EFFECTS OF TRANSFER PRICING ON FINANCIAL PERFORMANCE OF
MULTINATIONAL FIRMS LISTED ON THE NAIROBI
SECURITIES EXCHANGE

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DECLARATION

This project is my original work and has never been submitted for a degree in any other college or university for examination/academic intents.

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D63/81875/2015

This research project has been submitted for examination with my approval as the University Supervisor.

Signature………………………………….. Date…………………………………..

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DEDICATION

To my father, Boaz Eric Owuor Nyangajo, whose constant encouragement to aim for academic excellence drove me to this level of education and to my son, Joel Hawi Otieno whom I was not able to give enough time because I was buried in books, for inspiring me to work hard to lead a better life.
ACKNOWLEDGEMENT

I am incredibly grateful to the almighty God for his unwavering love, encouragement and support that saw me through the completion of this research project. I thank him for answering my prayers and making it possible for me to attain Master’s degree.

I would also like to acknowledge my supervisor, Doctor Duncan Elly Ochieng who was available and reachable throughout this period and took his time to give guidance. Thank you for your big heart.

I extend my gratitude to family and friends for their support throughout this period.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>BEPS</td>
<td>Base Erosion and Profit Shifting</td>
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<td>FP</td>
<td>Financial Performance</td>
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<td>KRA</td>
<td>Kenya Revenue Authority</td>
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<td>MNEs</td>
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<td>MNFs</td>
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<td>NSE</td>
<td>Nairobi Securities Exchange</td>
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<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>RA</td>
<td>Revenue Authorities</td>
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<td>RP</td>
<td>Related Party</td>
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ABSTRACT

Transfer pricing has become a global issue that multinational firms and revenue authorities need to manage. There is a general feel by the revenue authorities that multinational firms transfer profits from jurisdictions of higher tax rates to jurisdictions with low tax rates without moving corresponding economic activity, assets, risks or functions to minimise on their overall effective tax rate (Wong et al., 2011). Multinational firms, on the other hand cite reasons for engaging in transfer pricing to include the need to benefit from group synergies through establishing shared service cost centres and hence improve on firm’s performance. This transfer pricing issue has therefore led to revenue authorities conducting transfer pricing audits on multinational firms and performing resultant transfer pricing adjustments. The principal objective of this study was to understand the effects of transfer pricing on financial performance of multinational firms listed on the Nairobi Securities Exchange. Research design used for purposes of this research was descriptive design. Target population comprised of 65 firms listed on the Nairobi Securities Exchange. Purposive sampling was used to select 10 multinational firms which are engaged in related party transactions. Data was collected from signed and published audited financial statements for a five-year period (2013-2017). Correlation analysis findings indicated a positive moderate correlation between the number of expense and revenue related transactions \((r = 0.433)\). The findings also indicated an inverse relationship between expense related transactions and operating margin, and a direct correlation between revenue related transactions and operating margin. Regression analysis results indicated that related party transactions could only explain 19.2\% of variation in profit margins. The findings also indicated that the number of revenue and expense related transactions does not have an effect on a firm’s performance financial performance: However, the amount of revenue related and amount of expense related transaction affects financial performance positively and negatively respectively. On suggestions for further research, the researcher proposes that future research to focus on wider scope of multinational firms listed on the Nairobi Securities Exchange and to increase the period under review to cover more than five years to establish whether this would yield a different result. The researcher also suggests future research to be conducted on multinational firms not listed on the Nairobi Securities Exchange to ascertain whether the research findings would be similar. Further, there is need to establish whether there are other underlying factors that affect how transfer prices are set which may affect financial performance of firms.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Pricing of related party transactions has been an issue of great importance for not only multinationals but for the revenue authorities as well, since transfer price as a cost to the firm buying the service or good and a source of revenue for the firm selling the service or good, affects the reported financial performance of a company. According to Li (2006), related party transaction normally takes place between firms which are members of a multinational company in various tax jurisdictions. According to Maseki (2015), related parties are separate legal entities where either one controls the other, or both are controlled by a common shareholder, or each relates to the other individual having shareholding ownership in the companies. Wong et al. (2011), observed that given an opportunity, multinational firms would arrange their affairs in a way that would enable them to pay as little tax as possible considering the differences in the tax rates applicable in the different jurisdictions in which they operate. As a result, over the last five years transfer pricing has been a focus to a wider audience in both business arena and fiscal policy formulation, considering the increasing globalisation of business activities by multinational firms.

There is a general feel by the revenue authorities that multinational firms shift profits from jurisdictions of higher tax rates to jurisdictions with low tax rates by the way they organise their affairs to minimise on their overall effective tax rate (Wong et al., 2011). In this way, it is arguable that transfer pricing affects their financial performance.

From an economic theory perspective, a multinational firm is normally a mini-economy with limited resources and should be allocated optimally to maximize the profits (Hirshleifer, 1956). Transfer pricing is thus the mechanism used by the multinational firm to allocate the limited
resources in a way that maximises the overall FP of the multinational firm. On the other hand, accounting theory views TP as a way of motivating and incentivising managers to make firm-wide beneficial decisions contingent upon the facts and circumstances of the transaction (Eccles, 1985). As such, in setting transfer prices, one should consider the motivational aspects of the transfer price on subsidiary managers. Finally, transaction cost theory assists in explaining why MNEs enter into certain related party transactions such as shared service centres (Coase, 1988). Transfer pricing therefore is a way through which the firm allocates resources in a manner that reduces the overall cost of doing business.

One aspect of financial management is increasing the overall profitability of a company by optimising expenses while maximising revenues. The current business environment is highly competitive and because of the growing competition in the domestic markets as well as with increasing technological advancement, MNFs are now able to spread their business operations across multiple jurisdictions to grow their overall profits (Baldenius, 2004). As noted by Slemrod and Venkatesh (2004), the higher the profits reported, the higher the taxes paid by the organizations. As such, MNFs operating across jurisdictions have evolved certain strategies that aim at taking advantage of the jurisdictional differences in the tax policies applied to enhance their overall profitability at the group level through engaging in related party transactions to benefit from group synergies, reduce costs through increased efficiency to improve their financial performance.

1.1.1 Transfer Pricing

Terzioglu (2016) define transfer price as the charge by the transferring division to the receiving division within the same organization. As such, from a financial reporting perspective, transfer price arises from inter-company transactions. Although the impact of such transactions is
eliminated at the group combination level, their effect on financial performance of the individual entities within the group remains. Matei and Pirvu (2011) described the term TP as price at which two organizations operating within the same group transfer tangible property, intangible property and services between each other.

For MNFs, transfer pricing plays various roles including reducing the aggregate corporate income tax and duties paid by the group; allocating costs associated with providing group services through shared service centres to entities benefiting from the service centre; and transfer of income from jurisdictions that ban or limit repatriation of profits to jurisdictions that allow profit repatriation. However, the prominent role has been to reduce taxes by fixing most of the benefit in the most tax-friendly jurisdictions. Transfer pricing issues occur when the MNFs fix prices for the transactions among related entities in a manner that enables them to take advantage of the differential tax rates. Related party transactions entered by MNEs subject to transfer pricing include; purchase or sale of goods, service provision, borrowing or lending of money, and sale, transfer, lease or purchase of tangible and intangible assets (Maseki, 2015).

To determine the effect of transfer pricing on financial performance of MNFs, various aspects of transfer pricing can be analysed. The aspects to be considered include the nature of related party transactions from both an income and an expense perspective, and value of related party transactions from both income and expense perspective. The nature of related party transactions was measured by number of intercompany transactions undertaken while the value of the related party transactions was measured by proportion of related party costs or revenue to the total costs or revenues respectively (Wong et al., 2011).
1.1.2 Financial Performance of Multinational Firms

Performance is a typical measure of the achievement and a management tool for achieving organizational goals (Veber, 2011). According to Elly (2012), financial performance measures include market share/growth, net income, return on sales, return on investments, sales, a combination of return on sales and return on investments, return on assets, and market to book value of equity and profitability. To evaluate financial performance of MNFs, one examines financial statements of a company including the profit & loss statements, financial position statement, as well as the cash flow statements.

Financial statements provide information for decision making by diverse users of financial statements who may use them to make credit decisions, investment decisions, and taxation decisions among others. For MNFs, the statement of statement of profit or loss provides information regarding the profitability of the entity and reveals information regarding the volume of sales, and the nature of the various types of expenses. MNFs use statement of financial position which provides information regarding owners’ equity, liabilities and assets of an entity at a specified period to make capital structure decisions. The statement of cash flow offers information about a firm’s cash flow from investing, operating, and financing activities. However, the way the information is presented often does not effectively convey information on financial performance in terms of the company’s liquidity, solvency and profitability (Mihaela, 2014).

For purposes of this study, financial performance is measured by the operating margin. To determine the FP of MNFs, financial analysis is necessary. The method used commonly when it comes to financial analysis according to Beaver et al. (2005) is ratio analysis. The method makes use of accounting ratios, which enhance the utility of financial statements for different users. Accordingly, Ratio analysis is utilized to establish the liquidity and profitability of a business,
among other factors. These ratios enable the comparability of business performance over time via trend analysis (Wood & Sangster, 2012). Note that trend analysis is crucial in determining business development and growth over time. Therefore, with the analysis, one can determine the financial performance of the business for a period.

1.1.3 Transfer Pricing and Financial Performance

Generally, transfer pricing is associated with business activities undertaken by MNFs. Specifically, it relates to the transactions entered by entities within the same group mainly across jurisdictional borders. However, in some jurisdictions it is also concerned about in-country transactions. Related party transactions may affect the overall revenue generated or the expenses reported by a company depending on the nature of the transactions engaged by the entities (Kariuki, 2016). Multinational firms can make decision on the places to locate activities and the best way to price and structure RP transactions to benefit from the varied market opportunities. According to OECD (2012), this involves making decisions on the manner global revenue and profits should be allocated for them to be able to measure performance by establishing the transfer price for services and goods to pass internally. To the extent that MNEs can take advantage of the differences in the tax rates between jurisdictions through engaging in related party transactions, in this way, depending on the objective of the multinational firm to engage in related party transactions which is also based on the tax policies in the jurisdiction, the results of transfer pricing might influence the company’s financial performance (Malik, 2011).

In the modern globalised world, no single country can provide all resources necessary for the operation of MNEs. As such, globalised business activities have enabled multinationals to benefit from the advantages of specialization by trading in goods, intangibles and services with other entities across the globe (Baldenius, 2004). To take advantage of business expansion
internationally, MNEs are expected to device sound strategies for their businesses which enable them to cope with the rapid changing business environment. In this way, they can prevail upon the global market challenges like containment of cost and regulations around pricing of cross border transactions. At the same time, multinational firms can benefit from opportunities availed by the global markets including increased demand. Without a clear strategy MNEs may never succeed in global markets (Martinson et al., 1999).

It is worth noting that transfer pricing is one of the most crucial strategic activities that managers of multiple related units of business engage in, and becomes complex where the business units are spread across different countries. According to Hassnain, et al. (2017), transfer pricing is a critical part of the marketing mix of a multinational entity affecting the prices set by entities within the group as they transact with each other as well as with other third-party entities in their respective local markets. A properly designed strategy of transfer pricing helps the management to make better decisions for the firm for it to achieve its strategic goals (Martinson, et al., 1999).

1.1.4 Multinational Firms Listed on the Nairobi Securities Exchange

Multinational firms are an outcome of international business, in which case refers to entities which have established operations across two or more jurisdictions. At the Nairobi Securities Exchange, there are multinational firms whose headquarters are based in Nairobi and others whose headquarters are located outside Kenya.

There has been increasing concern about the way multinational firms use transfer pricing by leveraging on the loopholes in the tax laws to reduce payment of taxes hence denying jurisdictions their fair share of the profits generated by the MNEs within their jurisdictions. This heightened concern is reflected in the global initiatives such as the Base Erosion Profit Shifting project led by the Organization for Economic Co-operation and Development which is aimed at enabling taxation
of profits at the point where value creating economic activities are performed. BEPS ensures that multinationals engage in transparent, coherent and substance cross border dealings (OECD, 2015).

The concern for transfer pricing is not limited to the global scene. Locally, in Kenya, the concern is reflected in the increasing tax audits on the affairs of MNFs since there is a belief by the KRA that related transactions may not be priced at arm’s length in cases whereby cost recharges are excessive and where there is no economic value or business case, or seen as duplication of services. In addition, through the Finance Act, 2017, the Income Tax Act of Kenya extended the coverage of transfer pricing to include certain local transactions such as transactions between resident entities operating in a beneficial tax regime carrying on business with an associated resident person not operating in a beneficial tax regime. Recently, there is a proposal in Kenya through the Income Tax Bill, 2018 to introduce more stringent rules that would govern the conduct of multinationals engaging in RP transactions to ensure that they are not unfairly shifting profits from Kenya. These comprises the measures taken in relation to OECD BEPS Action Plans: Kenya has become an associate. These developments illustrate the importance and significance of TP in the modern internationalised business world (Sanschagrin & Voth, 2017).

Transfer pricing compliance requirements on MNEs include preparation of transfer pricing policy. This document captures details of intercompany transactions engaged by the entity comprising of an explanation of the type of transaction and an elucidation on the pricing of the transactions. A justification that the transactions are undertaken in compliance with the arm’s length principle is also expected to be included in the documentation, normally by way of a benchmarking analysis. These activities increase the compliance cost of the entities engaged in related party transactions (Sanschagrin & Voth, 2017).
1.2 Research Problem

Transfer pricing is considered as an important factor influencing financial performance. This influence could be either positive or negative. In this current world of internationalisation, most enterprises have expanded their operations into different market jurisdictions. As each jurisdiction has its own taxation laws with differences in the tax rate applicable in the jurisdiction, the internationalised enterprises tend to take advantage of such differences via transfer pricing to shift income from one jurisdiction, usually the high tax one, to the other, which would normally be one with a low tax rate. In doing so, they can report lower financial performance in the high tax jurisdictions hence pay the least of the taxes. For other enterprises, transfer pricing is used to enable capital flight and avoid currency restrictions in other jurisdictions (Adum, 2015). As such, transfer pricing might have an impact on financial performance of multinational firms.

In most jurisdictions such as Kenya, the revenue authorities perceive MNFs to report low financial performance through engaging in related party transactions (Kariuki, 2016). As such there has been increased scrutiny of the activities of MNFs especially those with related party transactions in instances whereby the revenue authority deems some of the cost recharges to be excessive and where there is a risk of revenue loss by the revenue authority (Maseki, 2015). This scrutiny through tax audits is aimed at discouraging businesses from engaging in aggressive transfer pricing practices. That notwithstanding, transfer pricing may influence financial performance reported by the multinationals. This is because, as noted by Eden and Smith (2011), the reported financial performance in terms of the bottom line affects the tax base hence the taxes paid by a company in different jurisdictions. This has warrantied the increased scrutiny on the activities of multinationals and their reported financial performance (Tebego, 2011).
Cools and Slagmulder (2009) studied the effect of transfer pricing compliance on responsible accounting by MNEs and noted that multinational entities engaged in TP activities are mainly focused on achieving group-wide objective of higher profitability and low effective tax rate for the group. In a research by Tebego (2011), the author argues that since MNEs operate in jurisdictions with different tax rates, they take advantage of such differences to manipulate gain or loss reported across the different jurisdictions. Taking a management perspective, a study by Sikka & Willmott (2010) observes that transfer pricing influences the allocation of profit among the profit centres in a decentralised multinational enterprise. According to Wong et al. (2011), transfer pricing objectives are contradictory and therefore no single transfer pricing method could lead to achievement of all the objectives. All these studies look at transfer pricing as an incentive to shift profits from one jurisdiction to the other and has not effectively and directly studied the actual effect of transfer pricing on financial performance of MNEs.

A similar focus is notable in the local studies. For instance, Maseki (2015) studied the effect of transfer pricing on revenue generation by multinational firms with a focus on those listed on the NSE. She found out significant adverse relationship between transfer pricing and revenue generation among MNFs. This study did not determine the impact of transfer pricing on operating margin of MNEs or whether the impact of transfer pricing on revenue generation depends on the number of related party transactions entered. In another research, Ndirangu (2015) studied transfer pricing landscape and challenges in Kenya and whether introducing Advance Pricing Agreements would resolve the challenges allied to transfer pricing. She recommended Advance Pricing Agreements introduction in Kenya. This study did not cover how transfer pricing affects the performance of MNEs financially. Kariuki (2012) also studied the impact of transfer pricing on corporate income tax in Kenya. He found out that transfer pricing affected corporate revenue in
the long run. The study focused on impact of corporate income tax and has not directly studied the effect of transfer pricing on financial performance of MNFs. This research study therefore, sought to address the following main question: What are the effects of transfer pricing on financial performance of multinational firms listed on the NSE?

1.3 Research Objectives

The principal objective of this study was to understand the effects of transfer pricing on financial performance of multinational firms listed on the NSE. The study thus focused on achieving the following specific objective:

(i) Identify the number and value of revenue related and expense related transactions entered into by multinational firms listed on the Nairobi Securities Exchange and determine the influence of such transactions on their operating margin over the period.

1.4 Value of the Study

Revenue targets by the Kenya Revenue Authority are significantly affected by the activities of multinational entities (Maseki, 2015). This research demystifies the effect that related party transactions have on financial performance of multinational firms. This understanding is important for the KRA as influencers of economic policies in the country to provide support on policy direction regarding transfer pricing issues. It is also helpful to revenue authorities dealing with transfer pricing to appreciate the effects of transfer pricing on financial performance of multinational firms.

According to OECD (2012), Tax advisors, multinational firms, as well as tax administrators tend to perceive transfer pricing as a challenge and a big risk. Accordingly, multinational firms tend to have fears on double taxation from transfer pricing audit adjustments. The risk is significant
considering the increased aggressiveness of the KRA over the recent past as per the increased number of transfer pricing audits undertaken. This research is therefore useful for MNEs engaging in transfer pricing activities with their overseas related parties to identify the impact of related party activities to their revenue disclosures to pre-empt any future confrontations with the revenue authority and be ready for such audit.

The study is also beneficial to researchers and academicians as it seeks to contribute towards the topic of transfer pricing by identifying and providing useful information that is helpful in addressing some of the pertinent issues regarding transfer pricing. The research also identifies other areas of concern that would form basis for future research.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter details the existing relevant information and knowledge on transfer pricing and financial performance of multinational entities. In this chapter, the researcher reviews findings from different authors on the topic and presents the results of the different researches. Specifically, the chapter looks at some of the theories that are applicable in transfer pricing and the results of financial performance studies on multinational firms. Furthermore, the researcher considered some empirical researches undertaken on transfer pricing and how it relates to financial performance of MNFs. A conceptual framework of this study was then developed based on the results of the literature review before providing a summary of the key literature review findings.

2.2 Theoretical Review

Theories that provide a background for the evolution in the approaches applied to transfer pricing over time from a profit maximisation perspective within an organization include; the economic theory, accounting theory and transaction cost theory. The economic and accounting theories point to maximisation of profits through the application of an optimal transfer price while the transaction cost theory seeks to maximise profits through optimal costs. In addition, the theories also provide motivational aspects of profit optimisation via transfer pricing.

2.2.1 Economic Theory

Developed by Hirshleifer (1956), the economic theory conceptualises an organization as a mini-economy that has limited resources, which should be allocated optimally via transfer pricing to the different units within the organization to maximise the profits of the overall organization (Eccles, 1985). In applying this theory from a TP point of view, Hirshleifer (1956) assumed two profit
centres or divisions within an organization – the manufacturing with no outside market for its production and supply centre, with a competitive exterior market for the product output. The transfer pricing problem was then analysed taking into consideration different conditions of demand. The author concluded that where a perfectly competitive market does exist, the transfer price between the divisions should be set at the market price. On the other hand, in the absence of a perfectly competitive market, the price should be adequate to compensate for the marginal costs.

According to Eccles (1985), the economic theory approaches aimed at establishing transfer price, which would lead the divisions - both selling and buying - to select production levels to maximize the profits of the firm. The people within the firm were perceived as rational utility maximisers. Therefore, hypothetically, they would not depict dysfunctional behaviour, which would result in resource misallocation. Most MNFs when engaging in related party transactions cite reasons such as the need to take advantage of group synergies whereby, it is cost effective for the services/goods to be provided at the group level since the parent company might have already established international networks with service providers and therefore, enjoy reduced costs through purchasing in bulk (Maseki, 2015) and as a result, increase total profit of the firm.

To decide the way global profits is supposed to be allocated among related parties to measure performance, multinational firms decide the transfer price at which services and goods should pass internally. When setting transfer prices for related party transactions, multinational firms set prices that would compensate for the costs incurred in providing the services/goods. However, where the prices set are not deemed to be the price that would be payable whereby a person transacts with unrelated third-party, then MNFs use the market price to represent the arms’ length price (Maseki, 2015). The economic theory is helpful for this study as it provides a background understanding of how transfer prices are set between related parties and the rationale. The economic theory which
advocates for optimal allocation of scarce resources to maximise profitability of a firm is related to the behaviour of multinational firms which use transfer pricing as a way of improving their financial performance.

2.2.2 Accounting Theory

Accounting theory aims at establishing the transfer price supposed to motivate divisional managers when making decisions benefit the firm. The focus of the theory was a determination of whether transfer prices should be based on a market price or it should be based on a standard variable cost (Eccles, 1985). Solomons (1965) made the first effort to use Hirshleifer’s (1956) theory in accounting. Based on this theory, five different transfer prices were prescribed and applied under different environmental conditions. These conditions are allied to the external market environment as well as the nature of the internal transfers made. Solomons (1965) acknowledged the impact of transfer pricing on performance evaluation as well as the problems caused. He however, decided to focus entirely on transfer price as the technique of resource allocation.

The accounting theory is applied in transfer pricing in determining the basis for setting prices at which the transacting entities exchange goods, intangibles and services. In this case, market prices should be applied on the transfer prices where there is a highly perfect competitive external market. The next two transfer prices were based on situations where the external market was not perfect to varying levels. In such conditions, varying forms of cost are used as basis for the transfer prices. The final condition was where the external competitive market for the product did not exist, in which case mathematical programming was prescribed as the most appropriate basis for determining the transfer prices between transacting related parties (Eccles, 1985).

Multinational firms trading with each other are required to follow the arms’ length principle when transacting with related parties. The arms’ length price represents the price payable in a transaction
between entities which are not related (Maseki, 2015). The arms’ length price therefore reflects the market price. MNFs use the market price to reflect the arms’ length price when allocating profits to related entities through group activities which therefore, affects their financial performance.

The study leveraged the understanding of this theory to interpret and understand the findings of the research regarding the impact of the income/expense nature of the related party transaction on financial performance of MNFs and whether this is influenced by the basis of setting transfer prices.

2.2.3 Transaction Cost Theory

Established by Coase (1988), this theory offers an explanation as to the existence and expansion of companies or why companies do outsource some of their business activities to external parties such as related parties. According to the theory, companies incur certain costs inherent in the exchange of resources, otherwise referred to as transaction costs. The companies therefore seek for ways of minimising such costs. Some of the costs include bureaucracies that come with facilitating activities within the company (Williamson, 1979). Further, the theory avers that as the company interacts with the external market, it tries to establish ways through which business costs of the interactions could be optimised for higher profits.

From a business perspective, such arrangement could also offer transactional economies by reducing on the costs of acquiring inputs as well as moving the outputs to the consumers (Martinson, et al., 1999). Growth of the company can be enhanced where the cost of performing the activity in-house is lower than through an external transaction. However, if the in-house costs associated to the activities is greater than the cost to be incurred if outsourced from the external market, the business may be required to downsize by outsourcing the activities from the external
market. This perhaps explains the growing trend of establishing shared cost service centres among MNFs.

MNFs tend to have large discretion when it comes to the way they structure business models as well as the way they their terms of internal trading. One of the reasons why MNFs engage in transfer pricing transactions with related parties, is to take advantage of group synergies and therefore reduce costs. MNFs can thus, allocate global profits to group members who are in low-tax jurisdictions without shifting the corresponding assets, activities, functions or even risks (OECD, 2012). When MNFs structure their businesses to shift profits or via transfer mispricing, this affects their financial performance.

As such, the researcher expects that the profitability of the firm would be enhanced as the cost of business reduces. This theory therefore explains the rationale for MNFs engaging in related party transactions and would help in determining the effects of transfer pricing on financial performance of multinational firms.

2.3 Determinants of Financial Performance

Many factors have been established in the existing literature as determinants of financial performance of MNEs as measured by their level of profitability. Ratio analysis is commonly applied in determining the level of profitability of a company. Specifically, financial ratios such as gross margin, operating margin, and return on capital employed are relevant in analysing financial performance of a company. The factors that are commonly cited as per the literature review done by the researcher and as presented below include transfer prices, exchange rates, tax regime, cost of operation and inflation rate.
2.3.1 Transfer Prices

According to Bergen and Seymour (2007) MNEs often make use of transfer prices passed through their inter-company accounts to allocate profits and capital between the various subsidiaries within the group. For instance, in the case of an insurance company, they could use intra-group reinsurance arrangement to reduce the capital expected of the insurance company by the local regulation and optimise management of capital at the group level. Howard et al. (2006) aver that such cross-border capital and profit allocation has a direct impact a company’s profitability. It could also be used as a tax saving mechanism at the group level. This points to the significance of transfer price in determining and recording the right tax base where the transaction is between related parties. Further, transfer pricing adjustments may be called for where the revenue authority is of the view that the established transfer price is inappropriate or “mispriced” (Wong, et al., 2011). This could also lead to additional costs hence impacting financial performance of a company.

2.3.2 Exchange Rates

A study by Sekkat and Varoudakis (2000) noted that fluctuations in the actual foreign exchange rate can influence company’s financial performance, notably where the company deals with foreign currencies. In this case, the researchers note that the profitability of a company using foreign currencies is likely to be impacted by changes in the exchange rate. On the contrary, an earlier study by Bigsten et al. (1999) on firms across four countries in Africa found limited evidence that firms respond to changes in real exchange rate. However, the research is criticised as it was done over a very short period. Montiel and Serven (2004) found out that companies operating in developing countries are faced with much higher real exchange rate volatility than those operating in developed countries.
2.3.3 Tax Regime

Taxation of business profits earned by corporations influences the net income of the corporate. This effect was analysed by Downs and Tehranian (1988) following the economic recovery in 1981. In a multinational organization, the tax regime put in place in the different jurisdictions in which the organization is operating affect the way they allocate capital and profits. In addition, Poterba (2001) investigated the effects of changes in tax on the investment decisions made by companies. This has an impact on the profits made by the companies because of the investment decisions. In another research, Kubota et al. (2009) studied FP of multinational corporations in the Japanese economy and noted that they are influenced by the corporate taxation regime.

2.3.4 Cost of Operation

Depending on the nature of a company’s business, cost of operation affects the profitability of a company (Kitty and Craig, 2014). These costs could include production costs for a manufacturing entity such as labour and raw materials incurred by the company in the process of producing products for sale to consumers. Other costs include overheads used to run the office such as utilities, rental space and other overhead costs. As noted by McGlaphren (2003), the higher the cost of operating the business, the lower the profitability reported by the business and the reverse is true. Also, high fixed costs reduce the ability of the company to make profits.

2.3.5 Inflation Rates

High inflation rates erode the value of money over time and influence the pattern of economic behaviour among households as noted by Davidson and Weil (1995). Inflation refers to the rising prices of both goods and services over a given period of time. Rising prices means that with time, a unit of currency can purchase lesser goods and services in the economy as the purchasing power of consumers in the market reduces. The value of money is lost as time passes due to the inflation
rate (Smith and Anderson, 1996). This affects the profitability of the company as it may lead to reduced sales revenue. High inflation may also cause increase in the other costs such as salaries and wages due to the demand for increased salaries by trade unions to cater for the increasing cost of living.

2.4 Empirical Studies

Different studies in the field of strategic management have studied transfer pricing and conceptualised it as a methodology through which profit is allocated among profit centres within a multinational entity that are decentralised (Sikka and Willmott, 2010). In most cases, Antić and Jablanovic (2000) argue that transfer pricing is most relevant for multinational entities that are vertically integrated. This means for instance that one unit produces and sells to the other unit. The transfer price significantly influences the profitability of the transacting divisions. As such, transfer pricing influences the profitability of each of the units directly and the overall FP of multinational entity (Merchant and Van der Stede, 2007).

Other researchers suggest that multinational entities use transfer price to attain the firm’s four major objectives, with each researcher vouching for at least one of the four objectives. First, transfer price can be used as a system for managerial control over the firm by influencing and coordinating workflow across the different business units and motivating unit managers to make and align their decisions to the firm-wide goals (Cools and Slagmulder, 2009). Secondly, analysis of transfer pricing can offer information required to establish the performance of specific units and for setting the right rewards for the unit’s efforts (Merchant & Van der Stede, 2007).

Thirdly, Malik (2011) argues that transfer price asserts the autonomy of the business units. This means that the units can decide how much to charge to maximise their profits. Lastly, via transfer
pricing the firm can shift profits among the different profit centres and business units (Drury, 2004). Other studies such as Steven (2008) and Wong et al. (2011), find objectives for engaging in transfer pricing contradictory and thus cannot be achieved based on a single transfer pricing method. Therefore, Drury (2004) points out that a compromise on the different objectives need to be made to implement a transfer pricing method.

While studying the impact of TP on the reported taxable profits of a company, Heckemeyer and Overesch (2012) observed that licensing was a dominant method applied by multinationals to shift profits. Effectively, shifting of profits leads to reduction in the profits that are reported by the company as low taxes would be payable in the jurisdiction with high tax rate. A similar finding was made by Hassett and Newmark (2008) who indicated that TP to shift profits is motivated by the existence of countries with low tax rates for corporate tax as well as on repatriation of profits earned.

Locally, Mutua (2012) undertook a descriptive research to analyse the development of transfer pricing in terms of why MNEs and revenue authorities are concerned with transfer pricing. He also looked at the management strategies multinationals put in place to cope with the challenges that come with TP challenges in emerging markets. The research found that transfer pricing presented a major tax risk for multinationals and that the multinationals face significant challenges in implementing transfer pricing strategies.

Boro (2013) used a case of multinational companies in Kenya to study the alliance between transfer pricing methods and their implementation level. The research noted several administrative challenges that multinational companies face in the implementation of the TP techniques. Some of the challenges noted include lack of awareness on the techniques and complexity of transactions. However, the research noted that the most common transfer pricing approaches were cost-based.
Maseki (2015) studied the impact of transfer pricing on generation of revenue by MNFs in Kenya and specifically looked at the related party sales and expenses. She found a significant relationship between the variables and revenue generation. However, Maseki (2015) also noted that these variables do not fully explain the changes in the reported revenues by the MNEs.

In another more recent local research, Kariuki (2016) studied the impact of transfer pricing on corporate income tax in Kenya. The research adopted both descriptive and inferential analysis approach and noted a significant influence of TP on the corporate income tax collected by the KRA. The study recommended multinational firms to adopt transfer pricing techniques to avoid associated costs when the tax risk crystallises.

2.5 Conceptual Framework

Based on the above review of the existing literature review, several factors can be identified as influencing the FP of MNEs as indicated by their profitability. These factors include the transfer prices, exchange rate, tax regime, operational costs and the inflation rate. This relationship can be presented in a conceptual framework diagrammatically as follows:
As notable from the framework, the profitability of multinational companies is influenced by the transfer prices set, where the multinational firm has transactions with its related parties. It is also influenced by the changes in the exchange rates where its transactions are denominated in other currencies other than the reporting currency. The tax regime and operational costs represent the cost of doing business in the country which also influence the level of profitability. Finally, the inflation rate prevailing in the country influence financial performance as it affects the purchasing power as well as the cost of inputs.

The independent variable analysed in this study is transfer pricing which has been measured by the number and nature of the RP transactions engaged as well as the value of those transactions to determine the influence of the respective variables of transfer prices on financial performance of
MNEs. The dependent variable is financial performance which was measured by the operating margin as an indicator of financial performance of a company.

2.6 Summary of the Literature Review

Notably, from the existing literature review and the empirical studies, transfer pricing has largely been studied as a process of establishing prices for goods and services that are traded among the different entities within an enterprise. As observed by the researchers, TP is frequently used to achieve diverse objectives including evaluating performance of each business unit, workflow coordination, enhancing cost efficiency, optimising operational efficiency and minimizing global tax expenses. However, other researchers have made contradictory observations that the objectives oppose each other. As such, an optimal trade-off needs to be made by the business managers in choosing the appropriate method for setting the transfer price. As notable in the table below, local researches have also been done on this topic, with the two key ones described below:

Table 1: Summary of the key literature review (Source: Author)

<table>
<thead>
<tr>
<th>Author</th>
<th>Focus</th>
<th>Methodology</th>
<th>Findings</th>
<th>Knowledge gaps</th>
<th>Current study focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maseki (2015)</td>
<td>Effects of transfer pricing on revenue generation by multinational entities in Kenya</td>
<td>A descriptive research design with regression and correlation analysis.</td>
<td>Transfer pricing is a major issue in tax for multinational entities as well as tax authorities. Multinational entities do engage in income and expense related transactions of diverse nature.</td>
<td>The researcher has not addressed the following: Impact of transfer pricing on the operating margin of multinational firms.</td>
<td>This study aims at filling the identified knowledge gaps by studying the impact of transfer pricing on the operating margin of MNEs and how the</td>
</tr>
<tr>
<td>Kariuki (2016)</td>
<td>Impact of transfer pricing on corporate income tax in Kenya and to draw policy implications based on the findings.</td>
<td>A descriptive research design with correlation analysis.</td>
<td>Increase in tax discourage foreign direct investment and increase tax evasion thus lowers tax revenue. Transfer pricing negatively influences corporate income tax ratio to GDP but insignificantly.</td>
<td>Whether transfer pricing’s impact on revenue generation by multinational entities depends on the number of related party transactions entered.</td>
<td>The researcher has not addressed the influence of transfer pricing on financial performance of MNFs.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agricultural ratio to GDP is insignificant in determining tax revenue to GDP in Kenya.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the process and procedures followed by the researcher to complete the study and achieve the study objectives. It discusses the reasons for choosing the research design used for purposes of this study. In addition, the chapter provides an indication of the population size that formed the target for this study as well as the selected sample from the target population and how such sample was selected. Further, the chapter provides data collection procedures and how the researcher established the reliability and validity of the data collected. Finally, the chapter details the way the collected data was analysed and presented.

3.2 Research Design

According to Kothari (2012), a research design is the way data is collected and analysed considering the relevance of the data in achieving the objectives of the study as well as ensuring that the procedure is completed economically.

This research adopted a descriptive research design. The descriptive research design was appropriate for purposes of this research primarily because the researcher sought to describe what effect transfer pricing has on financial performance of MNEs and as such the design gave the researcher the ability to gather detailed data about the population targeted for purposes of this study. The in-depth information was both quantitative and qualitative in nature and descriptive research design allowed for such flexibility. Descriptive research design also leads to collection of rich and large amounts of data. In addition, a descriptive research design can elicit topical areas
for future research as the research identified several variables that can form the basis of future research. Multiple case studies were selected and used to describe the relationship between financial performance and transfer pricing.

3.3 Population of the Study

Target population were multinational firms listed on the NSE and engaged in intercompany transactions. There are 65 companies listed on the Nairobi Securities Exchange. Appendix 1 provides the list of the 65 companies listed on the NSE.

A review of the related party disclosure notes on the latest published financial statements which are publicly available for these 65 companies revealed that 29 companies engaged in related party transactions with non-resident entities outside Kenya. However, for the remaining 36, some only engaged in RP transactions with related parties in Kenya while for some, the related party disclosures in financial statements could not reveal much information as to the residency status of the entity transacted with.

3.4 Sample Selected

As Mugenda and Mugenda (2003) advises, the larger the sample size the more representative the sample is of the target population. However, given the huge number of multinationals listed on the NSE and in view of limitation of time and resources, a representative sample was selected from the population of study. To decide on the number of entities to be included in the sample, the following model as proposed by Naing et al. (2006) was applied.

\[ n = \log (1+\alpha^2N) \]

where \( \alpha^2 \)
n is the sample size; N is the target population size at 65; and \( \alpha \) is the significance level which in this case is set at 0.01.

Considering the time and resource constraints, Mugenda and Mugenda (2003) advises that a sample size comprising of 10% or more of the target population is sufficient and preferable for purposes of research. For purposes of this research, 10 multinational firms were selected which represent 15% of the target population. In line with Mugenda and Mugenda (2003) suggestion, this is sufficient sample size for purposes of this research. To select sample elements that are relevant for purposes of this study a purposive sampling technique was applied. This technique is selected because it allows the researcher to consider and select multinationals with the required attributes to be measured (Kothari, 2012). In this case the desired features included MNFs listed on the Nairobi Securities Exchange and which are engaged in related party transaction(s).

### 3.5 Data Collection

This research was conducted as a secondary research and as such, it made use of secondary data, collected mainly through review of audited financial statements which are publicly available and accessible by the researcher as well as through extraction from books of accounts. Specifically, the documents reviewed include signed audited financial statements of the companies sampled over a period of five years between 2013 and 2017. The data collected included net profit and total revenue for each of the years in the review. This was useful in computing the operating margin which is a measure of financial performance.

The other set of data collected from financial statements was information relating to related party transaction(s) entered by the sampled MNEs. Specifically, the information collected included the number and nature of the transactions that is, whether revenue-related or expense-related and the
value of each of the transactions entered during each of the years reviewed. Financial information together with other relevant publications were accessed through the internet, reports of analysts and respective websites of the companies sampled. Appendix 2 provides the data collection instrument showing the information to be obtained from analysis of financial statement of each multinational firm.

3.6 Data Reliability and Validity

Altheide and Johnson (1994) define reliability and validity as the stability and truthfulness of the research findings respectively. These aspects of research findings are significantly influenced by the quality of the data collected in the research. Saunders et al. (2009) argue that appraisal of data collection methods can be used to evaluate validity and reliability of data. As this is a secondary research, the researcher relied on data from signed and published financial statements.

3.7 Data Analysis

As the data collected was quantitative in nature, quantitative data analysis techniques were applied. The researcher expected significant variations in the data that was collected given the differences in the scale, industry and level of operation of the different MNFs sampled. This variability of data would make it difficult or inaccurate for direct comparability of the data. As such and following Naing et al. (2006) advice, the data was standardised to allow for comparability across the period and between the sampled companies.

Data relating to the value of related party transactions was standardised by expressing the total value of related party transactions as a percentage of the total expenses or total revenue for the expense-related and revenue-related intercompany transactions respectively. By determining these
proportions, the standardised data became more comparable across the five-year period and across the MNFs.

The standardised data was then coded and entered into Statistical Package for Social Sciences (SPSS) for analysis. To describe the relationship, if any, between the dependent variable and the independent variables. The dependent variable in this case is financial performance which was measured by the operating margin. Independent variables relate to the different aspects of transfer pricing such as the number of related party transactions and their proportionate percentage.

To describe the relationship, a multiple linear regression analysis was done and presented in a linear equation taking the following form:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 \]

Where:

\( Y \): Financial performance of a multinational firm measured by the operating margin (operating income/total revenue) of that firm.

\( \beta_0 \): Constant which represents the value of the dependent variable (\( Y \)), where the values of independent variables are equal to zero.

\( \beta_1, \beta_2, \beta_3 \) and \( \beta_4 \) are the regression coefficients for the independent variables \( X_1, X_2, X_3 \) and \( X_4 \) respectively, which represent the direction and extent to which each variable influence financial performance of a firm.

\( X_1 \): The number of expense related transactions.

\( X_2 \): The number of revenue related transactions.
X3: The amount of expense related transactions expressed as a percentage of the total expenses.

X4: The amount of revenue related transactions expressed as a percentage of the total revenue.

Regression P-values were also considered to determine the statistical significance of the independent variables (aspects of TP) to the dependent variable (FP as measured by the operating margin). A significance level of 0.05 was assumed in deciding on the statistical significance of the variables. This significance level has been applied in most of similar researches that have been done previously (Maseki, 2015). In this case, an independent variable with P-value equal to or less than 0.05 was considered as statistically significant in explaining the dependent variable. On the other hand, an independent variable with P-value more than 0.05 was regarded as insignificant in explaining the dependent variable.

Further, correlation analysis was also done on the data to determine the nature and strength of the relationship between each of the independent variables and the dependent variable. This analysis indicated which of the independent variables strongly explain the variation in the dependent variable. Based on this analysis, the researcher could make conclusions and recommendations on which of the various aspects of transfer pricing has the most impact on financial performance of MNFs and whether the impact is positive or negative.

Overall, through the regression and correlation analysis as described above, the researcher could understand the sensitivity of financial performance of the sampled multinational firms to changes in the different aspects of transfer pricing. This was also extended to determination of the predictive value, whether positive and negative. In this way the researcher could achieve the objectives of the proposed research.
3.7.1 Inferential Statistics

The researcher also used inferential statistics where examination of each member of an entire population is not convenient or possible by using a random sample of data taken from the population, to describe and make inferences about the whole population.

As the research entails the analysis of more than one independent variable, multivariate analysis is chosen to account for the effects of the different transfer pricing variables on financial performance of different MNFs (Hopkins, 2000).

According to Ndegwa (2017), MNFs listed on the NSE are grouped into various categories including: Manufacturing and Allied (9), Agricultural (7), Banking (11), Automobile and Accessories (1), Insurance (6), Exchange Traded (1), Commercial and services (12), Investment services (6), Telecommunications and technology (1), Real Estate Investment Trusts (REITs) (1), Energy and Petroleum (5) and Construction and allied (5). Since the MNFs in the target population belong to the various categories of firms listed on the NSE, the researcher used stratified random sampling method to select the sample to be studied. The researcher used ANOVA for purposes of this study, to compare two or more groups in the target population and make generalisation regarding the MNFs listed on the NSE.
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATIONS

4.1 Introduction

This chapter discusses in detail, data analysis based on the study objectives and variables, presentation and interpretations. The study sought to determine the effects of transfer pricing on financial performance of multinational firms listed on the Nairobi Securities Exchange by identifying the number and value of revenue and expense related transactions entered into by multinational firms listed on the NSE and determine the influence of such transactions on operating margin of multinational firms over the period.

4.2 Descriptive Statistics

The target population for this study were all firms listed on the Nairobi Securities Exchange. Purposive sampling technique was applied to select 10 MNFs listed on the NSE and are engaged in related party transactions. Data was obtained from signed published financial statement for a range of 5 years (2013-2017). Complete data was available indicating 100% response rate.

Descriptive statistics was used to analyze the number of expense and revenue related transactions, the amount of expense and revenue related transactions, and the operating margin.

The statistics indicate that the minimum number of expense related transactions was 3 while the maximum was 32. The number of expense related transactions had a mean of 9.36 and a standard deviation of 6.62.
In terms of amount of expense related transaction, the minimum value was 296,357 while the maximum was 20,121,285. The mean value for the variable was 4,265,23.46 and with a standard deviation of 4,226,255.05.

On the other hand, number of revenue related transactions had a minimum of 1, maximum of 15, mean of 8.52 and a standard deviation of 4.47. Amount of revenue related transaction had a minimum of 25,184, maximum of 93,796,000, mean of 14,577,041.14 and a standard deviation of 21,741,408.71.

Operating margin was a ratio of operating profit and total revenue. The minimum operating margin was 0.0021 while the maximum was 0.69. The mean and standard deviation of operating margin was 0.23 and 0.17 respectively.

**Table 4.1: Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of expense related transactions</td>
<td>3</td>
<td>32</td>
<td>50</td>
<td>9.36</td>
<td>6.62</td>
</tr>
<tr>
<td>Value of expense related transactions</td>
<td>296357</td>
<td>20121285</td>
<td>50</td>
<td>4265323.46</td>
<td>4226255.05</td>
</tr>
<tr>
<td>No. of revenue related transactions</td>
<td>1</td>
<td>15</td>
<td>50</td>
<td>8.52</td>
<td>4.47</td>
</tr>
<tr>
<td>Value of revenue related transactions</td>
<td>25184</td>
<td>93796000</td>
<td>50</td>
<td>14577041.14</td>
<td>21741408.71</td>
</tr>
<tr>
<td>Operating profit</td>
<td>76000</td>
<td>70632073</td>
<td>50</td>
<td>11273585.86</td>
<td>14685705.99</td>
</tr>
<tr>
<td>Total revenue</td>
<td>5158992</td>
<td>212885194</td>
<td>50</td>
<td>44593662.08</td>
<td>47849617.32</td>
</tr>
<tr>
<td>Operating margin</td>
<td>0.0021</td>
<td>0.69</td>
<td>50</td>
<td>0.23</td>
<td>0.17</td>
</tr>
</tbody>
</table>
4.2.1 Financial Performance for 5 Year Period

Table 4.2: Financial Performance for the Period

<table>
<thead>
<tr>
<th>Year</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.003566376</td>
<td>0.67372326</td>
<td>0.24317543</td>
<td>0.179899</td>
</tr>
<tr>
<td>2014</td>
<td>0.002109412</td>
<td>0.687066782</td>
<td>0.238724675</td>
<td>0.191478</td>
</tr>
<tr>
<td>2015</td>
<td>0.032164691</td>
<td>0.687066775</td>
<td>0.245980706</td>
<td>0.176159</td>
</tr>
<tr>
<td>2016</td>
<td>0.037024959</td>
<td>0.574680296</td>
<td>0.239105891</td>
<td>0.139557</td>
</tr>
<tr>
<td>2017</td>
<td>0.031104398</td>
<td>0.488170703</td>
<td>0.205580554</td>
<td>0.137766</td>
</tr>
</tbody>
</table>

Figure 4.1: Trend Financial Performance

Trend analysis of financial performance indicate that, the mean performance (operating margin) was high in 2015 and lowest in 2017. The performance was quite high in 2013 with an operating margin of 0.245 before dropping slightly in 2014 and increasing sharply in 2015. However, the
performance fell drastically in 2016 and 2017. This fall in 2016 and 2017 can be attributed to low economic times followed by prolonged general elections in 2017.

4.3 Diagnostic Test

Diagnostic test was done in to determine if the data was fit for regression analysis. The diagnostic tests done included, normality test, homoscedasticity/heteroscedasticity, multicollinearity test and autocorrelation test.

4.3.1 Normality Test

Table 4.3: Normality Test

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Number of Expense Related Transactions</td>
<td>.171</td>
<td>50</td>
</tr>
<tr>
<td>Number of Revenue Related Transactions</td>
<td>.162</td>
<td>50</td>
</tr>
<tr>
<td>Value of Expense Related Transactions</td>
<td>.468</td>
<td>50</td>
</tr>
<tr>
<td>Value of Revenue Related Transactions</td>
<td>.395</td>
<td>50</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>.155</td>
<td>50</td>
</tr>
</tbody>
</table>

*a. Lilliefors Significance Correction*

Shapiro-Wilk and Kolmogorov-Smirnov tests were used to conduct the normality test of the data.

The null hypothesis was that the data used was not normally distributed. This implies that, if the p-value was greater than p-critical (0.05), then the null hypothesis would be rejected.

The normality test results indicated that, no significant values were recorded which are greater than 0.05. Therefore, the null hypothesis was dropped, meaning that the data was normally distributed and parametric test can be performed on the data.
4.3.2 Heteroscedasticity Test

Table 4. 4: Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Source</th>
<th>Chi2</th>
<th>Df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heteroscedasticity</td>
<td>12.68</td>
<td>49</td>
<td>0.215</td>
</tr>
</tbody>
</table>

Heteroscedasticity refers to a situation in which the error term is not the same across all values of the independent variables. In this study, Cameron and Trivedi’s IM-test was used. The null hypothesis used for Heteroscedasticity stated that, there was no heteroscedasticity. Results tabulated in table 4.3 indicated that the p value was 0.215 greater than 0.05. Therefore, null hypothesis was not rejected. Thus, the variance of the secondary data was homogenous.

4.3.3 Auto Correlation Test

Table 4. 5: Auto-Correlation Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.298a</td>
<td>.089</td>
<td>.008</td>
<td>.1681131</td>
<td>1.978</td>
</tr>
</tbody>
</table>

Predictors: (Constant), Amount of Revenue Related Transactions, Number of Expense Related Transactions, Amount of Expense Related Transactions, Number of Revenue Related Transactions.

b. Dependent Variable: Operating Margin

In regression analysis, auto-correlation refers to a situation where it is suspected that observations develop a time series where an observation depends on its predecessors. When auto-correlation is present, it is suspected that t values for regression parameter's estimates are unduly large making corresponding p-values unduly small. In other words, in presence of auto-correlation, regression parameter's estimates may wrongly be interpreted as significant.
Durbin Watson was used to test the auto-correlation. According to Huitema (2011), if the values for Durbin-Watson are 2, then there is no auto correlation. If it is above 2, there is positive auto correlation and if below 2, negative auto correlation. The data used in this study indicated that the Durbin-Watson value was 1.978. Therefore, it can be concluded that the data does not suffer auto-correlation problem.

4.3.4 Multicollinearity Test

Table 4. 6: Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of Expense Related Transactions</td>
<td>.761</td>
<td>1.314</td>
</tr>
<tr>
<td></td>
<td>Number of Revenue Related Transactions</td>
<td>.748</td>
<td>1.337</td>
</tr>
<tr>
<td></td>
<td>Value of Expense Related Transactions</td>
<td>.572</td>
<td>1.748</td>
</tr>
<tr>
<td></td>
<td>Value of Revenue Related Transactions</td>
<td>.580</td>
<td>1.724</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Operating Margin*

To ascertain the presence of multicollinearity, Variance Inflation Factor (VIF) was used. According to Neeleman (2012), if the VIF values are below 4, there is no multicollinearity. Based on the VIF values obtained for the secondary data, there was no value above 4. Therefore, the data didn’t suffer from multicollinearity.

4.4 Correlation Analysis

Correlation analysis helps identify association between the independent and dependent variables. In this study, the dependent variable was the operating margin. The independent variables were, number of expense and revenue related transactions, and the amount of expense and revenue related transactions.
Pearson correlation coefficient which indicates how variables co-move was used. In the correlation, a negative coefficient implied inverse relationship and vice versa. The strength of the association was gauged using correlation coefficient at 95% confidence level.

**Table 4.7: Correlation Results**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Number of Expense Related Transactions</th>
<th>Number of Revenue Related Transactions</th>
<th>Amount of Expense Related Transactions</th>
<th>Amount of Revenue Related Transactions</th>
<th>Operating Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Expense Related Transactions</strong></td>
<td>Pearson Correlation</td>
<td>.433*</td>
<td>1</td>
<td>.082</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.002</td>
<td>.003</td>
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<tr>
<td><strong>Value of Expense Related Transactions</strong></td>
<td>Pearson Correlation</td>
<td>.406*</td>
<td>.082</td>
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<td>.187</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.003</td>
<td>.003</td>
<td>.570</td>
<td>.570</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
<td>50</td>
<td>50</td>
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</tr>
<tr>
<td></td>
<td><strong>Correlation is significant at the 0.01 level (2-tailed).</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Correlation is significant at the 0.05 level (2-tailed).</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Positive moderate correlation was established between number of expense and revenue related transactions ((r = 0.433)). This correlation was significant ((p \text{ value} = 0.002 &lt; 0.05)). This implies</td>
<td></td>
<td></td>
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</tbody>
</table>
that, an increase in the number of expense related transactions will increase the number of revenue related transactions.

Amount of expense related transactions had a moderate correlation with number of expense related transactions. This was inferred from correlation coefficient of 0.406, significant at 95% confidence level (P value = 0.003<0.05).

Operating margin had a negative and weak correlation with amount of revenue related transactions (r = -0.349), significant at 95% confidence level (p value = 0.013 <0.05). It also had a positively moderate correlation with value of expense related transactions (r = 0.484 and p value = 0.001). Therefore, an increase in the value of expense related transaction will lead to a decline in operating margin, while its decrease will contribute to increased operating margin. Increased amount of revenue related transaction will lead to an increase in operating margin while its decline will contribute to decrease in operating margin.

4.5 Regression Analysis

Regression analysis in this study sought to establish the relationship between the study dependent variable and independent variables. The dependent variable was the operating margin while independent variables were, number of expense and revenue related transactions, and the amount of expense and revenue related transactions as a percentage of the overall expense and revenue respectively.
Table 4.8: Model Summary

<table>
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<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.438a</td>
<td>.192</td>
<td>.120</td>
<td>.0649577</td>
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</tbody>
</table>

a. Predictors: (Constant), Amount of Revenue Related Transactions, Number of Expense Related Transactions, Amount of Expense Related Transactions, Number of Revenue Related Transactions.

Table 4.4 shows results of goodness fit. R squared which is the coefficient of determination was 0.192. This indicates that 19.2% of variation in operating margin is explained by independent variables. Based on the R squared value, the largest proportion equivalent to 80.8% of variation in operating margin is explained by other factors.

R represents the correlation coefficient of the variables in the model. In this study model, R was 0.438 indicating a moderately weak positive correlation.

Table 4.9: Overall Model Significance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>.045</td>
<td>4</td>
<td>.011</td>
<td>2.675</td>
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<tr>
<td></td>
<td>Residual</td>
<td>.190</td>
<td>45</td>
<td>.004</td>
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</tr>
<tr>
<td>Total</td>
<td></td>
<td>.235</td>
<td>49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Operating Margin
b. Predictors: (Constant), Value of Revenue Related Transactions, Number of Expense Related Transactions, Value of Expense Related Transactions, Number of Revenue Related Transactions.
Overall model significance entails analysis of variance, which describes significance of the overall model. From the results, the F statistic is 2.675. P value was 0.044 smaller than the critical p value 0.05. Therefore, the model was significant at 95% confidence level. Hence, for operating margin, independent variables are good joint predictors.

**Table 4.10: Regression Coefficients**

<table>
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<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
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<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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<td>Number of expense related transactions</td>
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<td>.019</td>
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<td>-.028</td>
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<tr>
<td>Number of revenue related transactions</td>
<td>-.024</td>
<td>.015</td>
<td>-.238</td>
<td>-1.549</td>
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<td>Value of expense related transactions</td>
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<td>.009</td>
<td>-.140</td>
<td>-.923</td>
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<td>Value of revenue related transactions</td>
<td>.013</td>
<td>.005</td>
<td>.368</td>
<td>2.631</td>
</tr>
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</table>

*a. Dependent Variable: Operating Margin*

Results presented in table 4.6 indicate the coefficients, t values and significance levels of variables under study. The constant had a coefficient of 0.616 significant at 95% confidence level (p value = 0.000 < 0.05). Therefore, holding all other variable at zero level, operating margin will be equivalent to constant based on the model.

Number of expense related transactions had a negative coefficient of -0.001 and t value of -0.028. This relationship was however found not statistically significant at 95% confidence level. This was
inferred from the significance interval (p value = 0.978 > 0.05). Therefore, it can be deduced that, number of expense related transactions has no significant effect on operating margin.

Number of revenue related transactions also exhibited a similar trend like number of expense related transactions. The variable had a coefficient of -0.24 and t value of -1.549. The p value was 0.128 greater than 0.05. Therefore, number of revenue related transactions was not significant at 95% confidence level. Therefore, the factor cannot predict any variation in operating margin. Also, its effect is insignificant since its significance interval is greater than critical p value 0.05.

Amount of expense related transaction had a negative coefficient (r = -0.029) and t value of -0.923. The variable had a p value of 0.022 < 0.05. This implies that, it is significant at 95% confidence level. Therefore, an increase in amount of expense related transaction is likely to cause decline in operating margin and vice versa.

Amount of revenue related transactions had significant effect on the operating margin. Amount of revenue related transactions indicated a coefficient of 0.013. The p value for this variable was 0.012 significant at 95% confidence level. Therefore, based on these statistics, an increase in the amount of revenue related transactions will lead to a significant increase in operating margin.

**4.5.1 Fitting of the regression model**

This study used the following regression model

\[ Y = \beta c + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + E \]

Based on the significant variable, the fitted model became;

\[ Y = 0.616 - 0.29X_3 + 0.013X_4 + E \]
4.6 Interpretation of Results

The correlation analysis in this study indicated several correlations. One of the correlations was the positive moderate correlation between the number of expense related transactions and number of revenue related transactions \((r = 0.433)\). The other correlation was between operating margin and both the amount of expense and revenue related transactions. Amount of expense related transactions was found to have an inverse relationship with operating margin while amount of revenue related transactions had a direct correlation with operating margin.

Regression results indicated that the model of this study could only explain 19.2% variation in operating margin. This percentage is quite lower. Therefore, related party transactions solely cause low variation in firm’s financial performance. This means that, there are other major factors that account for the 80.8% variation in financial performance of firms listed in NSE.

The regression coefficient analysis indicated that neither number of expense related transactions nor number of revenue related transactions had any statistical impact on financial performance. Therefore, number of related party transactions has no effect on financial performance.

Amounts of related party transactions were found to impact operating margin differently. Amount of expense related transactions were found to impact profitability negatively. This effect can be explained by the fact that, cost and expenses reduce company earnings which consequently impact on the profitability of the firm.

On the other hand, amount of revenue related transactions indicated direct relationship with operating margin. Therefore, an increase in the amount of revenue related transaction will lead to an increase in operating margin.
These findings agree with Antić and Jablanovic (2000) and Merchant and Van der Stede (2007). These authors claim that transfer pricing is most relevant for multinational entities that are vertically integrated. This means for instance that; one unit produces and sells to the other unit. The transfer price significantly influences the profitability of the transacting divisions. As such, the transfer pricing influences the profitability of each of the units directly and the overall financial performance of multinational firms.

The findings also found a link to the findings tabulated by Maseki (2015). Maseki studied effects of TP on revenue generation by MNFs in Kenya and specifically looked at the related party sales and related party expenses. She found a significant relationship between transfer pricing and revenue generation. However, Maseki (2015) also noted that these variables do not fully explain the changes in the reported revenues by the MNEs.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter covers the summary, conclusions and recommendations of the study, based on research findings. The research findings are outlined according to the research objective of the study and are based on information gathered on the research question.

5.2 Summary

This study sought to establish the effects of transfer pricing on financial performance of multinational firms listed on the NSE.

The researcher adopted descriptive research design. The study population were listed MNFs at the NSE which are engaged in related party transactions. The study employed secondary method of data collection which entailed analysing signed and published financial statements for the 10 multinational firms engaged in related party transactions over a five-year (2013-2017) period.

Data was collected using data instrument, standardised, coded and entered into Statistical Package for Social Sciences (SPSS) for analysis.

Correlation analysis indicated a positive moderate correlation between the number of expense and revenue related transactions ($r = 0.433$). Correlation analysis also indicated an inverse relationship between the amount of expense related transactions and the operating margin: Direct correlation between revenue related transactions and the operating margin.
Regression results indicated that the related party transactions solely cause low variation in firm’s financial performance. This means that, there are other major factors that account for the 80.8% variation on financial performance of multinational firms.

Regression coefficient analysis indicated that neither number of expense related transactions nor number of revenue related transactions had any statistical impact on financial performance. Therefore, number of related party transactions has no effect on financial performance.

Amount of expense related transactions were found to impact profitability negatively. On the other hand, amount of revenue related transactions indicated direct relationship with operating margin.

5.3 Conclusions

Transfer pricing in this study was considered by both the number and amount of related party transaction. The transactions were further categorised into two, expense and revenue. Inferential statistics was used to determine the impact of related party transactions on financial performance.

The regression model of this study was found significant at 95% confidence level. Therefore, the model can be used to predict financial performance using related party transactions. However, the model can only predict 19.2% of changes in operating margin. Therefore, this study concluded that such a model can predict financial performance to a small extent given that more than 80% is explained by other factors.

The results indicated that, number of related party transactions has no significant effect on financial performance. This was checked against the significance interval of 95% confidence level. Therefore, based on the data analysis results, it can be concluded that, number of related party transactions, both expense and revenue, has no significant effect on financial performance.
The amount of expense related transactions was found to affect financial performance negatively. While the coefficient was quite small at 0.029, its increment will lead to a decline in operating margin. Therefore, the study concludes that, amount of expense related transactions has an inverse impact on financial performance.

The amount of revenue related transaction affects the operating margin positively by 0.013. While it has a minimal impact to overall financial performance, its increase leads to increased operating margin while its decline leads to decreased operating margin. Therefore, this study concludes that, amount of revenue related transactions positively affects operating margin.

Considering the effects of expense related transactions and revenue related transactions, this study adds to the body of knowledge that, transfer price influences financial performance of a company.

5.4 Recommendations

The study established that amount of expense related transactions affects financial performance negatively. On the other hand, amount of revenue related transactions affects financial performance positively. It is therefore important for multinational firms in Kenya which are engaged in related party transactions to appreciate the effect of expense related party transactions and ensure that expense recharges from their foreign related parties are not excessive and thus trigger transfer pricing audits.

It is important for revenue authorities to analyse revenue repatriation by multinational firms in Kenya to related parties outside Kenya to ensure that there is no profit shifting activities since some MNFs can exploit the loopholes available to engage in profit shifting activities. Therefore, there is need for developing countries such as Kenya to understand the number and types of MNFs
operating in their jurisdiction and the types of transfer pricing risks that are likely to arise and come up with transfer pricing rules and measures that will curb Base Erosion Profit Shifting.

It is also important for MNFs to appreciate the impact of expense related transactions on financial performance, since by incurring such expenses does not directly translate to improved financial performance. It will therefore be important to analyse the long-term effect of related party expenditure on financial performance of MNFs to justify the incurring of such costs.

5.5 Limitations of the Study

This study used a scope of 5 years to establish the impact of transfer pricing on financial performance of MNFs listed on the NSE. This span may not be sufficient to fully understand the effects of transfer pricing on financial performance of MNFs listed on the NSE, since it might be argued that initial investments by MNFs, would yield benefits in the long run.

The findings of this study are only applicable to MNFs listed on the NSE engaged in related party transactions, whereas, there are many MNFs in Kenya which are not listed on the NSE and the study may therefore not apply to them.

The study assumed that the data collected was from related party transactions made under similar economic conditions. However, the situation might not be the same since multinationals operate in more than one country and the value of related party transactions might have been affected by different exchange rates.

5.6 Suggestions for Further Research

This study sought to determine the effects of transfer pricing on financial performance of multinational firms listed on the NSE. It is important to note that there are quite many multinational firms which are not listed on the NSE. A similar study can therefore be done for multinational
firms not listed on the NSE to establish where the results would be different and whether there are other factors in play that affect financial performance such as the methods used in determining transfer prices. This will help validate the findings of this study or find more relationships on the research variables.

The study considered a five-year period as adequate to analyse the effects of transfer pricing on financial performance of multinational firms listed on the NSE. A similar study can be undertaken considering more than 5 years and on a wider number of MNFs listed on the NSE to accurately establish the impact of transfer pricing on financial performance. This may help MNFs who plan to engage in related party transactions to have a short term and long-term view on how related party transactions will affect firm’s performance.
REFERENCES


Boro (2013). Relationship between transfer pricing techniques and their level of implementation: a case of multinational companies in Kenya. University of Nairobi Unpublished research project.


APPENDIX I: LIST OF FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE

1. Eaagads Limited
2. Kakuzi Limited
3. Kapchorua Tea Company Limited
4. Limuru Tea Company Limited
5. Sasini Tea and Coffee
6. Williamson Tea Kenya Limited
7. Car & General Kenya
8. Marshalls East Africa
9. Sameer Africa Limited
10. Barclays Bank of Kenya
11. CIC Stanbic Holdings
12. Diamond Trust Bank Group
13. Equity Group Holdings Limited
14. Housing Finance Company of Kenya
15. I&M Holdings Limited
16. Kenya Commercial Bank Group
17. National Bank of Kenya
18. National Industrial Credit Bank
19. Standard Chartered of Kenya
20. Cooperative Bank of Kenya
21. Express Kenya Limited
22. Hutchings Biemer Limited
23. Kenya Airways
24. Longhorn Kenya Limited
25. Nation Media Group
26. Scangroup
27. Standard Group Limited
28. TPS Serena
29. Uchumi Supermarkets
30. ARM Cement Limited
31. Bamburi Cement Limited
32. Crown-Berger (Kenya)
33. East African Cables Limited
34. East Africa Portland Cement Company
35. Kengen
36. KenolKobil
37. Kenya Power and Lighting Company
38. Total Kenya Limited
39. Umeme
40. British-American Investments Company
41. CIC Insurance Group
42. Liberty Kenya Holdings Limited (formally CFC Insurance)
43. Jubilee Holdings Limited
44. Kenya Reinsurance Corporation
45. Pan Africa Insurance Holdings
46. Centum Investment Company
47. Olympia Capital Holdings
48. TransCentury Investments
49. Nairobi Securities Exchange
50. A Baumann and Company
51. BOC Kenya
52. British American Tobacco Limited
53. Carbacid Investments Limited
54. East African Breweries
55. Eveready East Africa
56. Kenya Orchards Limited
57. Mumias Sugar Company Limited
58. Unga Group Flour milling
59. Safaricom
60. Atlas Development & Support Services
61. Home Afrika
62. Flame Tree Group Holdings Ltd
63. Kurwitu Ventures
64. Stanlib Fahari
65. New Gold Issuer (RP) Ltd
## APPENDIX 2: DATA INSTRUMENT

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<th>Year</th>
<th>Number of related party transactions</th>
<th>Value of related party transactions</th>
<th>Total expense (KShs)</th>
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<th>Operating profit (KShs)</th>
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### APPENDIX 3: SOURCE DATA

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