.

Table 4.21: Importance of TPPs to company when not trading internationally

How important would be the use of TPPs in achieving managerial targets if your company did not operate internationally?					
TPP achieving managerial targets	Completely unimportant	Slightly Important	Important	Very Important	Extremely important
Degree of importance	0	0	4	11	0
%	0	0	26.67	73.33	0

The MNC would still have used TPP in achieving its managerial targets even if it were not operating across international borders. Nevertheless the importance of TPP in usage varied. 73.33% of respondents thought TPP will be very important and 26.67% considered it will be important in meeting their managerial targets.

4.2.16 TP and the Arm's Length Principle

Compliance with the arm's length principle means that intra-firm transactions should be treated and priced as if parties to the transaction are completely unrelated and are operating under open market scenarios (OECD 1995:15). According to Table 4.22, 86.6% of MNCS considered aligning their TPPs to the ALP as being very important. 13.3% said it was extremely important to them aligning their TPP to the ALP. This means all fifteen MNCs align their implementation of TPPs to the ALP.

Table 4.22: Importance of TPP being aligned to ALP

How important is it to your company to align its TPPs to the Arm's Length Principle?					
Alignment of TPPs	Completely unimportant	Slightly important	important or unimportant	Very Important	Extremely important
Degree of importance *(Tick)*				13	2
%				86.7	13.3

4.2.17 ALP and effective Implementation of company's TPP

According to Table 4.22 (p88) MNCs gear their TPP to adhere to the ALP. Given this, this question seeks to find out to which degree this need for compliance compromises the effective implementation of the TPPs to the goals of the company/group. Results from Table 4.23 below show that in their quest for compliance, MNCs compromise the effective implementation of their chosen TPP.

Table 4.23: Degree to which TPP is compromised through adhering to ALP

To what extent does the need for the alignment to the ALP compromise the effective implementation of the company's TPPs?					
	Extremely compromised	Compromised	Neither compromised nor uncompromised	Somewhat uncompromised	uncompromised
Number	3	11	1	0	0
%	20	73.3	6.7	0	0

93.3% of MNCs compromised their TPP so as to stay in line with the conditions put in place by the ALP. The other 6.7% respondent MNCs believed that adhering to the ALP did not adversely affect the implementation of their TPPs.

4.2.18 Evaluating the proper use of TPPs as per the ALP

Bearing reference to Table 4.23 above, the company's choice of TPP is being compromised during implementation when keeping in line with the ALP. Hence Table 4.24 below goes on to support this by showing that the ALP is not an adequate yard stick for evaluating the chosen TPP. 73.3% responded that it is inadequate; 20% of the respondents stated that the ALP is completely inadequate.

Table 4.24: Adequacy of the ALP in evaluating the proper use of company TPPs

How adequate a yardstick is the ALP for evaluating the proper use of TPP by your company?					
Adequacy of the ALP	Completely inadequate	Slightly Inadequate	Inadequate	Very Adequate	Extremely adequate
Degree of Adequacy	3	11	1	0	0
%	20	73.3	6.7	0	0

This might be because MNCs, in their quest to comply with the requirements of the ALP, compromise the effective implementation of TPPs in achieving organizational objectives to the detriment of the company.

4.2.19 Evaluating the proper use of TPP in management incentives and the ALP

Results from Table 4.25, indicate that 53.33% of MNCs thought that using TPPs to achieve managerial incentive was slightly uncompromised by the need to align to the ALP. 40% of companies indicated theirs were neither compromised nor uncompromised and 6.67% of respondents had theirs compromised.

Table 4.25: Importance of TPP being aligned to ALP

To what extent is the need to achieve managerial incentives via the use of TPP compromised by the requirement to comply with the ALP?					
	Extremely compromised	Compromised	Neither compromised nor uncompromised	Somewhat uncompromised	Uncompromised
Degree	0	1	7	8	0
%	0	6.67	40	53.33	0

- **Degree of compromise of TPP implementation and managerial incentive when keeping in line with the ALP.**

With regards to the issue of the degree of compromise of TPP implementation and Managerial incentive when keeping in line with ALP Results from Tables 4.23 (p89) and 4.24 (p89) show compliance with the ALP compromises the application of TPPs to achieve managerial incentives.

4.2.20 TP as a controversial issue

By necessity, as the business environment changes, MNCs must modify existing transfer pricing systems or devise new ones to meet the needs of the company and comply with existing laws. Given such conditions and the need for companies to use TP in their transactions, the respondents thought TP is the most controversial issues facing multinationals today. As seen in Table 4.26, all the MNCs strongly agreed to the notion that TPP was a very controversial issue.

Table 4.26: TP controversy

Do you agree or disagree that transfer pricing is one of the most controversial issues facing multinationals today?					
Controversy of transfer pricing	Strongly disagree	Disagree	Moderately agree	Agree	Strongly agree
Degree of agreement	0	0	0	0	15
%	0	0	0	0	100

4.3 RESPONSES TO INTERVIEW QUESTIONS

This section provides a description of the results obtained from interviews with respondents from the fifteen MNCs. The findings are presented according to the order in which the interview questions were structured:

4.3.1 Number of years working with Transfer Pricing (TP)

Interview respondents were purposefully selected from the fifteen MNCs on the basis of the fact that each respondent was heavily involved with the transfer pricing issues of the company. About 5 % of the respondents have been working with transfer pricing for at least 14 years and 95% of the respondents had been working with transfer pricing for a time period spanning 4 – 13years. This figure captures the respondents' expertise in dealing with MNCs and their transfer pricing issues.

4.3.2 Obstacles faced by MNCs in implementing their Transfer Pricing Policies (TPP)

Operational transfer pricing (OTP) deals with the day-to-day transfer pricing implementation. An arm's length TPP lacking accurate implementation of this policy is not good enough to mitigate regulatory risk, tax risk or financial statement risk. OTP therefore complements the preparation of transfer pricing planning; transfer pricing compliance documentation by focusing on transfer pricing implementation and monitoring and it significantly refines and improves a multinational entity's transfer pricing approach, but because of certain circumstances, the OTP faces a series of barriers which are discussed below:

- **Legal Contracts:** These are intercompany contracts that accurately reflect the functions to be performed, risks borne and the terms and conditions for transactions. Most of the respondents said they were facing problems because the parties found it difficult to adhere to these contracts principally because of the ever expanding and changing nature of the MNCs, subsidiaries within the group, parties to transactions as well as changes pertaining to the risk factor. Most often, legal agreements are not amended to reflect these changes.

- **Price List:** Intercompany price lists that accurately reflect the stated policy on transfer pricing margins or prices must be developed and maintained. A multitude of issues surround the conversion of transfer pricing parameters to actual intercompany prices. One of the respondents said " … *the selling entity in the group is compensated using resale price margin on its business, but most often than not that margin is not translated into specific prices for each product sold. There is no mandate that each product generates the same margin, and generally they will not. The price list should result in the selling entity earning returns consistent with the transfer pricing policy*". Furthermore, most of the respondents said that even though their products, manufacturing processes and market prices continuously evolve and change, the MNC's price lists very often failed to keep abreast of these changes and thus fell one step behind as far as updates are concerned.

- Acquisitions and Integration: When acquisitions occur, or when additional products are introduced to a company's portfolio, they need to be integrated into the company's transfer pricing policies. Most of the respondents said that the process of acquisition and integration was sometimes not a straight forward exercise. This is because it most often than not requires a complete evaluation of the new products, the functions, risks and assets associated with them, as well as a reworking of the transfer pricing structure. They said the most common pitfalls associated with acquisitions and integrations include inconsistencies in the margins earned on "old" and "new" products, with resulting unintended distortions in incentives for the divisional managers within the MNC.

- **Human Resources:** A major hindrance to an effective implementation of TPP is the appropriate acquisition and use of various human resources that would make the process as painless and seamless as possible. The respondents said management compensation was based at least in part on the performance of an individual's respective business unit or division. This alignment of compensation with divisional performance provides an incentive to maximize the results of the division, which may be in conflict with the success of the MNC as a whole.

  Furthermore, while a global transfer pricing policy may benefit aMNC as a whole, it may shift profit between jurisdictions, consequently having a material impact on the compensation of management. If these management incentive structures are not considered and potentially recalibrated, the implementation or modification of a TPP will produce unintended consequences. In addition, some, if not most, transfer pricing structures depend critically on certain functions being performed in certain locations, or contracts being executed in certain locations.

- Information Technology: Most of the MNCs said information and technology was the biggest hurdle in the implementation of transfer pricing. This is so because proper planning and implementation of transfer pricing policies as well as developing reports necessary for transfer pricing compliance necessitates the existence of a free-flowing and fully integrated information technology platform(s) across all the different TP-related functional areas within the MNC. This is easier said than done since there are continuous setbacks resulting from unreliable information technology networks. In addition, data may not be compatible across the different software platforms across the different functional areas of the entity.

- **Compliance:** Another barrier to TPP implementations is compliance. The majority of respondents found it difficult to juggle compliance with the host country's tax rules with compliance with the global transfer pricing policy. This seemly administrative task may prove onerous and can have a severe negative impact should the tax department fail to properly mesh transfer pricing with other tax requirements compliance. The objective of transfer pricing documentation is to meet statutory requirements in order to provide sufficient justification for transfer pricing positions taken during a specific time period. To meet this objective, a tax department must ensure that necessary and accurate documentation is kept. Beyond the formal transfer pricing documentation report (whose contents and structure vary by jurisdiction), MNCs must keep legal agreements, supporting invoices and any other specific supporting documents related to their intercompany transactions. This is an apparently straightforward task which may prove to be a substantial burden for a tax department, since the required documents are likely scattered across different parts of the enterprise.

Many MNCs struggle with the resource-intensive requirements to manage intercompany arrangements, which can involve complex collaboration among staff members in tax, finance and accounting, operations and information technology. Challenges are often, and primarily, observed relating to people, processes, technology and data. Large multinationals can create value and reduce risk by aligning the transfer pricing policy with day-to-day operations through well-defined business processes and technology solutions. This requires a holistic view and cross-functional execution that can be challenging, even for large multinationals that are good at other aspects of global integration. Each company has a unique set of OTP challenges.

4.3.3 The strictness of SARS in regulating TPPs

About 80 % of the respondents were of the opinion that SARS was not only being unnecessarily strict but rather vague in some aspects of its laws. They said that the inherent complexity of corporate tax policies coupled with the sometimes underwhelming skill level of tax law enforcers, make for a sometimes nightmarish relationship with SARS. They went on to explain the gruelling process of preparing tax returns that are as transparent as possible. This is a process which can tie up staff for as much as six months, even with the assistance of outside consulting specialists.

The other 20% said that SARS is not being unnecessarily strict, but just making sure people pay their dues. So if you are found to have allegedly breached tax laws, the implication will be the same as breaching any legal requirement: penalties and a lot of documentation for legal battles.
Furthermore the respondents went on to say that the tax regime in South Africa is not as advanced as in European countries given that South Africa is still an emerging economy. Consequently the government is continuously grappling with the issue of proper establishment and implementation of transfer pricing laws.

Consequently, tax authorities focus on meeting their target revenue streams, and any apparent evasion of tax levies invites hefty consequences. Added to this, South Africa does not allow any transfer pricing correction, neither debit nor credit notes are accepted. It then becomes even more important that the MNC gets its transfer prices absolutely right as early as possible. Moreover, transfer pricing corrections are not the only adjustments that are not accepted by SARS. For example one respondent said “if we receive some adjustment after it was declared to customs, we are not allowed to pay. We cannot pay.” If the error was made by accident, it can be corrected while clearing from customs. But as soon as the duty on the declared value is paid, “nothing can be paid above the declared value.”

4.3.4 The influence of TPP on the profitability of MNCs

There were a varied number of opinions regarding this question. Respondents generally stated that the use of TPP doesn't necessarily increase the profitability of the group. Some respondents stated that any perceived resultant increase in profitability tends to occur only in the short term since most often the TPP is geared towards keeping in line with the requirements of the "tax man", without which the perceived profits will be realized in the long term.

4.3.5 TPP as an effective tool in assessing and improving managerial performance

Respondents were unanimous in their responses to this question. They were of the opinion that TP will be effective in assessing and improving managerial performance if other goals such as tax and financial gains were not put on top of their scale of preference when choosing TPP. Since transfer pricing is only one amongst many tools that the MNC avails itself to in executing its corporate strategy, it would not be reasonable to expect all of the executives to indicate that transfer pricing has a major influence on corporate performance. The results indicate that executives perceive transfer pricing strategy as important, but as only one of the strategies employed by MNCs to implement corporate policy. This sample represents a group of large, publicly-held MNCs. The fact that these firms have a variety of alternative mechanisms available attests to the importance of transfer pricing. Of even more interest is the importance of transfer pricing in terms of overall corporate performance given the evaluation structure of lower management.

Many of the respondent firms state that lower-level (subsidiary or division) managers are evaluated more on their own unit's performance rather than on overall corporate performance. The study results also indicate that these managers have a substantial amount of input into the transfer pricing decision. This suggests that transfer pricing may function more as a strategic tool to achieve corporate performance objectives rather than a means to deal with internal issues amongst divisional managers. Even though 21% of the MNCs in the sample listed internal objectives as the primary transfer pricing objective, these results seem to suggest the importance of transfer pricing along other dimensions. It may be difficult for respondents to pinpoint the general overall effects of transfer pricing. Since transfer pricing may serve a variety of strategic objectives, the resulting effects of such a tool may be difficult to capture in a summary assessment.

4.3.6 Performance of the MNC if TPP is geared solely towards tax compliance and profit maximization.

40% of the respondents stated that realigning TPPs solely towards tax compliance and profit maximization will not necessarily engender more efficient operations given that, contrary to theoretical propositions, MNCs are already operating in an environment in which they are compelled to prioritize these two objectives far above all else. The remaining 60% of respondents said that efficiency levels will definitely improve with the formulation of TPP tailored strictly to tax compliance and profit maximization given that there will no longer conflicting objectives that tend to negate the beneficial impact of the MNC's TPPs.

4.3.7 Impact of earnings reallocation on achievement of non-financial objectives of transfer pricing.

All the responses were geared towards a positive impact in the overall goals of the company. They went on to explain that in cases where earnings repatriation is successful, the MNC will thus be able to redirect its resources to other aspect of its operations besides trying to stay in line with tax laws.

4.3.8 Controversies surrounding transfer pricing

The central theme running through all the answers provided by respondents to this question related to the effectiveness of the Arm's Length Principle and the conflicting views held by MNCs on the one hand and tax authorities on the other hand, regarding the objectives and effectiveness of transfer pricing. Respondents felt that, as a private business entity, the MNC is in business to achieve its ultimate objective, which is profit maximization. To the MNC, transfer pricing is simply one of the tools which it avails itself to in order to achieve this objective. However, as far as transfer pricing is concerned, tax authorities operate on the premise that transfer pricing is primarily used as a vehicle by MNCs to siphon off huge amounts of taxable earnings to the detriment of the jurisdiction within which the MNCs are conducting business. Consequently the tax authorities put in place overly stringent regulations and guidelines regarding the use of transfer pricing, like the ALP. This is largely the case with emerging economies like South Africa where tax authorities strongly feel that MNCs take full advantage of the inexperience and ineptitude of local governments to maximize profit repatriation. To further compound issues, different tax authorities have not only different interpretations of the guidelines of the OECD but also different sets of tax regulations.

4.3.9 Regulatory leniency from SARS and the OECD in the choice and implementation of varying transfer pricing methods as dictated by the particular business circumstances.

All the respondents were of the opinion that they should be given greater leeway in their choice and implementation of TPP. Some of the arguments put forward include differences in areas of operations, size of the companies, types of goods traded, and availability of resources. In addition, in South Africa, legal entities are taxed separately. Two resident companies for example, in the same group could set their TP prices such that the company with an assessed loss has the majority of the profit from its sales included in its gross income which would likely not be taxed because of the utilization of the assessed loss. Given that each company is taxed differently, they should thus use different policies.

4.3.10 Assessment of TPP in relation to group objectives

The respondents said it was easier to assess the financial aspects of group goals because they can compare figures. Estimates could be compared to actual figures to determine if those particular financial goals like profits or tax have been made. But with the managerial aspects, it is a bit difficult given that it is human behavior. Therefore, when using TPP to measure managerial performance, there is no clear cut method or if there is any indication of performance improvement, it could not be completely attributed to TPP.

4.3.11 Steps taken if TPPs do not achieve pre-stated managerial objectives.

Respondents were deliberately vague here as they felt that providing detailed responses to this question may jeopardize their competitive advantage. The majority of respondents felt that the action(s) to be taken in such a situation depended on whether or not current TPPs achieved other objectives. If this was the case then for the most part the managerial objectives would have to be realigned to be more parallel to the TPPs. All the respondents unequivocally turned down the possibility of making changes to TPPs just to suit managerial objectives. This confirms part of the problem statement as stated in paragraph three of Section 1.3 (p 5). A few respondents went so far as to state that managerial objectives tended to stay in place even when these objectives were not being achieved by organizational TPPs.

4.4 CONCLUSION

The results from the questionnaire and interviews show that there is no universally appropriate TPP which applies equally to all organizations in all circumstance. Firms are affected by different environmental factors while striving both to be tax compliant and to create value. The fear of falling on the wrong side of tax laws is the major driving force behind transfer pricing policies of MNCs and as such other objectives become secondary and tend to be neglected if/when these objectives conflict with the primary objective.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This final chapter presents conclusions drawn from the findings of this study. The chapter is divided into two main sections: the implications of the study and recommendations arising from it. The implications of the study for existing literature covers both the similarities and differences of the results of the study when compared to the existing literature. The discussion on the implication of the study for transfer practicing MNCs then follows. It covers a number of research findings that are relevant for MNCs using transfer pricing such as factors influencing choice of transfer pricing, effective implementation of transfer pricing, factors affecting such implementation and how effective TP is used in attaining the goals and objectives of MNCs. It follows this up with suggestions on how to improve the implementation of TPP to attain and evaluate managerial incentive of the group. This section of the research may be of benefit not only for South Africa, but also other developing countries that may be encountering the same or similar problems with transfer pricing implementation and compliance.

Questionnaires were devised and interviews were conducted with transfer pricing personnel in order to answer the research questions. A mixed methods research methodology was chosen as the principal vehicle for the execution of the study, based on the reasoning that this methodology would provide not only the best possible groundwork for an acute assessment of the key variables in the study, but also maintain the link between the research objectives on the one hand and the research findings on the other. The choice of the mixed method research design obviously necessitated subsequent quantitative and qualitative analysis of collected data. In order to achieve the stated objectives, the researcher used all the units within the population to conduct the study, given that the population was small. The principal data collection instruments were telephonic interviews, electronic and mailed questionnaires. From the 45 participants to whom questionnaires were mailed, 15 respondents returned completely filled questionnaires, yielding a response rate of 33.4%. To preserve the validity of findings, partially-filled questionnaires were discarded. The experiences in conducting this study suggest many other ideas for further research and studies.

5.2 IMPLICATIONS OF THE STUDY AND CONCLUSION

The objectives of this study were to assess the effective use of transfer pricing policies in the realization of managerial performance objectives on the one hand, and tax and financial objectives on the other, of manufacturing MNCs in Southern Gauteng. A pervasive review of literature was necessary not only to validate the problem statement but also to lend credibility to the choice of methodology necessary for data collection and subsequent analysis. This was accomplished in the second chapter. The study focused on literature which outlined the origins, evolution, contextualization, objectives and variants of transfer pricing methods to which MNCs avail themselves for their day-to-day transactions. In addition, the researcher garnered literature that supported the premise that one set of transfer prices could not be optimally applied to both internal and external transactions as stated in Section 2.4.2 (p18-19). Thus for entities that made use of one set of transfer prices, tax compliance as well as financial objectives could only be satisfactorily achieved at the expense of managerial performance targets.

Heightened attention on international transfer pricing practices by both international bodies and varied governmental organizations, as well as the inherent desire for profit-maximization by MNCs all combine to engender the negligence of managerial performance objectives favour of financial and international tax compliance targets. This chapter also thoroughly covered the different types and categories of transfer prices, as presented in Section 2.6 (p21-29). Based on this research, it can be seen that the main motivations and objectives in favour of implementing transfer pricing are tax-related goals (tax compliance and tax minimization) and profit maximization. Not surprisingly, the MNCs prioritize tax compliance and tax minimization as the very first objectives and motivations when implementing transfer pricing strategy.

In identifying the MNC’s transfer pricing policy with regard to intra-trade dealings, the analysis commenced with an assessment of the volume and nature of transfers effected by the different respondent MNCs. The findings showed that tangibles comprised the largest portion of intragroup transfers, thereby validating our decision to focus on manufacturing MNCs. Findings also showed that the majority of transfer pricing decisions were done at corporate level which puts divisional managers at a bit of a disadvantage since their viewpoints and positions are certainly not adequately represented. Moreover if the majority of transfer pricing decisions are made at corporate level then motivating divisional managers' efficiency and performance is hardly going to be of paramount importance, given that these same divisional managers are for the most part left out of the decision-making process.

The majority of the MNCs considered managerial motivation to be an important objective of their transfer pricing policies, profit maximization was even more important. Deductively then, if the MNC had to choose between profit maximization and managerial motivation, the latter would suffer in favour of the former. In addition, when assessing the motives behind the formulation of the transfer pricing policies, financial and taxation-related motives came first, at the expense of managerial and incentive motives.

The formulation of transfer pricing policies is shaped not only by internal motives and objectives but also by external environmental factors. Section 2.3 (p15-16) outlined the major environmental variables, both internal and external that, directly or indirectly, shape the TPPs of multinationals. Respondents were asked to assess the extent to which 19 environmental variables were factored into their TPPs. As per the findings, all 15 MNCs were most preoccupied with the legal implications of trading across different tax jurisdictions. As such, these legal considerations were found to be the most important environmental consideration in the formulation of transfer pricing policies. Respondents were questioned on the degree of importance of TP in the formulation and implementation of management control systems (MCS) as shown in Section 4.2.6 (p 81). Even though more than 80% of respondents considered TP to be important, just above 13% of respondents considered TP to be very important. Reading between the lines, TP is definitely taken into consideration when formulating MCS but the majority of multinationals would not hesitate to sacrifice these MCS-related objectives if these objectives proved to be a hindrance to the attainment of considerably more important objectives.

As evidenced in Section 2.6.1. (p23-25), there are at least five transfer pricing methods that are recommended by the OECD as the acceptable options for replicating arm's length transactions (Dogan, Deran & Koksal 2013:736; OECD 2010:2). The majority of respondents in the study stated that they consistently used different sets of transfer prices for internal and external transactions even though they were running the risk of stepping on the wrong side of the law. The understanding of the researcher is that multinationals strongly feel – as initially put forward in the last paragraph of Section 2.4.2 (p19) - that one set of transfer prices would prove woefully inadequate.

With regards to the role played by TPPs in achieving overall corporate strategic objectives most of the respondents stated that TP was critical in realizing these objectives. However a smaller percentage of respondents were able to affirm that TP were ***successfully*** used to achieve the aims and objectives of the organizations. By inference, as shown in Sections 4.2.8 – 4.2.10 (p83-84), MNCs are always keen for TP to play a significant role in achieving overall objectives but the proper execution of these TPPs gets derailed, rendering the policies ineffective for some multinationals. Furthermore, the results of the analysis showed that TP was moderately successful in evaluating the performance of divisional managers as well as motivating these managers to attain, and where possible, exceed expectations.

In view of the conflicting nature of some of the objectives of TPPs, multinationals would rarely implement these policies without having to overcome some intractable obstacles. As seen in Section 4.2.11(p85-86), when asked about the major difficulties encountered in implementing TPPs, respondents frequently referred to legal constraints as the overriding difficulty that needed to be dealt with. To complicate matters further, MNCs are operating in a time when TP is considered highly controversial. MNCs are susceptible to frequent and pervasive audits by legal bodies within the geographical jurisdictions in which these MNCs operate. Given that TP audits are unavoidable, MNCs were questioned on whether or not preparing for these audits yielded considerable benefits. It is worth noting from the responses in section 4.2.13 (p86) that even though there were benefits, none of the respondents believed that the benefits outweighed the costs and a third of respondents felt that the costs outweighed the benefits.

Transfer pricing is evidently more controversial when transactions cross different national boundaries. When questioned on the relative importance of transfer pricing with regards to geographical delimitation in Section 4.2.14 (p87), MNCs felt that transfer pricing was certainly not as important when transactions took place in a single country as it would be if the transaction involved different jurisdictions, the implication being that if MNCs operated across international borders then transfer pricing would become much more critical in dealing with tax-related issues arising from the MNC’s operations. This evidently would not be the case if the MNC operated strictly within the borders of one country only.

A major bone of contention has been the extent to which TPPs are being compromised by efforts to align these TPPs to the Arm's Length Principle (ALP) as prescribed by most official bodies. As stated in paragraph 2 of Section 2.5 (p20-21), the ALP provides the guidelines for arriving at acceptable TPs by multinationals. An overwhelming majority of respondents felt that compliance with the ALP seriously compromised the effectiveness of their TPPs. Further analysis in section 4.2.16 (p88) and section 4.2.17 (p89) showed that multinationals felt that the ALP was an inadequate yardstick for assessing the validity of an MNC's chosen TPP. This scenario is not helped by the fact that all the respondents strongly feel that TP in this day and age is an exceedingly controversial issue.

Interview questions were used to get more raw data and where necessary clarify and/or corroborate responses given in the questionnaires. Respondents stated repeatedly that continuous change within the business environment and in the MNC made for a less than smooth implementation of transfer pricing policies. This could be seen in the domains of legal contracts, price lists and acquisitions integrations (Sections 4.3.2 paragraphs 2, 3 & 4, p 91) where changes, both foreseen and unforeseen, tend to hamper the implementation of TPPs. Acquiring the right quantity and quality of human resources and instituting the proper information technology needs to facilitate the adequate handling of TP issues tended to create nightmarish headaches for MNCs, specifically in South Africa which is relatively new to TP. Representatives of respondent MNCs reiterated that compliance with SARS is a major hurdle principally because of the volume of the resources that have to go into the administrative aspects of such compliances. Respondents also felt that SARS, in an obvious effort to meet target revenue streams from TP, tended to be overly strict in its interpretation and application of tax laws.

Respondents generally stated that TP does not necessarily substantially improve the profitability of MNCs but would definitely be a valuable tool in assessing and motivating divisional managers, as long as the latter did not compromise the former. In addition, the majority of respondents felt that TPPs would definitely be more efficient if they were formulated and targeted solely at profit-maximization and tax compliance. Other respondents differed on the basis that prevailing circumstances already compelled MNCs to tailor their TPPs to these two stated objectives even though that was the original intention of the MNCs. Respondents were quite vocal about the controversies surrounding TP. The majority of MNCs opined that they are wrongly portrayed in unflattering terms by unnecessarily cynical and overeager tax bodies. Furthermore, all the MNCs felt that they could benefit from more freedom and leeway from SARS and the OECD regarding the conduct of TP-related business activities.

5.3 RECOMMENDATIONS

The fundamental tenet of almost all business entities is profit-maximization. Achieving this entails using every resource at the disposal of these businesses some of which are more controversial than others. Transfer pricing is here to stay and will continue to increase in importance thanks largely to the fact that the world is now a global village wherein even the most basic business transactions may cross several international boundaries. Within the context of South Africa, substantial resources have to be devoted to enticing and training competent individuals who can properly formulate and apply TP-related tax laws. A significant degree of urgency is needed here since the lack of experience in this domain creates just the right environment for some MNCs to make the most of the situation with regards to earnings repatriation. It is essential that MNCs and government collaborate on the best way forward regarding their respective obligations and expectations on TP.

MNCs certainly have to hold up their end by being as transparent as possible with regards to all TP-related transactions. Understandably, tax compliance and profit maximization have pushed managerial objectives onto the back burner. It is equally clear that unless SARS relaxes its stringent application of TP-related tax policy, managerial objectives for TP may never be considered as important as tax compliance and profit maximization, and consequently will never be given due consideration.

MNCs will always be faced with the daunting task of competing ***safely*** in the international market. Despite the fact that the MNC, by its very nature and reach, holds vastly more trade related advantages that a purely domestic firm, the MNC is exposed to a wider degree of complexities that it must deal with on a continuous basis. Not only must the MNC determine the most appropriate transfer pricing methods that will facilitate the realization of its corporate objectives, the MNC must also ensure the efficient and effective application of this transfer pricing method(s) in the achievement of these objectives and at the same time take care to stay on the right side of legal tenets in the various jurisdictions in which it operates. Organizations view transfer pricing as a highly dynamic business tool and not just a mere necessity.

It is recommended that future research focus on the following, *inter alia*:

- The degree to which transfer pricing facilitates the realization of strategic objectives;
- The complications that arise from using various transfer pricing methods;
- The use and implications of transfer pricing in the financial services sector, especially taking into consideration the increasing ease of electronic movement of funds around the world;
- Substantially more research needs to be conducted on the nuances and determinants of transfer pricing specifically in the African context, taking into consideration the complexities of technological breakthroughs in Africa;
- SARS needs to dedicate substantial resources in bolstering its human and material transfer pricing department in order not only to keep up with the rapid changes in the world of transfer pricing, but also to minimize the possibility of contradictions and controversies in its application of transfer pricing regulations;
- Despite the fact that transfer pricing regulation in Africa has been in existence for over a decade, it is still in infancy and for these regulatory practices to grow, substantially more disclosure is required from MNCs;
- Further research needs to focus on a time series comparative analysis of MNCs using single transfer prices on the one hand, and on the other hand, MNCs using more than one transfer price. A time series analysis would, everything being equal, yield the richest results in such a study;
- Questions need to be asked about the degree of culpability of managers in cases where non-compliance eventually leads to substantial negative setbacks for shareholders of the MNC.

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APPENDICES

Appendix A: Cover letter

Dear Sir/Madam,

A Comparative Analysis of the Effective Use of Transfer Pricing Policies in Manufacturing Multinational Corporations in Southern Gauteng.

We would like to invite you to take part in our research titled: A Comparative Analysis of the Effective Use of Transfer Pricing Policies in Multinational Manufacturing Corporations in Gauteng. We would appreciate it if you would complete the enclosed survey questionnaire and return it to us in the freepost envelope enclosed.

This research is part of an authorized MTech research programme based at the Vaal University of Technology which observes the highest level of academic and professional integrity. The University has provided funds for this research, which aims to enhance our understanding of how companies make transfer pricing decisions and the conditions that influence such decisions. The results of the study should provide multinational companies with significant insights on transfer pricing issues and practices in Southern Gauteng-South Africa.

In accordance with the highest principles and traditions of academic research, anonymity and confidentiality are guaranteed. A copy of the summary findings and results from the survey will be made available to you if you so wish.

If you have any questions regarding this research or concerns about the questionnaire, please do not hesitate to contact Lendeu Siewe by email at: lendeus@cti.ac.za or by phone (27) 781 188 2845/011 450 1963. We are very grateful for your cooperation and we thank you for your assistance.

Sincerely,

Lendeu Siewe	Dr. ToekieZiemerink
________________	__________________
(Masters Student)	(Research Supervisor)

Appendix B: Interview Questions.

1. How long have you been working in the field of transfer pricing?
2. What, in your opinion, is/are the greatest obstacle(s) that businesses face in implementing their transfer pricing policies?
3. Is SARS being unnecessarily strict in its regulation of transfer pricing practices?
4. Does the use of TPP potentially increase profitability for your group? If so, how?
5. Is transfer pricing a truly effective tool in assessing and improving managerial performance? Please explain your answer.
6. Given that a significant volume of trade by your group is across different tax jurisdictions would your group be more efficient if it established and used transfer pricing policies solely for the purpose of profit maximization and tax compliance?
7. If your group were able to use its TPPs to reallocate its earnings would that negatively impact on its non-financial objectives for transfer pricing?
8. In your opinion what is at the core of all the differing opinions/controversy surrounding transfer pricing today?
9. Should companies be allowed greater freedom by SARS and the OECD in the choice and implementation of varying transfer pricing methods as demanded by the particular business circumstances?
10. How do you assess whether or not your transfer pricing policies are meeting varied group objectives?
11. What steps are normally taken if TPPs do not achieve pre-stated managerial objectives?

Appendix C: *Questionnaire*

Thank you for accepting to voluntarily provide responses to the following questions. This questionnaire constitutes the data-collection phase of a study on the effective use of transfer pricing policies within your company. All information provided here will only be used for statistical purposes. Most of the questions may be answered by only ticking (✓*)* the appropriate box. We look forward to receiving your completed questionnaire in the included **freepost** envelope.

(No stamp required)

SECTION A

A1 What position do you hold within the group? ______________________________________

A2 How many subsidiaries exist within the group? ___________________________________

A3 How many different products are manufactured and traded within the group?

SECTION B

B1 Who makes the decisions regarding the choice of transfer pricing methods used by subsidiaries within the group? *(Tick)*

A	Corporate executives only	
B	Corporate divisional executives equally	
C	Mostly corporate executives with minor divisional input	
D	Mostly divisional executives with minor corporate input	
E	Other:_____________________________	

B2 To what extent can subsidiaries influence the decision-making process regarding which transfer pricing method to use? *(Tick)*

	No influence at all	A little influence	Neutral	Average influence	Complete influence
Degree of influence by subsidiary					

B3 Please indicate the regularity with which each of the following categories of transfer pricing methods (TPMs) are used by your company? *(Tick for each method)*

	Never	Sometimes	Fairly often	Often	All the time
Market-based transfer prices					
Marginal cost-based transfer prices					
Full cost-based transfer prices					
Negotiated transfer prices					

B4 Describe the degree of importance of the following objectives for transfer pricing to your company *(Tick for each method)*:

	Completely important	Unimportant	Neither important nor unimportant	Important	Very important
Managerial motivation					
Goal congruence					
Departmental assessment					
Profit maximization					
Tax minimization					
Earnings allocation					

B5 What environmental factors are most influential in the choice of TPMs used? *(Tick)*

Environmental Factor	Subsidiaries within South Africa	Subsidiaries outside South Africa	In the open market
Compliance with tax laws and regulations			
Corporate profits of the subsidiary			
Overall profit of the group			
Maintenance of cash flows			
Competitive position of the subsidiary			
Tax authority TP audit			
Difference in income tax rates			
Performance evaluation			
Restriction on repatriation of income			
Foreign currency exchange control			
Good relationships with the host government			
Import restrictions			
Existence of local supplier			
Price controls of host government			
Political and social pressure			
Royal restrictions			
Goal congruence of the group			
Managerial incentives			
Other:			

B6 The degree of importance of transfer pricing in formulating and implementing your company's management control system is *(Tick):*

	Completely unimportant	Unimportant	Neither important nor unimportant	Important	Very important
Degree of importance					

B7 Does your company use different TPs for its internal and external business transactions? *(Tick)*

	Never	Sometimes	Fairly often	Often	All the time
Degree of frequency					

B8 How often should business entities be allowed to decide, without repercussions, on whether to use a single set of transfer for both internal and external transactions? *(Tick)*

	Never	Sometimes	Fairly often	Often	All the time
Degree of frequency					

B9 Do you agree or disagree that a single set of transfer prices equally achieves a company's tax and managerial objectives: *(Tick)*

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
Degree of agreement					

B10 How critical is the role of TPPs in achieving the strategic objectives of your group? *(Tick)*

	Completely unimportant	Unimportant	Neither important nor unimportant	Important	Very important
Degree of importance					

B11 What is the degree to which your choice of current TPP meets the aims and objectives of the group? *(Tick)*

	Completely unsuccessful	Unsuccessful	Somewhat successful	Successful	Completely successful
Degree of success					

B12 How successful has your company been in using TPPs to motivate and encourage the performance of divisional managers? *(Tick)*

	Completely unsuccessful	Unsuccessful	Somewhat successful	Successful	Completely successful
Degree of success					

B13 What major obstacles does the group encounter currently in its implementation of TPPs?

____
____
____
____
____
____
____

SECTION C

C1 How much attention has been focused on your company's use of TPPs within the past five years? *(Tick)*

	Completely no attention	Inattention	Neither attention nor inattention	Some attention	A lot of attention
Degree of attention					

C2 How important has the role of transfer pricing become in international trade over the past five years? *(Tick)*

	Completely unimportant	Unimportant	Neither important nor unimportant	Important	Very important
Degree of importance					

C3 How do you rate the cost/benefit relationship for your company with regards to the preparation of audit documentation for transfer pricing purposes? *(Tick)*

	Costs greatly outweigh benefits	Costs slightly outweigh benefits	Costs equal benefits	Benefits somewhat outweigh costs	Benefits greatly outweigh costs
Degree of comparison					

C4 How important would the use of TPPs your company did not operate across different tax jurisdictions? *(Tick)*

	Completely unimportant	Unimportant	Neither important nor unimportant	Important	Very important
Degree of importance					

C5 How important would be the use of TPPs in achieving managerial targets if your company did not operate internationally? *(Tick)*

	Completely unimportant	Unimportant	Neither important nor unimportant	Important	Very important
Degree of importance					

C6 How important is it to your company to align its TPPs to the Arm's Length Principle? *(Tick)*

	Completely unimportant	Unimportant	Neither important nor unimportant	Important	Very important
Degree of importance					

C7 Do you agree or disagree that the need for compliance with the ALP compromises your company's effective use of TPPs.

	Strongly disagree	Somewhat disagree	Neutral	somewhat agree	Strongly agree
Degree of agreement					

Appendix D: Correlation Matrix of environmental variables influencing transfer pricing

	Compliance with tax laws and regulations	**Corporate profits of the subsidiary**	**Overall profit to the group**	**Maintenance of cash flows**
Compliance with tax laws and regulations				
Corporate profits of the subsidiary	0.559			
Overall profit to the group	0.483	0.705		
Maintenance of cash flows	0.205	0.417	0.453	
Competitive position of the subsidiary	-0.306	0.278	0.128	0.207
Tax authority TP audit	0.405	0.095	0.125	0.131
Difference in income tax rates	-0.107	0.25	0.176	-0.074
Performance evaluation	-0.075	-0.327	-0.213	-0.333
Restriction on repatriation of income	0.097	-0.105	-0.048	-0.014
Foreign currency exchange control	-0.646	-0.093	-0.088	-0.039
Good relationships with the host government	-0.382	0.159	0.034	0.202
Import restrictions	-0.421	0.061	-0.123	0.026
Existence of local partner	-0.48	0.006	-0.135	0.035
Price controls of host government	0.03	-0.033	-0.015	-0.135
Political and social pressure	0.454	0.057	0.11	0.089
Royalty restrictions	-0.721	-0.18	-0.215	0.027
Goal congruence of the group	-0.669	-0.125	-0.175	-0.243
Managerial incentives	-0.08	-0.213	0.131	-0.134
	Competitive position of the subsidiary	Tax authority TP audit	Difference in income tax rates	Performance evaluation
Competitive position of the subsidiary				
Tax authority TP audit	-0.263			
Difference in income tax rates	0.15	0.202		
Performance evaluation	0.131	0.073	-0.014	
Restriction on repatriation of income	-0.298	0.27	-0.026	-0.08
Foreign currency exchange control	0.687	-0.652	0.026	0.005
Good relationships with the host government	0.759	-0.665	-0.045	-0.139
Import restrictions	0.747	-0.52	-0.018	0.047
Existence of local partner	0.802	-0.522	-0.042	0.07
Price controls of host government	0.054	-0.243	-0.193	-0.025
Political and social pressure	-0.552	0.636	0.014	-0.05
Royalty restrictions	0.354	-0.273	0.244	-0.137
Goal congruence of the group	0.64	-0.542	0.097	0.165
Managerial incentives	-0.127	0.15	-0.003	0.142
Other:	-0.063	-0.122	-0.026	-0.08

Appendix D Continues : Correlation Matrix of environmental variables influencing transfer pricing

	Restriction on repatriation of income	Foreign currency exchange control	Good relationships with the host government	Import restrictions
Restriction on repatriation of income	0.1182			
Foreign currency exchange control	-0.0879	0.8253		
Good relationships with the host government	-0.0485	0.402	0.2798	
Import restrictions	-0.0924	0.4965	0.299	0.4677
Existence of local partner	-0.0879	0.8025	0.4929	0.6328
Price controls of host government	0.0167	0.0616	0.052	0.0374
Political and social pressure	0.0439	-0.4884	-0.3071	-0.3354
Royalty restrictions	0.003	0.2495	0.1141	0.148
Goal congruence of the group	-0.0333	0.4071	0.2066	0.2737
Managerial incentives	-0.003	0.0308	-0.0535	-0.0722
Other:	-0.0182	0.003	-0.003	0.0212
	Existence of local partner	Price controls of host government	Political and social pressure	Royalty restrictions
Existence of local partner	1.098			
Price controls of host government	0.0843	0.1343		
Political and social pressure	-0.5566	-0.0838	0.5434	
Royalty restrictions	0.2722	0.0313	-0.1323	0.2192
Goal congruence of the group	0.4525	0.0343	-0.2566	0.1495
Managerial incentives	-0.1056	-0.001	0.0263	-0.0071
Other:	0.003	-0.0061	-0.0242	0.003
	Goal congruence	Managerial incentive	Other:	
Goal congruence				
Managerial incentive	-0.023			
Other:	0.067	-0.312		