THE EFFECT OF CURRENCY DEPRECIATION ON FINANCIAL PERFORMANCE: A STUDY OF MANUFACTURING AND ALLIED COMPANIES LISTED ON THE NAIROBI SECURITIES EXCHANGE

BY

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UNITED STATES INTERNATIONAL UNIVERSITY – AFRICA

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A Project Report Submitted to the Chandaria School of Business in Partial Fulfillment of the Requirement for the award of a Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY – AFRICA

SPRING 2015
STUDENT'S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University for academic credit.

Signed: ___________________________ Date: ___________________________
Mark Muthui Mboyo (ID 639441)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ___________________________ Date: ___________________________
Dr. Bernard Omboi

Signed: ___________________________ Date: ___________________________
Dean, Chandaria School of Business
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I would first like to thank my project supervisor, Dr. Bernard Omboi, for his continuous assistance, understanding, cooperation and priceless insight that have helped me towards accomplishment of this research project. My sincere appreciation and gratitude to my respondents for taking time off their busy schedules to furnish me with the information required to carry out my research and who actively participated in the study.
DEDICATION

This project is dedicated to my parents, Jackson Mbogo and Ruth Wanjiru and also my friends James Gathenya, Twaila Koske and Kibibi Ndope. Without their continuous encouragement and support, the completion of the study could not have been possible.
A B S T R A C T

The study examined the adverse effects of currency depreciation on the financial performance of manufactured and allied companies listed on the Nairobi Securities Exchange. It focused on how this affects firm imports, the exports to other markets, the net profitability of the firm and its competitiveness within the industry. It takes into account the currency depreciation has affected the financial performance of selected manufacturing and allied companies listed on the Nairobi Securities Exchange for the periods covering years 2004 to 2013. The study was aimed at establishing how manufacturing and allied companies can minimize the impact of the depreciating local currency on the cost of the imported manufacturing inputs, how they price their products against other products in the market and the profitability of the firm. It also provided hindsight on how managing the adverse effects can help improve competitiveness within the market against other key industry players.

A descriptive study design was utilized to examine and explore descriptive characteristics of several variables of interest. The target population comprised of the 9 manufacturing and allied companies listed on the Nairobi Securities Exchange. The study sample frame was comprised of a list of key employees in the treasury or finance departments of the selected manufacturing companies listed on the NSE. These employees were selected to give more information on the effect of currency depreciation on the financial performance of the companies.

The researcher considered the primary data collection method. Questionnaires had both structured and semi-structured questions and these were later analyzed using content analysis. During the research, descriptive statistics and distributions charts and graphs were used considering the mean, mode and median to represent the data for the analysis of the quantitative data. Content analysis was also used for the qualitative data since information was collected from these categories to answer the various questions. SPSS was used to provide some of the findings in the research.

The study established that currency depreciation had affected the financial performance of manufacturing and allied companies listed on the Nairobi Securities Exchange. Over the years, currency depreciation has increased the cost of production since the inputs and machinery used in production are imported from other markets. Furthermore, the study
established that currency depreciation also affected the export sales to clients. It established that the companies got more value from the export sales since the foreign currency they receive from sales is converted to the Kenyan Shilling to fund local operations.

In addition, the study established that currency depreciation had over time eroded the competitiveness of some of the listed manufacturing companies, especially those that relied solely on imported raw materials or finished goods for distribution within the Kenyan market.

The study concluded that currency depreciation had a significant effect on the financial performance, cost of production, export sales and the overall competitiveness of listed manufacturing and companies. The cost of production was mainly affected since most of the companies had imported inputs during the manufacturing process and also they interacted with foreign currency from payments made their international clients.

Furthermore, these companies were in competition with other companies internationally in terms of price and quality. Therefore, any increase in cost of production due to increased import costs of raw material was passed on to the client, making them less competitive in the market. This also resulted in shrinking margins and thus resulted in diminishing financial performance.

The main recommendation from the study is that the management of the companies should incorporate a wider array of the hedging tools available and should not only rely on forward and spot contracts, but look into other intricate methods like swaps and options and this should help mitigate against the adverse effects if currency movements.

Also, from the study it seemed that there is some information asymmetry when it comes to hedging techniques. Therefore, companies should provide continued education and trainings to enhance the capabilities of their employees about other avenues that are available to minimize the effects of currency depreciation and general risk management.

In an increasingly globalizing economy, the risks that companies are exposed are growing day by day; therefore companies need to continuously enhance their mitigating mechanisms to remain profitable in the long term.
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<td>CBK</td>
<td>Central Bank of Kenya</td>
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<tr>
<td>CBR</td>
<td>Bank Rate</td>
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<td>CMA</td>
<td>Markets Authority</td>
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<td>CPI</td>
<td>Consumer Price Indices</td>
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<td>Euro Currency</td>
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<td>G7</td>
<td>Group Seven</td>
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<tr>
<td>GBP</td>
<td>Great Britain Pound</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>ICT</td>
<td>Information and Computer Technology</td>
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<tr>
<td>IFE</td>
<td>International Fisher Effect</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>KES</td>
<td>Kenya Shillings</td>
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<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
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<tr>
<td>M3</td>
<td>Money Supply</td>
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<td>MPC</td>
<td>Monetary Policy Committee</td>
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<tr>
<td>PFM</td>
<td>Public Financial Management</td>
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<tr>
<td>RER</td>
<td>Real Exchange Rate</td>
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<td>USD</td>
<td>United States Dollar</td>
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<td>WB</td>
<td>World Bank</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

For the past few decades, researchers have been empirically investigating the exchange rates exposures of firms. Most of this research measures the exposure as the elasticity between changes in firm value and the exchange rate measures. In Kenya, there has been increased variability in the exchange rate as the Kenyan currency has depreciated drastically against major global currencies and this has had an adverse effect on the domestic economy of the country, Adler and Dumas (2010). There has always been some contention about the most suitable exchange rate policy in the developing countries. It mainly revolves around the degree of fluctuations during times of uncertain activity as a result of internal and external shocks (Abo, 2005). There has been widespread economic implication on the domestic economy as a result of the local currency depreciation that has happened over the last few years.

Kenya experienced a fixed exchange rate regime since 1966 up until 1992, when the multiparty system and devolved trade came into play. Just like most developing countries at that time, it had to frequently devalue its currency in an attempt to mitigate the negative effects that volatility had on its economy at that time. Thereafter, it went into a dual exchange rate system, which lasted until late 1993, after which the official exchange rate was matched to the official interbank rate and the shilling was allowed to float, Adler and Dumas (2010).

Firms in the industry have in recent times been affected by the introduction of the floating exchange regime and the increased risk appetite of firms which has enabled them to get into international markets, thus attributing to the increase in their foreign exchange risk (Brealey, Myers and Allan, 2008). Since the abolishment of the fixed exchange rate regime of Bretton Woods in 1971, the movements in the foreign exchange rates have continued to be a concern to shareholders, investors, managers and traders.

This was replaced by a floating rates system whereby the prices of currencies are determined by the supply and demand of money. This therefore leaves companies
exposed to foreign exchange risk. Adler and Dumais (2010) defined foreign exchange exposure as the sensitivity of changes in the real domestic currency value of assets and liabilities or operating incomes to unanticipated changes in exchange rate. Adverse foreign exchange rate movements have an effect on both the prices of imported finished goods and the costs of imported inputs, thus influencing directly those companies that compete with such firms (Grambovas and McLeay, 2006). Depreciation is a fall in value of one currency against other currencies. This appreciation and depreciation of a currency is what they term as foreign rate exchange fluctuations. It is this changes in exchange rate that give rise to undesirable effects on company’s foreign operations.

Adler and Dumais (2010) also define a firm exposure to exchange rate risks when its share value is influenced by changes in currency values. Theoretically, there are various channels through which the exchange rate might affect the profitability of a firm. Firms that export to foreign external markets may benefit from a depreciation of the local currency if its products become more affordable to foreign consumers. Conversely, firms that rely on imported intermediate products may see their profits shrink as a consequence of increasing costs of production. Firms that do not engage in international business may be affected indirectly by foreign competition. Furthermore, firms in the non-traded and the traded sectors of the economy compete for factors of production, whose returns are affected by changes in the exchange rate. Extreme currency depreciation is highly correlated with a general deterioration of the local economic conditions. On the other hand, as illustrate by Lee (2010), the success of currency depreciation in promoting trade balance largely depends on switching demand in proper direction and amount, as well as on the capacity of the home economy to meet the additional demand by supplying more goods.

Srinivasulu (2009) points out that currency depreciation from an initial trade deficit reduces real national income and may lead to a fall in aggregate demand. Furthermore, currency depreciation takes away with one hand, by raising import prices, and gives with the other hand, by lowering export prices. When the trade is in balance and terms of trade are not changed these price changes offset each other. Where imports exceed exports, the net result is a reduction in real income within the country. Cooper (2007) confirms this point in a general equilibrium model.
Carter and Simkins (1989) state that in a typical semi-industrialized country where inputs for manufacturing are largely imported and cannot be easily produced domestically, firms’ input cost will increase following a devaluation. As a result, the negative impact from the higher cost of imported inputs may dominate the production stimulus from lower relative prices for domestically traded goods. Lessard (2007) provide evidence that the final effect depends on the magnitude by which demand and supply curves shift because of devaluation.

In summary, the most important point to note is that currency depreciation increases net exports and increases the cost of production. Inversely, currency appreciation decreases net exports and the cost of production. The combined effects of demand and supply channels determine the net results of exchange rate fluctuations on real output and prices.

1.2 Statement of the Problem

Exchange rates form a critical part of the macroeconomic factors in the Kenyan economy. The Kenya shilling has experienced an extended period of rapid depreciation, which has adversely affected the Kenyan Economy, particularly the manufacturing companies. Various studies have been conducted to establish the effects that the depreciating Kenya Shilling has had on the economy. Furthermore, even more studies have been done to outline the effect of foreign exchange exposure on the financial performance of firms in the economy.

In spite of the abundant literature on the effects of exchange fluctuations on economic growth, studies that specifically focus on Kenyan economy are scanty. Musyoki and Pundo (2012) study on the impact of real exchange rate volatility on economic growth: Kenyan evidence for the period of 1993 - 2009 found that Kenya’s real exchange rate volatility generally exhibited an appreciating and volatility trend, implying that in general, the country’s international competitiveness deteriorated over the study period, hence, impacting negatively on the economic growth of Kenya. In addition, Otieno (2012) study found that the impact of exchange rate fluctuations in attracting Foreign Direct Investment is insignificant. Kiptui and Kipyegon (2008) found that that though
external shocks have major effects on the real exchange rate, domestic shocks also play a role.

In light of the above, very little has been done to shed light on its impact on the financial performance of listed companies in the manufacturing industry. In this context, we were able to evaluate and explain the specific implication that the currency depreciation has and its subsequent consequences.

1.3 Purpose of the Study

The purpose of the study was to establish the effect that the currency depreciation has had on the financial performance of listed manufacturing companies.

1.4 Research Questions

The research questions of this study are:

1.4.1 What effect has currency depreciation had on the profitability of listed manufacturing and allied companies?

1.4.2 What effect has currency depreciation had on the cost of production of listed manufacturing and allied companies?

1.4.3 What effect has currency depreciation had on export sales to clients?

1.4.4 What effect has currency depreciation had on the competitiveness of the listed manufacturing and allied companies?

1.5 Significance of the Study

1.5.1 Manufacturing firms

To manufacturing firms, there are always been an argument that that currency depreciation imperils their ability to import raw materials for manufacturing and servicing external debt. This ultimately reduces the profitability and a result, the firms are left on the losing end having to bare extra costs, and this has direct implications on the cost of doing business for the company. East African Economic forum (2006) indicated that Kenya economy faces changes in its foreign exchange rates that could translate into a decline in the value of investments in the country. Such an economic situation suggests the need to stabilize foreign exchange rates.
Therefore, due to the need for firms to remain competitive in light of such challenges, this study sought to quantify the effect that currency depreciation has had on the performance of manufacturing companies, and how well they can embrace or mitigate against the effects that this may have on their financial performance.

Lessard (2007) tested the hypothesis that an exogenous real home currency depreciation enhance the competitiveness of home country manufacturers vis a vis foreign competitor. His finding did not support that hypothesis. Firms did not benefit from a depreciation of the home country. On the contrary a significant decline in their market share of industry was found in a depreciation of the home currency.

1.5.2 Investors

To the investors, the study will provide insight on the impact of currency depreciation on the cost of doing business in the manufacturing industry. It will also highlight key measures that investors can take to ensure that the impact of the depreciation is minimized by putting in place very stringent measures to curb the sometimes detrimental effect to the respective firms. Investors through this study will be guided in their process of speculation and may use the content of this study to make investment decisions. The study will also benefit the academicians by contributing to the existing body of knowledge of economic policies in Kenya.

1.5.3 Government

To the government technocrats at the treasury and Central Bank of Kenya, this study presents them with critical information that can be used in formulation of policies which would facilitate decision making when it comes to the adjustments of interest rates and the subsequent impact on various aspects of the economy including foreign exchange rates in the financial markets. Furthermore, it will put in place measures to help shield and protect the external investors from the adverse effects of such as it encourages Foreign Direct Investment within the country, especially in the manufacturing industry to enhance output and improve the quality of goods taken to the market and those exported into the international markets.
1.5.4 Researchers

To the researchers and academicians, the study presents them with the valuable information on the relationship between currency depreciation and the financial performance of manufacturing companies listed on the Nairobi Securities Exchange. This will add to the extensive research that has been done on the broader industry.

1.5.5 Consumers

To the consumer or the general public, the study will shed some light on the effect that currency depreciation over the years has had on the prices of their manufactured consumables. There has been a general increase in the price of commodity goods in the domestic economy over the last 10 years. Currency depreciation, in addition to other key factors, has had a key role to play in this.

1.6 Scope of the Study

The study covered data on the exchange rates offered by banks within the economy and also highlight the inflation, money supply and lending rates available to the market. The data was obtained from Central Bank of Kenya reports in their website while money supply data is obtained from the Kenya National Bureau of Statistics. The average annual exchange rates for the USD, EUR and GBP were considered for a period of 10 years, from 2004 to 2013.

One of the anticipated limitations that were encountered while conducting the research was getting the respondents who were interviewed during working hours as many of them maybe out for field work or in closed door meetings. To overcome this, the researcher had to make special appointments to meet the targeted respondents early in the morning before they leave office. The study also acknowledged that not all information sought for this research is in the public domain and to overcome this challenge permission was sought to access the organizations documentation which was captured the required information.
1.7 Definition of Terms

1.7.1 Interest Rate

According to Cowley (2007) interest rate is the price the borrower pays for the use of money borrowed from the lender or financial institution. It is the fee paid for the use of borrowed assets. Interest rate risk is the exposure of the firm’s financial position due to fluctuations in interest rates.

1.7.2 Exchange Rate

Exchange rate is simply the price of one country’s currency in terms of another (Caprio, 2012).

1.7.3 Currency Depreciation

Currency depreciation refers to a decline in the value of one currency relative to another currency. Depreciation occurs when, because of a change in exchange rates; a unit of one currency buys fewer units of another currency (Miller and Reuer, 2009).

1.7.4 Inflation Rate

Inflation is an upward movement in the average level of prices. Its opposite is deflation, a downward movement in the average level of prices. This is the rate at which the general level of prices for goods and services is rising and subsequently purchasing power is falling (Elbanna and Younies, 2008).

1.7.5 Foreign Exchange (FX)

FX refers to the exchange of one currency for another or the conversion of one currency into another currency. This also refers to the global market where currencies are virtually around the clock (Pandey, 2011).

1.7.6 Foreign Exchange Exposure

Foreign Exchange exposure is the sensitivity of changes in the real domestic currency value of asset, liabilities or operating income to unanticipated changes in exchange rates. Pandey (2011) explains that the foreign exchange exposure can be measured by the slope
of a regression equation which relates changes in values of assets, liabilities or operating income to unanticipated changes in exchange rates.

1.8 Chapter Summary

This chapter has explained in details the background, purpose, significance and the boundary of the study. It highlighted the general objective and the importance of this study and who is expected to benefit from the findings of the study. Furthermore, the chapter laid down the intended research methodology and research questions under which the study was done. The scope and importance of study have also been highlighted. The next chapter will review previous literature done on the effect of currency depreciation and fluctuations and will seek to establish conclusions that were drawn from previous studies. The chapter includes a review of the theories and past studies done on currency depreciation in the financial industry.

Chapter three describes the methodology used to undertake the research and includes a discussion of the research design, the population and sampling design, the data collection methods, research procedures and data analysis methods. Subsequently, chapter four presents the results and analysis of findings whereas chapter five discusses the findings, draws conclusions and makes recommendations for improvements.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to currency depreciation in the economy. It highlights the various risks that manufacturing and allied companies face during times of extended currency depreciation. It will also review some of the empirical evidence from other similar work done in order to conceptualize and put the study into perspective.

2.2 Effect of Currency Depreciation on Profitability

There have been previous research studies have tried to explain the relationship between currency depreciation and firm performance (Duangploy et al., 2008); (Ankrom, 2007) with very little conclusive results. Lee (2010) has shown that companies with robust currency risk management frameworks have higher firm performance. He identifies that the main characteristics of exceptional risk management identified in these studies include; leadership of the risk team, adequate compensation of the risk team and compliance with laws and best practice. Dufey (2005) contends that risk management departments without well trained personnel are less effective and the company is highly susceptible to such adverse currency risks.

2.2.1 Shareholder Value

The Anglo-Saxon principle, which focuses on maximizing shareholder value, provides an operational conceptual and framework for evaluating business performance. The current value of shareholders, commonly defined as market value of a company is dependent on several factors; the current profitability of the company, its risks, and its economic growth essential for future company earning, which typically influence the market value of a company.

In contrast, Dhanani and Groves (2007) argue that financial indicators based on accounting information are sufficient in order to determine the value for shareholders.
Soenen (2009) argues that the net turnover and profit margin can influence the profitability of a company one time.

If a high turnover means better utilization of assets owned by the company and therefore better efficiency, a higher profit margin means that the entity has substantial market power. A company’s financial performance is directly influenced by its market position. Furthermore, risk and growth are two other key factors influencing a firm’s financial performance. Since market value is conditioned by the company’s results, the level of risk exposure can cause changes in its market value. In addition, economic growth is also a key factor that helps to achieve a better position on the financial markets, since market value also takes into consideration expected future profits.

2.2.2 Company Growth

There are certain characteristics that are associated with high performance of a firm. Love and Rachinsky (2007) state that size is one of the characteristics that a firm can attribute its performance to. Gurbuz et al (2010) also indicate the actual growth rate of the firm and industry, dividends distributed to shareholders and the level of liquidity that a company has at any particular time. He emphasized that the sales that a company does is a key measure of their performance in a competitive environment. Companies that have been able to experience better growth rates are in a position to frequently purchase better machinery, and then gradually the assets and size of the firm will increase. Furthermore, large companies attract a higher calibre of managers and workers who in turn contribute to the performance of the firm.

The earliest empirical studies on this topic (Amihud, 2003), although focusing on companies with considerable operations abroad, failed to show a significant impact of fluctuations in exchange rates on the stock price of multinational companies. The contemporary foreign exchange exposure theory (Lessard, 2007) is of the opinion that exchange rate fluctuations should affect the value of a multinational company mainly via foreign sales and foreign (net) assets, which have to be denominated in the domestic currency of the parent company.
In a study, Adler and Dumas (2010) present a method of estimating the foreign exchange exposure using a single-factor market model to estimate the elasticity of firm equity returns to exchange rate changes. They establish that the degree of exposure varies directly with the degree of foreign investment.

In addition, there are other recent various studies that have been done to confirm the basic findings regarding the foreign exchange exposure faced by companies, and looks into the issues that arise in the procedures used for estimating such exposure. The initial research in foreign exchange exposure examined whether corporations are exposed to foreign exchange risk (Belk and Gläum, 2007). Allayannis and Ofek (2001) and Soenen (2009) investigate the effect of financial hedging on foreign-exchange exposure. Moreover, Pantzalis, Simkins, and Laux (2006) examine the ability and use of operational hedges to reduce exposure. These studies find that firms that experience foreign exchange exposure for longer time horizons have increased over time. Bodnar and Wong (2005) are cautious in recommending very-long term horizons that may result in limited non-overlapping time periods.

2.2.3 Hedging Instruments

2.2.3.1 Forward Contracts

A forward contract refers to an agreement to purchase or sell a set amount of a foreign currency at a specified price for settlement at a predetermined future date, or within a predetermined window of time. Foreign Exchange Forward contracts help investors manage the risk inherent in currency markets by predetermining the rate and date on which they will sell or purchase a certain amount of foreign currency (Kumar, 2004).

The depreciation of a receivable currency is hedged against by selling a currency forward. However, the risk could be of a currency appreciation for importing firms, in which case, it can hedge by buying the currency forward. The key advantage of a forward contract is that it can be tailored to meet the exact specifications of a firm that match their needs. Bodnar and Wong (2005) indicate that the most frequently used method of hedging is forward exchange contract. This method shields the firms against currency movements. However, there are other risks like counter party risk where the other party fails to perform his part of the forward contract and settlement risk where the other party does not
deliver the sold currency on the due date. A loss would occur if the counterparty was to default and the contract is replaced at a higher cost than had originally been agreed.

2.2.3.2 Futures Contract

A futures contract refers to a standardized, transferable, exchange traded contract that requires delivery of a commodity, bond, currency, or stock index at a specified price on a pre-determined future date (Kumar, 2004).

One of the major advantages of futures contracts is that in developed markets, there is a central market for futures which therefore eliminates double coincidence. Whenever there is depreciation of a currency, this can be hedged by selling futures. However, when a currency is appreciating, this can be hedged by buying futures.

2.2.3.3 Options

An option is a financial instrument or contract that confers upon the holder or the buyer the right, but not the obligation, to buy or sell an underlying asset, at a specified price, on or up to a specified date. A currency option refers to a contract that gives the party the right and not the obligation a specific quantity of one foreign currency in exchange for another at a predetermined fixed price. Options on spot currencies are commonly available in the interbank, over-the-counter markets in developed economies.

A study done by Kumar (2004) examined the uptake of derivatives and the reasons for their use by carrying out surveys on 250 UK companies. They found out that 96% of them use forwards, whereas 59% use futures. The main reasons included the fact that some companies have made a mandatory policy to hedge against currency fluctuations by using forwards. Options usage was a result of management’s needs and requirements for the company’s financial performance.

2.2.3.4 Leading and Lagging

Leading and lagging refer to the accounting techniques of expediting (leading) or delaying (lagging) payments and receipts in order to gain an advantage. These payments are normally undertaking within a company’s subsidiaries or departments. If the currency of a subsidiary or department is expected to appreciate, it may expedite the payment
before the currency appreciates, and this is referred to as leading. However, if the
currency is expected to depreciate, the company will delay its payments, in a move
referred to as lagging.

A lead strategy entails attempting to collect foreign currency receivables only when the
foreign currency is expected to depreciate and making foreign currency payables before
they are due when the currency is expected to appreciate. Conversely, a lag strategy
involves delaying collection of foreign currency receivables if the currency is expected to
appreciate and delaying the payables if the currency is expected to depreciate (Abor, 2005).

2.2.3.5 Price Adjustments

This entails that a company change the prices of their products in different manners
depending on the prevailing economic conditions. When the local currency of a
subsidiary is devaluing, the subsidiary company can decide to raise the price of goods
offered in the market. This method is commonly used in countries that experience high
currency devaluation and they have inefficient derivative markets in place to curb this. A
major disadvantage of this is method is prices cannot be raised without considering how
this might affect the end users and competition. Ultimately, a company may not want to
lose its target market clients to cheaper products or services offered by the competitors
(Madura, 2010).

2.3 Effect of Currency Depreciation on the Cost of Production

During the production cycles, manufacturing and allied companies get most of their
materials and hardware either from local and international markets. From their machinery
all the way through to the inputs they utilize to manufacture goods, these are imported
and in this way, the company has some exposure to foreign exchange depreciation from
time to time. This therefore creates a great foreign exchange risk in the company’s books.
Dufey (2005) describes foreign exchange risk as the variance of a firm’s cash flows that
may be attributed to currency fluctuations.

There are three forms of foreign exchange risk, which include; translation risk
(accounting risk), transaction risk and economic exposures. Translation risk is the
sensitivity of the real domestic currency value of assets and liabilities, appearing in the financial statements, to unanticipated changes in exchange rates.

Transaction or contractual exposure is the sensitivity of the real domestic currency value of assets and liabilities, when assets and liabilities are liquidated with respect to unanticipated changes in exchange rates for exporting, importing or import-substitute firms. Economic or operating exposure is the sensitivity of the real domestic currency value of assets and liabilities, or future operating incomes to unanticipated changes in exchange rates (Brigham and Ehrhardt, 2005).

2.3.1 Foreign Exchange Risk

Foreign exchange risk management aims at coming up with measures and decisions that will eliminate or mitigate against the negative effects of currency fluctuations on statements of comprehensive income and the statements of financial position, a company’s payments and receipts as a result of its ongoing transactions and on the future cash flows of the firm. Some seminal work in this research area was carried out showed that the values of the US Dollar and US stock prices were positively correlated.

In a different earlier study, Adler and Dumas (2010) present a method of estimating the foreign exchange exposure using a single-factor market model to estimate the elasticity of firm equity returns to exchange rate changes. From their extensive research, they discovered a significant impact of foreign exchange rate risk on stock prices for only 5.2% of the analyzed 287 U.S. multinationals. Both the single factor model of Adler & Dumas (2010) and Jorion (1990)’s two-factor model were used extensively in empirical papers later in the literature.

2.3.2 Increased Foreign Exchange Exposure

According to Bradley and Mole (2002), foreign exchange risk management is a finance function which affects the financial position of a firm. Exchange rate fluctuations reduce cash flows and profitability of a company. The aim of exchange rate management is limiting volatile forex exposure on a firm’s financial performance. Pandey (2011) carried out a survey of foreign exchange rate risk management practices in the energy sector in India. The study did find that economic factors like inflation, political stability and
changes in technology significantly contributed to changes in prices in petroleum related products. But it also opined that oil firms have embraced risk management practices to prevent susceptibility of foreign exchange affecting their performance.

Various financial instruments have been made available to firms to mitigate against the foreign exchange risk. These instruments are known as hedging instruments. Hedging refers to the substitution of an open future exchange risk with a presently known exchange rate. Eitemann (2006) investigate the effect of financial hedging on foreign exchange exposure. Pantzalis, Simkins, and Laux (2006) examine the ability of operational hedges to reduce exposure. Where the effects of exchange rate changes last longer or are more permanent in nature, then longer estimation time zones are more appropriate. Martin and Mauer (2005) find that the estimated number of firms with significant foreign exchange exposure is higher in longer time horizons. Operational hedges are used to manage long term exposures to foreign exchange. Foreign exchange derivatives (financial hedges) are used often to manage short term exposure.

McKinnon and Schnabl (2004) focus on the asymmetric nature of the world currency system. The United States is the issuer of the most important international currency and it pursues an independent monetary policy focused on domestic inflation and growth. However, most countries outside of Europe tend to stabilize their exchange rates against the dollar due to a high degree of openness and underdeveloped capital markets. A same situation is reflected in the euro area and its periphery. The European Central Bank is independent in monetary policy making, while in most European non-euro area countries the euro is widely used as banking, invoicing, vehicle, intervention and pegging currency (ECB 2005).

Williamson and Miller (1987) have fully excluded the exchange rate behaviour within the margin from their analysis. Also, Krugman (1991) has modelled the exchange rate behaviour within the band incorporating exchange rate expectations. Furthermore, McKinnon and Schnabl (2004) provide the rationale for exchange rate stabilization in small open economies with underdeveloped capital markets. They argue that developing countries and emerging markets cannot choose their monetary framework exogenously based on specific targets of economic policy making. Rather, the regime choice is
interpreted as endogenous, determined by several inherent and interdependent factors such as macroeconomic stabilization, invoicing of international trade, and the currency denomination of international capital flows.

As a result of the long tradition of inflation and depreciation, which have partially resulted in a high degree of euroization or dollarization of the respective economies, banks and enterprises cannot use the domestic currency to lend or to borrow from other international markets (Eichengreen and Hausmann, 1999).

The aggregated foreign exchange risk of net international debt and assets remains widely unhedged as international debtors and investors are unwilling to accept liabilities and assets denominated in local currencies. However, if and where hedging instruments are available, they are very costly due to the low degree of liquidity of the foreign exchange markets. Therefore, from a short-term perspective, day-to-day exchange rate volatilities constitute a risk for short-term payments flows. In contrast, in Japan, highly developed capital markets like Europe and US provide a broad variety of cheap instruments to hedge the foreign exchange risk of short-term payments flows (Dash, 2012).

Fluctuations in the exchange rate level constitute a risk for the competitiveness of export industries and balance sheets of banks and enterprises. In the case of liability euroization or dollarization, sharp depreciations inflate the liabilities in terms of domestic currency increasing the probability of default. In highly euroized or dollarized small countries with a high stock of foreign currency deposits and borrowing such as Croatia, the incentive to avoid sharp exchange rate fluctuations is even stronger. However, in large countries which hold international debt and assets in domestic currencies, exchange rate fluctuations leave the balance sheets of domestic banks and enterprises unaffected (McKinnon & Schnabl, 2004).

Exchange rate differences over time are a possible source of danger to cross-border fiscal obligations and trade-related dealings. Concern about the potentially troublesome fiscal and real consequences of such dissimilarities are reflected in the strategy of some states to explicitly limit the nominal changeability of their money regarding that of others. While this ‘anxiety of flouting’ is the result of an intricate array of opposing considerations, it
nonetheless exemplifies that restrictive exchange rate changeability ranks well ahead of other strategy objectives in some states (Adler, 2010).

Transaction disclosures typically rise for non-financial firms as a result of worldwide trade. Since receipts and expenses are often denominated in external cash, the local money value of these sums varies with exchange rate movements. This type of disclosure may pose an array of possible complications for firms. Take, for example, an exporter whose charges are largely denominated in local money terms, but who sells production into world markets in foreign monies. Exchange rate variations directly affect income streams and income margins as a result of intervals between creation and sales. Many firms in the Australian assets sector are in such a location. Importers face a similar operation exposure, notwithstanding for dissimilar reasons, since costs are classically denominated in foreign money and incomes in Australian cash Giddy and Dufey (2007).

For fiscal firms, balance sheet disclosure that arises from holding possessions and liabilities denominated in foreign cash is likely to be more important than deal exposure. In addition to the fiscal sector, nonfinancial firms such as corporations with offshore processes may acquire a contact to estimate effects through the conversion of foreign money assets or liabilities held on their poise sheet into Australian dollar raports. A substantial portion of this paper is devoted to investigative balance sheet experiences where much of the apparent susceptibilities appear to lie (Lessard, 2007).

A simple way to limit jeopardy surrounding exchange rate variations is a commitment to an absolute purchase or sale of money at a specified future date, for a prearranged price. For firms supposing to receive or make foreign money payments at a definite future date, forwards are a plastic and readily available evading instrument. Australian exporters who characteristically obtain revenues in alien moneys tend to enter advancing agreements to acquisition the Australian cash, while traders mainly purchase foreign cash forward. A simple example would be that of an exporter of wheat who has a long lag between deserving initial charges and acceptance export revenue in US cash as contracted. A contract to sell advancing the predictable foreign revenues for Australian cash would remove some cash flow indecision. Since the forward amount would be agreed upon incoming the contract, subsequent discussion rate movements become unrelated. For
Australia and most other states, forwards are the most commonly used prevarication instrument Epstein & Jermakowics (2010).

A cross-currency interest rate exchange involves the swap of a stream of interest expenses in money for a stream of interest incomes in another over a given period of time. At maturity, there is characteristically also an exchange of principal. Since these connections involve exchange rate danger they can be organized to offset an existing revelation. This type of derived is therefore primarily used to hedge balance sheet disclosure on debt securities and the linked transaction risk on interest expenses Giddy and Dufey (2007).

Money options give the owner the right, but not the responsibility, to purchase or sell a quantity of money for another at a given future period, for a pre-arranged exchange rate (‘strike’). Significantly, the holder of the instrument has carefulness over whether or not to application his right to transact, permitting for a greater degree of rigidity than forwards, and leaving open the possibility of acquisition from favorable exchange rate movements. This elasticity comes at a quality built into the price of the option, (Lessard, 2007).

2.4 Effect of Currency Depreciation on Export Sales

There have been previous research studies that have tried to explain how the costs of manufactured export sales are affected by the currency depreciation and firm performance (Ankrom, 2007) will inconclusive results.

2.4.1 Purchasing Power Parity

Purchasing power of parity developed by Gustav (1918), states that in ideally efficient markets, identical goods should have one price. According to PPP theory, when exchange rates are of a fluctuating nature, the rate of exchange between two currencies in the long run will be fixed by their respective purchasing powers in their own nations. It expresses the idea that a bundle of goods in one country should cost the same in another country after exchange rates are taken into account. The foreign exchange market is considered to be in equilibrium when the deposits of all the currencies provide equal rate of return that was expected.
The PPP theorem states that under a floating exchange regime, a relative change in purchasing power parity for any pair of currency calculated as a price ratio of traded goods would tend to be approximated by a change in the equilibrium rate of exchange between these two currencies (Lessard, 2007). Nominal interest rate differentials between two countries tend to reflect exchange rate fluctuations. Giddy and Dufey (2007) referred to this as the International Fisher effect, a close relationship to the Fisher effect, a phenomenon observed by Irving Fisher.

Where the International Fisher effect holds, interest rates in appreciating currencies tend to be low enough, and in depreciating currencies high enough, to offset expected currency gains and losses. If foreign exchange markets are efficient, then the two theorems must hold. Therefore, foreign exchange rates take into account all expected interest rate and purchasing power differentials.

Critics have brought up the Capital Asset Pricing Model (CAPM) as an argument against the relevancy of foreign exchange risk management. Their rational is that, even if the foreign exchange risk exists, it will either be systematic or unsystematic risk. Unsystematic risk can be diversified away by investors when they choose to add low-risk, low-return securities to the portfolios. If foreign exchange pricing is in line with CAPM, then it will not be viable for a firm to increase its value through hedging. The eventual movement of its share price will be along the Security Market Line (SML) which takes into account the systematic risk (Adler, 2010).

2.4.3 Government Action in Financial Markets

The government's main responsibilities when it comes to the financial markets are providing regulation within the market, intervention when necessary and the financing the personal financial needs of its respective arms and entities. Within its mandate as an oversight function on the financial markets, the first primary undertaking can essentially be separated into 'for' or 'against.' Different markets have different feels about how markets work. At times one feels either that a pure free market works, or that extensive oversight is needed, or that a medium ground should be instituted. From an empirical perspective, when market prices fall, government regulation becomes stricter, and when prices rise, regulation becomes relaxed.
Epstein & Jermakowics (2010) acknowledge that governments use several policies and legislations to administrate foreign exchange in the economy. Frankel (2009) suggests that regulation may be less meaningful to investors during rising markets, and more meaningful after a crash, because investors use prices as a surrogate for market integrity.

In terms of trends, since the mid 1980s stabilisation of economic activity has focused on the effect on regulation by economic shocks, monetary stabilisation policy, inventory management and primarily financial engineering (Dynan et al., 2005). As such, different countries may have varying political goals to achieve, and thus divergent world regions will see varying levels of progression in and approach to the arena of financial market oversight.

There have been recent structural and institutional indicators of financial market development. Some of these indicators show that a number of countries have made significant progress in promoting an environment that is conducive to financial intermediation (Ndikumana, 2007).

Investors in the United States of America do not appear to have fled the markets in the last 30 years as they did in the 1930s, possibly because some have been locked into investments for tax benefits, and because sometimes a simple change to a corporate culture of honesty may restore lost investor confidence (Frankel, 2002). Europe has been the most regulatory world region, since as much European financial regulation is based on the disclosure paradigm to remedy market failure, discipline market actors, improve investor/consumer choice, and prevent abuse (Avgouleas, 2009). After the financial crises in the late 1990s, the Asian markets have learnt from their mistakes and have become more integrated and efficient than ever before (Yang et al., 2008). Governments generally say they don’t like to take an active role in the financial market (except for regulating it); however, there are methods and policies by which the government’s actions may have an indirect influence on the market. Fiscal policies that affect the taxation of capital gains, dividends and interest gains may eventually have an effect on market activity. For example, favourable policies such as tax cuts could persuade investors to become more active in buying and selling securities, while unfavourable policies might cause individuals to move to fixed-income securities or alternative investments such as real estate or other appreciable assets (Avgouleas, 2009).
Furthermore, through monetary policies, governments can indirectly involve themselves in the market by adjusting interest rates and taking part in open-market operations. In theory, cutting rates will discourage investors and companies from putting (or parking) their money into fixed-income investments—the lower rates instead may encourage borrowing for investment purposes (Frankel, 2002).

The market is also affected by the bills and laws passed by the various levels of government. This can occur for those laws directed specifically at the securities market or those that have an indirect affect. For example, on the direct side, the government enacted the Sarbanes-Oxley Act in 2002, which established stricter securities regulations on publicly traded companies. This has led to stricter accounting and auditing guidelines, increased corporate responsibility and increased disclosure, with the intention of providing more clarity for investors. On the indirect side, if the government reduces spending in areas such as health care or defense, companies in these sectors will likely sell off as they rely in part on government funds (Ndikumana, 2007).

Governments cannot sit lazily by when confronted with the looming collapse of a major fiscal institution. Moreover, both banks and financiers know that the administration will step in because it cannot obligate itself not to arbitrate in the economy. There have been secluded cases in which the administration has not arbitrated, but these cases have usually involved small banks whose letdown posed no danger. The difficulty of holding the government to specific promises is one of the significant ways in which the government differs from the reserved sector. The private segment relies on the government to enforce its contracts (Yang et al., 2008).

The government thus accomplishes the role of an underwriter, whether or not it has openly issued a policy. The provision of protection tends to alter behavior, giving rise to the well-known difficult of moral danger; that is, the insured has a condensed incentive to evade the insured-against event. In this case, banks, knowing that they are efficiently insured, may take larger risks than they otherwise would. In particular, they may assume risks similar to those being assumed by other banks, since they undertake that although the administration might ignore the difficulties of a single bank, it could not allow the entire fiscal system to go belly-up. So long as the bank does what other banks are doing,
the likelihood of a rescue is enormously high (Avgouleas, 2009). Most cover gives rise to moral threat problems. Insurance companies attempt to alleviate the moral danger problem by imposing limits. For instance, fire cover firms typically require that sprinklers be installed in commercial structures. Once identify the role of government as an underwriter, fiscal market regulations can be seen from a new viewpoint, as akin to the guidelines an insurance firm imposes. The effects of some versions of fiscal market liberalization are similar to a cover company’s deciding to abandon fire codes, with similar catastrophic consequences (Yang et al., 2008).

The administration has several marked gains in risk-bearing. First, because it can force membership in cover programs, it can avoid the hostile selection difficulties that plague risk markets in general and cover markets in particular. Averse assortment has a social cost as well. Insurance companies must spend large amounts to advance the quality of their pool of protected policyholders, and the prices of insurance reflect these expenditures. A second advantage is the government’s ability to alleviate the effects of moral hazard that arise because lenders lack info. The government has the power to compel the revelation of information through a range of indirect instruments, including taxes, subsidies, and guidelines. Information accessible in the revenue tax system, for instance, can be used to decrease the risks of loan evasion and to design loan payments liable on income (Ndikumana, 2007).

A third benefit is that private markets cannot handle the kinds of social risk associated with macroeconomic disturbances. Markets are decent at insuring persons against coincidences. But if all individuals are alike, who is to absorb the communal jeopardy? It can be extent across groups, but only the administration can engage in such intergenerational transmissions of risk (Avgouleas, 2009).

Moreover, social revenues may vary from private incomes. Moneylenders focus only on the predictable return that they obtain; the total return comprises the excess accruing to the businessperson. The projects with the highest probable return to the moneylender may not be those with the highest total predictable return, but they are the ones that get funded. Thus part of the rationale for focused credit is that good projects may be limited out of the market.
Several administration programs reflect this insight of a inconsistency between social and private revenues, although in some cases the view is that the market is unduly conservative and in other cases that it undertakes needless risks (Yang et al., 2008).

Government actions include generating and regulating fiscal market institutions, overruling in these institutions through other than controlling means, and prevailing directly in the money market. In addition, many government strategies, including those affecting to taxes, insolvency, and accounting, have a deliberate or unintentional effect on fiscal markets (Avgouleas, 2009). Some actions can be seen as improving fiscal markets or using them to realize other objectives; others auxiliary for fiscal markets. In pursuing these actions, governments may be trying to address the kinds of market disappointment described earlier. But the government resolves market letdown imperfectly. Some involvements motivated by, say, forces from special interest groups actually hamper the functioning of markets and pass on the allocation of capital in ways that cannot easily be connected to any correction of a market disappointment. I do not have space here to comment on all of these roles, but in the context of developing states, the first--creating marketplace institutions--requires exceptional comment (Ndikumana, 2007).

One of the most significant tasks in developing states has been the creation of fiscal institutions to fill gaps in the kinds of praise provided by private organizations. In some cases the aim that the private market has not in case a particular category of fiscal service or loan may be clear: evasion rates are high, and at an interest rate extraordinary enough to cover these evasions, the market is just not viable. Often the disappointment may be attributable to a lack of free enterprise, to a lack of originality or a reluctance to bear risks, or to the fact that the probable private revenues to the institution may be evidently less than the social earnings (Ndikumana, 2007). Since achievements are speedily imitated, it may be difficult to appropriate the returns from novel ideas, including new financial institutions and implements. In other cases there may be questions about whether a specific innovation is legal and a unwillingness to bear the costs and hazards of finding out. In some instances the administration takes primary responsibility for making new monetary institutions or institutional preparations; in others it takes actions that make the creation of certain fiscal institutions viable or more likely Epstein & Jermakowics (2010).
The guidelines must also be based on the gratitude that there are important irregularities of information between the bank and the controllers, since the "records" of the bank are largely under the bank's control, so that the info presented to controllers may quite possibly be inaccurate. Thus banks are in a position to sell underrated assets but hold on to overrated assets and carry them on their records at book value. When banks methodically engage in this practice, volume value will systematically overrate true value (Yang et al., 2008).

It may be hard to design operational incentive constructions where significances of actions today are understood only years into the future. At the very least, suitable accounting systems that reflect the costs of assuming certain dangers attract attention to what the administration is doing and in this way help provide appropriate stimuli. Thus the incentive to distribute loans at less than actuarially fair interest rates is alleviated to some extent by the obligation that the actuarial value of the loss be included in the economical in the year in which the advance is made (Ndikumana, 2007).

2.5 Effect of Currency Depreciation on the Competitiveness

2.5.1 Financial Benefits

The size of the firm can also have a positive effect on financial performance because larger firms can use this advantage to get some financial benefits in business relations. Large companies have easier access to the most important factors of production, including human resources. Furthermore, large organizations often enjoy the advantage of getting cheaper funding. The main objective of the company has evolved over time: the need for short term profit is replaced by the need for sustainable long-term growth of the company. Hence, a sustainable growth rate higher than 1 would have a positive impact on performance. For the companies listed at the stock exchange, its ability to distribute dividends is a proof of stability. However, until now there is no proof of a link between this factor and profitability, since profits can be used for purposes other than to distribute dividends (Soenen, 2009).

A company's ownership structure is also has a great impact on the performance of the company. Reddy (2010) has empirically tested this phenomenon on various occasions and
establishes that internal ownership results in long-term firm performance. In addition, institutional ownerships lead to better control and monitoring of the board of directors and somehow force them to undertake profitable projects to ensure future earnings (Bhagat and Bolton, 2008). Research has however established that small shareholdings by public do not support long-term sustainable growth plans. Conversely, such owners are mostly focussed on the short-term profits and fail to look at the overall growth of the company and same is the case for small or no internal ownership. It is therefore important that the ownership structure of a firm should be carefully balanced for it to perform well.

A separate study conducted by Javed and Iqbal (2007) investigates the impact of corporate governance on firm performance by creating indices for transparency, board characteristics, and disclosure, and shareholder and ownership characteristics. The findings of this study establish that there is a significant relationship between indices and performance except for disclosure and transparency.

2.5.2 Firm Exposure

Various studies assess both the firm level and portfolio level exposures. Prior studies have focused on exposures of internationally involved or multinational firms. Using a large sample of firms from many different countries Giddy and Dufey (2007) find that foreign exchange exposure is related to the level of foreign activity. They also establish that large firms exhibit more foreign exchange exposure than smaller firms after controlling for the level of foreign activity. Stacy and Williamson (2010) find an increase in equity volatility following the breakdown of the Bretton Woods agreement and increased exchange rate volatility but equity risks increased much more for firms with a multinational presence than it did for a control sample of domestic firms. Uses a two-factor model for sample portfolios of large corporations and found the exposure varied with the degree of foreign involvement while the exposure for a sample of domestic firms is not significantly different from zero.

In a recent study of individual bank exposures Giddy and Dufey (2007) find the vast majority of domestic banks exhibit exposure to at least one major currency and this exposure is greater than to a sample of internationally oriented banks with longer-term exposures more prevalent than short-term exposures, consistent with Bodnar and Wong
(2005). Bodnar and Gentry (2005) using data from the U.S., Japan and Canada also find industry differences in foreign exchange exposure and note that that the exposure level and direction are broadly consistent with economic theory. Griffin and Stulz (2001) find the effect of exchange rate shocks is minimal in explaining relative US industry performance and is even smaller in other countries that are more open to trade finding that industry effects are more significant than exchange rate effects.

Koutmos and Martin (2003) use industry sector portfolios from four countries and find that exchange rate exposure is asymmetric over different appreciation depreciation periods. Moreover, these asymmetries are more pronounced in the financial and non-cyclical sectors. Various studies find that companies with extensive foreign businesses have a significant level of foreign exchange exposure. Whereas a few studies have incorporated domestic firms without foreign activity and generally found them not to be exposed to foreign exchange risk, no other studies have addressed the determinants of foreign exchange exposure of such firms.

More recent studies (Jongen et al., 2006; Gao, 2000; Bodnar & Gentry, 2005.), however, are more consistent with financial theory and find that exchange rate movements, through their effect on sales and net assets values, are an important factor in determining firm value.

2.5.3 Impact of Hedging Techniques

There are various factors that could affect exchange rate fluctuations and these include foreign exchange supply and demand, rising inflation, interest rates, monetary policy, national income, speculations and expectations (Grambovas, 2006). When hedging techniques are implemented by a company, the effects of the above named factors are minimized and a company operates more efficiently and competes more effectively.

The International Fisher Effect theory indicates that foreign currencies with relatively high interest rates tend to depreciate because the high nominal interest rates reflect expected rate of inflation (Madura, 2010). This theory is known not to be a good predictor of short-run changes in spot exchange rates. In the long run, however, a relationship
between interest rate differentials and changes in spot exchange rates exist but with extensive deviations in the short run (Hill, 2004).

Hagelin and Pramborg (2004) conducted a test of the IFE theory by examining results of purchasing future contracts of currencies with higher interest rate that contained discounts and selling futures on currencies with low interest rate that contained premiums. Unexpectedly, the study found that 57 percent of the transactions created by this strategy were profitable, contrary to the IFE theory. The average gain was relatively higher than the average loss. When the IFE theory holds, the high interest rate currencies should depreciate while the low interest rate currencies should appreciate, and hence yielding insignificant profits by the transactions resulting in less than average profitability and a reduced competitive advantage.

Adler and Dumais (2010) and Grambovas (2006) found evidence of a significant variation in the relationship between inflation rate differential and exchange rate. However, in the long run, the relationship between inflation rate differentials and exchange rates was not perfect. They still recognize the use of such differentials in forecasting for long-run movements in exchange rates.

Copeland (2005) put forward a relationship between interest rates and inflation that states that the nominal interest rates in any period is equal to the sum of the real interest rate and expected rate of inflation. This is known as the Fisher Effect. Fisher states that if real interest rate relate to the expected rate of inflation, changes in the real rate will not lead to full adjustment in nominal rates in response to expected inflation.

2.5.4 Government Intervention in Foreign Exchange in Kenya

Foreign exchange dealings in Kenya are closely governed by regulations contained in Part VI of the Central Bank of Kenya Act and Legal Notice No. 23 of 28th February, 1996. The CBK is tasked to regulate the overall financial system and plays a supervisory role with regard to the management of the foreign exchange business. Amongst the key concerns of the CBK is the accurate collection and timely submission of statistical information by the foreign exchange dealers without which the Bank cannot fulfil its objectives as laid down in the CBK Act.
There is great importance on the responsibility of the foreign exchange dealers in the open market which cannot be emphasized more. These dealers should ensure that they operate within the law and ensure they are not pertinent to illegal transfers and they have in place effective money laundering policies in place to monitor such activities.

2.6 Chapter Summary

There are various models that can be used to explain the aggregate effects of currency depreciation on the performance of companies in the economy. There have been numerous studies that have been done since the late 1800’s to assess such an impact. Various researchers have come up with their ideologies about how this affects the general performance of a company. They have even looked at how operations, the firm culture, calibre of employees, size of the firm, the net turnover among other factors contribute to company performance. Our focus however is on how these, in addition to foreign currency depreciation, can affect the manufacturing industry. Previous work has not particularly touched on this industry, and since it is one of the driving forces of the economy, it is important that this study highlights it in this research. Chapter three outlines the methodology used in carrying out the research, clearly giving the designs and techniques to be used to bring out the results obtained.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, we outline methods used to collect, analyze, interpret and present the research findings that go to explain the effect of currency depreciation on the financial performance of listed manufacturing and allied companies. Data was collected from various sources related to the subject matter. The section focuses on the study design adopted, target population, sample selection, outlines research design, method of collecting data and data analysis technique. It also underscores how a research study excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research.

3.2 Research Design

Research design is an arrangement of conditions for collection and analysis of data in a way that combines their relationship with the purpose of the research (Chandran, 2004). It is a means to achieve the research objectives through empirical evidence that is required economically. The choice of a design is determined by: research purpose as described by the research problems and questions, categories of data needed, sources of data and cost factors.

A descriptive study design was utilized to examine and explore descriptive characteristics of several variables of interest. Glass & Hopkins (1984) describe a descriptive research design as a mode of gathering data that describe events and then organizes, tabulates, depicts, and describes the data collected and often uses visual aids such as charts and graphs to help the reader in understanding data distribution. Descriptive research is very unique in the number of variables employed since it can incorporate multiple variables for analysis, unlike other methods that require only one variable (Borg & Gall, 1989).
3.3 Population and Sampling Design

3.3.1 Population

Population is the entire groups or individual, events or objects having common characteristics about which the researcher wishes to make generalizations, international statistic indicate the likelihood that what was true of the sample is also true or the population from which is drawn. When the target population is similar the researcher has more confidence making generalization.

The study examined the value relevance of currency depreciation on manufacturing and allied companies listed on the NSE for the period covering the years 2004 to 2013, for a span of 10 years. Most of the previous studies have focussed on the financial firms, which include banks and investment firms (Seow and Tam, 2002; Riffe, 1997; Ecccher et al., 1996, Nelson, 1996). Exchange rate fluctuations affect some industries more than others because some of the industries are more import or export dependant than others (Bodnar and Gentry, 2005).

The target population comprised of the 9 manufacturing and allied companies listed on the Nairobi Securities Exchange. This sector is majorly affected by exchange rate fluctuations since it over-relies on imports for its inputs. Furthermore, some of these firms export the end products to the neighbouring countries and are paid in foreign currency. Most of their revenues and costs are denominated in foreign currency mainly the US Dollar ($), the Sterling Pound (£), the Euro (€) and the Japanese Yen (¥).

3.3.2 Sampling Design

3.3.2.1 Sampling Frame

A sampling frame simply refers to the set of source materials from which the sample is selected. This encompasses the purpose of the sampling frames, which is to provide a means for choosing the particular members of the target population that are being interviewed in the survey (Turner, 2003).

The study sample frame was comprised of a list of key employees in the treasury or finance departments of the selected manufacturing companies listed on the NSE. These
employees were selected to give more information on the effect of currency depreciation on the financial performance of the companies.

3.3.2.2 Sampling Technique

When a sample is used, by whatever method chosen, it is important that the individuals or companies chosen are representative of the whole population. The selection technique used to make the choice of the sample to be used depending on the qualities one intends to capture (Barratt, 2009). Therefore, it refers to the method in which a researcher has chosen to select the samples to be used. Sampling techniques are classified into two: Probability and Non-probability sampling Technique. Probability sampling is chosen based on known probabilities where the researcher chooses the samples at random. On the other hand, non-probability sampling is based on unknown probabilities and the sample selection is not based on random methods. Non-Probability sampling is divided into the following: convenience sampling, quota sampling, self-selection sampling, purposive sampling and snowball sampling. The convenience sampling technique was utilized for the study. With convenience sampling, the samples are selected because they are accessible to the researcher. The sample selected for the study comprised employees from manufacturing and allied companies listed on the bourse.

3.3.2.3 Sample Size

Sampling refers to the process of selecting a group of subjects for a study in such a way that the individuals represent the larger group from which they were selected. The representative portion of a population is called a sample (Yount, 2006).

The study selected employees from seven firms put of the nine manufacturing and allied companies listed on the NSE. The firms were selected based on the location of their headquarters or business offices. The selected sample size comprised of firms with headquarters in Nairobi as well as those with business support in the same jurisdiction. This made distribution of questionnaires and regular visits to the premises easier and convenient for the researcher.
3.4 Data Collection Methods

Data collection refers to the technique through which a researcher collects information to be used for a study. This information can either be primary or secondary collected using various methods. In this research project, primary data collection methods were considered. Primary information was collected from the manufacturing and allied companies by use of questionnaires to accountants, risk managers, treasury officers and managers in the finance and/or treasury department or in any other department that deals with foreign exchange within the company. These questionnaires had both structured and semi-structured questions and these were later analyzed using content analysis.

These employees were based in either the treasury and finance department. Selection of the samples was based on the kind of outputs that the company produces and also the geographical dispersion of these firms to the capital city of Kenya. The study selected employees of the firms whose headquarters are Nairobi because of easy accessibility and proximity to the researcher. The data by the respondents was captured by the use of questionnaires. Since this is a form of non-probability sampling, the views by all respondents were taken into consideration and recorded for analysis. All the respondents were issued questionnaires to fill and a scale was provided to provide their ratings based on their conclusions. The respondents also answered semi-structured questions within the same documents that were analysed to provide the respondents views on specific area of the study.

3.5 Research Procedures

Before actual data collection, a pilot study was done to allow for pre-testing of the research instrument and make the researcher familiar with research and its administration procedure as well as identifying items that require modification. The result helped the researcher to correct inconsistencies arising from the instruments, which ensured that they measure what is intended. The pilot study was conducted on five (5) respondents from randomly selected from the Nairobi Securities Exchange. Research instrument reliability and validity was then tested.

To establish the validity of the research instrument, the researcher sought the opinions of experts in the field of study. This facilitated the necessary revision and modification of
the research instrument thereby enhancing validity. After the pilot study the main survey followed. The questionnaires were administered through drop and pick method. To get a favourable response rate, the respondents were given one week to fill-in the questionnaires owing to their busy work schedule and the need to obtain objective and unhurried response. In addition, the researcher made phone calls and personal visits where it was necessary to remind the respondents to fill-in and return the questionnaires; the respondents were also promised a copy of the findings. The pilot study tested reliability of the likert scale tool and also helped project output for the main study besides highlighting any necessary adjustments to the tool itself.

3.6 Data Analysis Methods

Analyzing information involves examining it in ways that will reveal the patterns, trends and relationships that can be identified within it. This may mean subjecting it to statistical operations that can tell you the level of trust the answers one is getting, in addition to the relationships that seem to exist among the variables (Milstein & Wetterhall, 2013).

Quantitative data is often subjected to statistical procedures which involve the calculation of mean or the average number of times an event or behaviour occurs over time. Since numbers provide data which is factual they can give definitive or nearly definitive answered to different questions. Quantitative analysis is considered to be highly objective since it is without any human bias attached to it because it depends on the comparisons and calculations of numbers according to mathematical computations. Qualitative data analysis is accomplished mostly by methods that have greater subjectivity and depend to a large extent on people’s opinions, knowledge, inferences and assumptions as compared to quantitative data (Milstein & Wetterhall, 2013).

During the research, descriptive statistics and distributions charts and graphs were used considering the mean, mode and median to represent the data for the analysis of the quantitative data. Content analysis was also used for the qualitative data since information was collected from these categories to answer the various questions. SPSS was used to provide some of the findings in the research.
In addition, the researcher conducted a multiple regression analysis so as to determine the impact.

The regression equation: \( Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \): Whereby

\[
\begin{align*}
Y &= \text{Financial performance} \\
X_1 &= \text{Profitability} \\
X_2 &= \text{Cost of production} \\
X_3 &= \text{Export sales} \\
X_4 &= \text{Competitiveness},
\end{align*}
\]

The variables on the two major items of currency depreciation on financial performance appertain to: Profitability Cost of production, Export sales and Competitiveness. Rank correlation coefficients, such as Spearman's rank correlation coefficient and Kendall's rank correlation coefficient (\( \tau \)) was also used to measure the extent to which, as one variable increases, the other variable tends to increase, without requiring that increase to be represented by a linear relationship. If, as the one variable increases, the other decreases, the rank correlation coefficient would be negative. This aided in interpreting dependence of the variables above and significance of the findings.

3.7 Chapter Summary

Chapter three gives a detailed description of the methodology used to analyse the data collected that was later used to determine the effect of currency depreciation on the financial performance of listed manufacturing and allied companies. The chapter clearly outlines the way in which data was collected, analyzed, interpreted and presented in order to draw conclusions.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the research findings to investigate on the adverse impact of currency depreciation on listed manufacturing and allied companies listed on the Nairobi Securities Exchange. This study was conducted on seven manufacturing and allied companies listed on the NSE. One employee of each of these companies was selected from the accounting, finance or treasury department and was served with a questionnaire as shown in Appendix (I). After administering a total of seven questionnaires, the researcher recorded approximately 100% response rate. All the questionnaires received were usable for the research more importantly because they were administered to respondents directly as the sample size and proximity made this possible to do.

4.2 Respondent Company Profile

4.2.1 Organisational Structure and Size

The study sought to establish the department in which the respondent works and thus required them to indicate it on the questionnaire. The findings of the study revealed that all the respondents in the study were from the Treasury, finance or accounts departments. Since employees from such departments dealt with foreign exchange transactions or similar transactions in their course of work, they could be said to have some knowledge on what foreign exchange appreciation and depreciation meant and its overall effect on the company performance.

When it came to the number of employees in the manufacturing and allied firms listed on the NSE, the study from Table 4.1 above indicated that 43% of the respondent's companies have employee numbers ranging from 500 to 2,000, 29% have between 2,000 and 5,000 employees, 14% have between 5,000 to 10,000 employees and the last 14% have 100 and 500 employees.
The number of employees in the manufacturing and allied firms listed on the NSE was well distributed to effectively carry out the study.

Table 4.1 Respondent's Size of Workforce

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 500 and 2,000</td>
<td>43%</td>
</tr>
<tr>
<td>2,000 and 5,000</td>
<td>29%</td>
</tr>
<tr>
<td>5,000 to 10,000</td>
<td>14%</td>
</tr>
<tr>
<td>100 and 500</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.2.2 Years of Operation

The study also sought to establish the number of years that the companies have had their operations in Kenya. From the respondents, 57% of the company had been operating in Kenya for between 20 to 50 years, 29% for between 50 to 100 years and 14% for between 5 to 20 years. This shows that the companies in the research had been in business in the Kenyan market for a long period of time, thus showing their continued interest to do business in the developing market.

The study from Table 4.2 indicated that majority of the firms had been operating in Kenya for between 20 to 50 years as supported by 57% of the respondents that were for this idea. The years in operation were ideal since the respondents were well versed in the industry and thus could provide viable responses in regard to the questionnaires.

Table 4.2 Years of Operation

<table>
<thead>
<tr>
<th>Years of Operation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between 0 and 1</td>
<td>0%</td>
</tr>
<tr>
<td>1 and 5</td>
<td>0%</td>
</tr>
<tr>
<td>5 to 20</td>
<td>14%</td>
</tr>
<tr>
<td>20 to 50</td>
<td>57%</td>
</tr>
<tr>
<td>50 and 100</td>
<td>29%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>
4.3 Financial Management and Performance

The study sought to establish the departments that dealt with foreign exchange management, whether they had a well-documented foreign exchange policy and whether they had an engrained hedging policy to mitigate against unfavourable movements in the foreign exchange market. Also, they sought to find out, in instances where there was a hedging policy in place, the individual responsible for implementing the policy. The findings are summarised as follows:

The findings in Table 4.3 show that 71% of the respondents indicated that their finance departments were responsible for dealing with foreign exchange and risk management whereas 29% indicate that it is the responsibility of the treasury department.

This therefore meant that both the finance and treasury departments were the main departments that dealt with foreign exchange related matters for manufacturing firms listed on the NSE. Hence, they were knowledgeable about the various techniques the company implemented to minimize the impact of risks within the market.

Table 4.3 Departments Dealing With Foreign Exchange Management

<table>
<thead>
<tr>
<th>Departments</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>71%</td>
</tr>
<tr>
<td>Treasury</td>
<td>29%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4.3.2 Foreign Exchange Policy

The study sought to find our which companies had a well-documented Foreign Exchange Policy. The findings in Figure 4.1 show that 71% of the respondents indicated that their companies had a well-documented foreign exchange policy and 29% of the respondents indicated that they were not aware as to whether the firm had such a policy in place.

It can therefore be deduced from the research above that majority of the manufacturing and allied firms listed on the NSE had a well-documented Foreign Exchange policy in
place. Thus, they were aware of the risks involved and were taking measures to safeguard against an adverse impact on their financial performance.

**Figure 4.1: Well Documented Foreign Exchange Policy Chart**

4.3.3 Hedging Policy

On whether the listed manufacturing companies had a hedging policy, from the findings shown in Figure 4.5, 72% of the respondents indicated that their companies had a hedging policy, 14% indicated that their company had no hedging policy and 14% of the respondents did not know whether there was a hedging policy in place.

This shows that a majority of manufacturing and allied companies listed on the NSE have a hedging policy in place to reduce the risk of currency fluctuation and minimise its effect on their financial performance.

**Figure 4.2: Hedging Policy Chart**
4.3.4 Employee responsible for implementing the Hedging Policy

On who in the company was responsible for implementing the hedging policy, the study revealed that 29% of the respondents indicated that it was the Treasury Manager responsibility, 28% of the respondents indicated that it was the Chief Financial Officer (CFO), 14% indicated that it was the Senior Accountant’s responsibility and 29% stated that they did not know who was responsible for that.

Results from table 4.4 indicated that those who were in charge of implementing the hedging policy in listed manufacturing and allied companies were mainly the Treasury Managers and CFOs.

Table 4.4 Implementing the Hedging Policy

<table>
<thead>
<tr>
<th>Hedging Policy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFO's</td>
<td>28%</td>
</tr>
<tr>
<td>Senior Accountant</td>
<td>14%</td>
</tr>
<tr>
<td>Treasury Manager</td>
<td>29%</td>
</tr>
<tr>
<td>I don’t know</td>
<td>29%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.3.5 Foreign Exchange Rate Exposure the Company is hedging against

On what percentage the company was hedging against, 43%, a majority of the respondents were unaware of how much risk the company hedged against in the course of their operations.

However, 29% of the respondents were confident that their company hedged against 20% to 40% of their foreign exchange risk, 14% of them indicated that the company hedged between 0% and 20% and the final 14% indicated that the company hedged 40% to 60%.
4.3.6 Hedging Techniques

The study also sought to establish the hedging techniques that the companies had put in place. The respondents were requested to rank how various internal and external techniques were effective in meeting the company’s needs as it hedged against the changes in the foreign exchange rates.

The study established that the respondents believed that the most effective way, at 71%, of hedging against currency movements was invoicing or being invoiced in foreign currency. The respondents also indicated that maintaining foreign currency reserves at any point in time would help reduce the risk of currency movements on the daily operations of the business, with a confident rate of 57% from the respondents. The respondents also appreciated that netting was the third most effective way, at 43%, of reducing the risk of currency fluctuation from affecting the operations of the company.

Key to note also is that the respondents indicated that none of the companies they worked in used leads or lags in their financial operations to cushion their companies against an adverse movement in currency value. This therefore indicated that manufacturing and allied companies listed on the NSE believed that the most effective internal techniques they had in place in curtailing the adverse impact of currency depreciation was invoicing
or being invoiced in foreign currency, maintaining foreign currency reserves and continuously implementing a netting system.

Figure 4.4: Internal Techniques Effectiveness

The study also sought to find out which measures or techniques that the departments dealing with foreign exchange have to put in place as they seek to carry out their businesses in the market. The respondents indicated that the two most important methods they used to mitigate against currency movements are foreign currency spot agreements and forward agreements, both at 71.4%. This therefore meant that the companies had two best alternatives they selected from in the course of their business.

They could get into the FX spot market whenever the need to pay or receive foreign currency arose. This prevented them from holding binding agreements and ensured that the company operated within the prevailing economic conditions. The respondents had the same confidence in the forward agreements that they got into with their respective financial institutions to purchase or sell their foreign currency, at 71.4%. The respondents felt that swap agreements had 28.6% effectiveness within the operations of the company.
4.4 Effects of Currency Depreciation on Import and Production Costs

4.4.1 Annual Purchases

The study sought to find out the company’s annual purchases and also establish how much of the purchases had been imported over the 10 year period. This information would help quantify to what extent the currency depreciation had on the total costs of the organisation over the years and whether this had much impact on their costs.

The study established that the firm with the least purchases had purchases ranging from between KES 50 million and KES 150 million, representing 15% of the manufacturing and allied companies listed on the NSE. However, key to note was that 57% of the listed manufacturing and allied companies had annual purchases of between KES 1.5 billion to KES 50 billion. This therefore meant that they had monthly turnover purchases of at least KES 125 million.
4.4.2 Annual Import Purchases

On what percent of purchases the manufacturing and allied companies imported, the study established that 29% of the firms imported between either between 10% to 20%, 20% to 40% or 60% to 80%. This therefore showed that manufacturing companies imported at least 10% of their purchases up to at most 80% of the purchases.

Hence, import purchases contributed considerably to the company annual purchases indicating that the companies were still exposed to adverse currency movements. Indicatively, the purchases that are imported ranged averagely between KES 5 million and KES 40 billion. This formed a very big percentile of purchases if you looked at the manufacturing and allied industry as a whole, in which companies relied on imported inputs for their production.
East African Breweries Limited was the largest importers amongst all the listed manufacturing and allied companies. It imported some of the raw materials it used in the production process. Furthermore, it imported various brands of international drinks including liquors and distributed them within the market. Currency depreciation made the importation of such drinks more expensive and this cost was passed on to the consumer who bore the brunt of the local currency depreciation. In addition, Carbacid Investments Limited imported its Liquid Petroleum Gas (LPG) gas from international markets, mainly Bahrain, which it paid for in the USD. Therefore, when the local currency depreciated, this made importation of the gas more costly and therefore this was reflected in the prices that were reviewed every mid-month by the Energy Regulatory Commission (ERC).

From the findings, the average growth of import purchases between 2004 and 2013 was 26.14%. The standard deviation was 8.355%. The distribution was negatively skewed hence indicating that the mean was less than the median and a graphical representation indicated an asymmetrical distribution with a long tail to the left. Since the kurtosis was negative, the average annual change in imports had a flat distribution.
4.4.3 Invoice Currencies

By virtue of Table 4.6, the study established that a majority of the firms were invoiced in Kenya Shillings (KES) at 57.10%, followed closely by the United States Dollar at 57.10%, which was the second most preferred currency the suppliers used to invoice the listed manufacturing and allied firms. The British Pound (GBP) was the third most commonly used invoicing currency at 42.9% followed by the EUR at 42.90%. The Japanese Yen was not used by any of the suppliers of the manufacturing and allied companies; hence it ranked fifth with 0% of the respondents indicating that they rarely used the currency. The study also sought to determine the extent of usage of foreign exchange currencies on booking their purchases and accounts payables and the impacts that these have on future payments to the foreign suppliers who have invoiced them in foreign currency.

Table 4.6: Invoice Currencies

<table>
<thead>
<tr>
<th>Currencies</th>
<th>Percent</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>KES</td>
<td>57.10%</td>
<td>1</td>
</tr>
<tr>
<td>USD</td>
<td>57.10%</td>
<td>2</td>
</tr>
<tr>
<td>EUR</td>
<td>42.90%</td>
<td>4</td>
</tr>
<tr>
<td>GBP</td>
<td>42.90%</td>
<td>3</td>
</tr>
<tr>
<td>JPY</td>
<td>0%</td>
<td>5</td>
</tr>
</tbody>
</table>

4.4.4 Purchases and Accounts Payable Currencies

From the findings of currencies used in recording the purchases and accounts payable as depicted by Table 4.7, the study revealed that manufacturing and allied firms listed in the NSE used different currencies to record purchases and accounts payable in their books. The Kenya Shilling remained the most frequently used currency at 57.10% and ranked the first as the most preferred currency. The United States Dollar (USD) was the second most
commonly used currency in recording purchases and accounts payable at 57.10%. The British Pound (GBP) remained the third most commonly used currency in recording purchases and accounts payable within the company’s books.

Since the Japanese Yen was not used by any of the suppliers of the manufacturing and allied companies; hence it ranked fifth with 100% of the respondents indicating that they rarely used the currency to record their purchases and accounts payable. The Kenya shilling was the leading currency in which the companies recorded their purchases and accounts receivables since the companies were incorporated and registered in Kenya and were therefore meant to report their financial performance in the local currency and pay the taxes and other levies in the same currency. Reporting in the other currencies was however a requirement from where the parent companies were incorporated since they had to report group performance and profits had to be repatriated back to the parent countries.

Table 4.7: Purchases and Accounts Payable Currencies

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>KES</td>
<td>57.10%</td>
<td>1</td>
</tr>
<tr>
<td>USD</td>
<td>57.10%</td>
<td>2</td>
</tr>
<tr>
<td>EUR</td>
<td>42.90%</td>
<td>4</td>
</tr>
<tr>
<td>GBP</td>
<td>42.90%</td>
<td>3</td>
</tr>
<tr>
<td>JPY</td>
<td>0%</td>
<td>5</td>
</tr>
</tbody>
</table>

4.5 Effects of Currency Depreciation on Export Sales

4.5.1 Annual Sales

The study sought to establish the company’s annual sales that it generated from the business and quantify the proportion it exported to other markets over a period of 10 years. This information helped quantify to what extent the currency depreciation had on the total sales of the organisation over the years and whether this has had much impact on their export sales.

From the findings in Figure 4.8, the study established that 57% of the companies have total annual sales of between KES 1.5 billion to KES 50 billion, 15% of the companies had annual sales of KES 50 million to KES 150 million, 14% of them had sales between
150 million to KES 500 million and a further 14% had sales of between KES 500 million to KES 1.5 billion. The study established that most listed manufacturing and allied companies had annual turnovers of between KES 1.5 billion to KES 50 billion.

Figure 4.8: Annual Total Sales

4.5.2 Exports Sales

On what percent of total sales the company exports, the study established that 43% of the listed companies export between 20% to 40% of their annual sales; 29% export between 0% and 20% and another 29% export between 40% and 60% of their annual turnover.

Figure 4.9: Exports as a Percentage of Sales

The study established that majority of listed manufacturing and allied companies export more than 20% of their annual turnover. On average, this therefore meant that some listed manufacturing companies exported goods averagely worth between KES 10 million and KES 30 billion. This qualifies as a handsome proportion of their turnover and any adverse
effect in currency valuation will have an adverse effect on aggregate sales of the company.

From the findings, the average growth of export purchases between 2004 and 2013 was 16.86%. The standard deviation is 14.029%. The distribution was positively skewed hence indicated that the mean is greater than the median and a graphical representation would indicate an asymmetrical distribution with a long tail to the right. Since the kurtosis was positive, the average annual change in exports had a peaked distribution.

Descriptive Statistics

Table 4.8: Average change in exports between 2004 and 2013

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td>16.86</td>
<td>14.09</td>
<td>196.81</td>
<td>.726</td>
<td>.794</td>
</tr>
</tbody>
</table>

4.5.3 Export Invoice Currencies

The study had sought to establish the currencies that listed manufacturing companies used to invoice their foreign buyers. By virtue of Table 4.9, the study established that the most frequently used currency to invoice its foreign clients is the United States Dollar (USD) at 83.3%. The Kenya Shilling (KES) was the second most frequently used currency when the companies invoiced their foreign clients at 50%. The British Pound (GBP) was less frequently used by listed and manufacturing companies to invoice its clients at 50%. The Euro (EUR) was often used by the listed manufacturing companies at 66.70%. All the listed manufacturing companies rarely invoiced their clients in the Japanese Yen (JPY).

The study therefore concluded that majority of manufacturing firms listed on the NSE invoice their foreign clients in the USD since it is a global trading currency acceptable everywhere in the world.

Furthermore, most international clients requested to be given quotes in the USD excluding those in the Europe, where the EUR and GBP are most common and main currencies within the region. Unilever is an international company with a global footprint. However, the Kenyan market serves as the hub for production for its East African business. Therefore, the company exported products from its manufacturing plants to

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other markets like Uganda and Tanzania and invoice them using the USD. Furthermore, Eveready also exported to the regional markets including Uganda, Tanzania, Rwanda and Burundi. British American Tobacco exports specific premium brands to other markets, including international markets like Europe. Thus its major invoicing currencies are the EUR and GBP.

Table 4.9: Ranking of Export Invoice Currencies

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>KES</td>
<td>50.0%</td>
<td>2</td>
</tr>
<tr>
<td>USD</td>
<td>83.3%</td>
<td>1</td>
</tr>
<tr>
<td>EUR</td>
<td>66.7%</td>
<td>4</td>
</tr>
<tr>
<td>GBP</td>
<td>50.0%</td>
<td>3</td>
</tr>
<tr>
<td>JPY</td>
<td>0%</td>
<td>5</td>
</tr>
</tbody>
</table>

4.5.4 Sales and Account Receivables

The study sought to establish which currency the sales and accounts receivables are recorded in the books of the listed manufacturing and allied companies. The most frequently used currency was the Kenya Shilling (KES) by 57.1% of the listed companies, whereas the United States Dollar (USD) is the second most frequently used and was utilized by 42.9% of the listed manufacturing and allied companies. The British Pound (GBP) was less frequently used and was utilized by 57.1% of the companies. The Euro (EUR) was often used by manufacturing and allied companies by 57.1% of the companies. However, the Japanese Yen (JPY) was rarely used by companies at 0%.

Therefore, the most frequently used currency in recording of sales and accounts receivable is the Kenya Shillings.

Table 4.10: Table of Sales and Account Receivables

<table>
<thead>
<tr>
<th></th>
<th>Percent</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>KES</td>
<td>57.10%</td>
<td>1</td>
</tr>
<tr>
<td>USD</td>
<td>42.90%</td>
<td>2</td>
</tr>
<tr>
<td>EUR</td>
<td>57.10%</td>
<td>4</td>
</tr>
<tr>
<td>GBP</td>
<td>57.10%</td>
<td>3</td>
</tr>
<tr>
<td>JPY</td>
<td>0%</td>
<td>5</td>
</tr>
</tbody>
</table>

49
As indicated before, the reason for this was mainly because of the local government requirements since the companies were incorporated and licensed locally and also because of the obligations payable to the government in form of taxes and those payable to other statutory bodies.

4.6 Effects of Currency Depreciation on Company Competitiveness

The study sought to seek the opinion of the respective respondents as to whether they feel that currency depreciation has had an effect on the company competitiveness within the industry over the last 10 years, from 2004 to 2013.

4.6.1 Effect of Currency Depreciation on Industry Competitiveness

On whether currency depreciation had an effect on the company competitiveness within the manufacturing and allied industries listed on the NSE, 71.4% of the respondents were of the opinion that it had affected their competitiveness. 14.3% of the respondents also indicated that it had not had any impact on their competitiveness whereas the last 14.3% stated that they were not aware whether the currency depreciation had any impact on their competitiveness within the industry.

![Figure 4.10: Effect of Currency Depreciation on Industry Competitiveness](image)

4.6.2 Effect of Currency Depreciation on Company Performance

On how currency depreciation had affected the performance of the company over the last 10 years, the study established that 57.1% of the respondents felt that currency depreciation had resulted in increased operating costs for the companies over the last 10
years. 42.9% of the respondents also felt that currency depreciation has resulted into reduced product price competitiveness since they felt that prices had become more homogeneous over the years. 28.6% of the respondents believed that currency depreciation had stifled growth prospects into within markets due to the unpredictability of currency variation which then had an impact on the cost of doing business.

Further to that, 14.3% also agreed that the currency depreciation had encouraged retraction from other markets due to unpredictability of currency movements. 14.3% indicated that they were not away on how currency depreciation had affected the performance of the companies. Hence, currency depreciation had impacted listed manufacturing and allied companies by increasing the costs of doing business, reduced the product price competitiveness, stifled the growth prospects of a company and encouraged retraction from other markets.

![Figure 4.1](image.jpg)

**Figure 4.1**: Effect of Currency Depreciation on Company Performance

### 4.6.3 Impact of Hedging on Company Competitiveness and Performance

The study therefore went ahead to find out whether hedging techniques implemented by the company have any impact on the companies competitiveness within the industry and the overall company performance.

57% of the respondents agreed that the hedging techniques had been put in place by their companies had an effect of the company’s competitiveness within the industry and
4.6.4 Effect of hedging on company competitiveness and performance

On what impact the hedging techniques have on the company competitiveness and performance, 57.1% of the respondents indicated that the hedging techniques implemented have resulted in reduced costs. In addition, 57.1% of the respondents indicated that this has also led to improved growth prospects. 42.9% do not know whether there is any effect of hedging on the company performance and competitiveness. 28.6% of the respondents indicate that hedging has improved the industry and a further 28.6% of respondents have stated that this has promoted expansion into other markets.

Figure 4.12: Impact of Hedging on Company Competitiveness and Performance

Figure 4.13: Effect of Hedging on Company Competitiveness and Performance
4.7 Regression Analysis

The following are the results of regression analysis.

4.7.1 Model Summary

Analysis in Table 4.11 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables). R Square equals 0.843, that is, profitability; Cost of production, Export sales and Competitiveness, explains 84.3% of observed change in financial performance. The P-value of 0.000 (Less than 0.05) implies that the regression model is significant at the 95% significance level.

Table 4.11: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.918 (a)</td>
<td>.843</td>
<td>.805</td>
<td>.51038</td>
<td>.843</td>
<td>1.242</td>
<td>4</td>
<td>.000</td>
</tr>
</tbody>
</table>

Predictors: (Constant), Profitability; Cost of production, Export sales and Competitiveness, Dependent Variable: Financial Performance

4.7.2 Analysis of Variance (ANOVA)

The researcher sought to compare means using analysis of variance. ANOVA findings (P-value of 0.00) in Table 4.12 show that there is correlation between the predictors' variables (Profitability; Cost of production, Export sales and Competitiveness) and the dependent variable (financial performance).

Table 4.12: Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.852</td>
<td>.213</td>
<td>1.242</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>20.35</td>
<td>.171</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22.64</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predictors: (Constant), Profitability; Cost of production, Export sales and Competitiveness, Dependent Variable: Financial performance
4.7.3 Regression Coefficients

The table shows the results of the regression coefficients required to form the multiple regression models. From the regression results in table below, the multiple linear regression model finally appear as

\[ Y = 0.903 + 0.058X_1 + 0.056X_2 + 0.0498X_3 + 0.047X_4 + 0.123 \]

Where:

Y = Financial performance
X₁ = Profitability
X₂ = Cost of production
X₃ = Export sales
X₄ = Competitiveness

The multiple linear regression models indicate that all the independent variables have positive coefficient. The regression results above reveal that there is a positive relationship between dependent variable (financial performance) and independent variables (Profitability, Cost of production, Export sales, Competitiveness). From the findings, one unit change in profitability results in 0.058 units change in financial performance. One unit change in Profitability, Cost of production, Export sales and Competitiveness causes 0.058, 0.056, 0.0498 and 0.047 changes in Financial Performance of manufacturing and allied companies.

The t-test helps in determining the relative importance of each variable in the model. As a guide regarding useful predictors, the researcher looked for t values well below -0.5 or above +0.5. In this case, the most important variable was Profitability followed by Competitiveness, Export sales, and Cost of production. The predictor variable of Profitability was significant because the p-value was below 0.05, therefore a change in profitability would have a greater impact on financial performance than the other variables.
### Table 4.13: Regression coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>0.903</td>
<td>0.123</td>
</tr>
<tr>
<td>Profitability</td>
<td>0.058</td>
<td>0.028</td>
</tr>
<tr>
<td>Cost of production</td>
<td>0.056</td>
<td>0.027</td>
</tr>
<tr>
<td>Export sales</td>
<td>0.0498</td>
<td>0.030</td>
</tr>
<tr>
<td>Competitiveness</td>
<td>0.047</td>
<td>0.028</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Financial performance

### 4.8 Chapter Summary

This chapter clearly gives the findings after data was collected and analyzed. There were questionnaires issued to the respondents, which contained both structured and semi-structured to gather information on the study. The findings from these have been captured under the respective research questions analyzed. Chapter five will give the summary, conclusion, discussion and findings of the study, clearly articulating for each research question and also provides a basis for further studies on the subject matter.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study identified the listed manufacturing and allied companies in the Nairobi Securities Exchange as the subject of the study. In November 2014, questionnaires were administered to 7 of the listed 9 listed firms whose headquarters was in Nairobi or they were reachable via email. The respondents were informed that their responses to the questionnaires were strictly confidential and their identities will not be revealed. The following discussions, conclusions and recommendations were made from the data that was collected and analysed. The researcher intended to establish the adverse effects of currency depreciation on the manufacturing and allied companies listed on the Nairobi Securities Exchange. The questions and responses were based solely on the objectives of the study.

5.2 Summary

The purpose of the study was to establish the impact that the currency depreciation had on the financial performance of listed manufacturing and allied companies listed on the Nairobi Securities Exchange. Over the period of the study, between 2004 and 2013, we saw the value of the Kenya Shilling depreciate consistently over time. Most manufacturing and allied companies used imported materials in the course of production or imported plant and machinery that facilitated the production on a day to day basis. Furthermore, most of the listed manufacturing and allied companies exported their products into other regional and international markets. Therefore, it was inevitable that these companies transacted in various pairs of foreign currency in the course of business. The study had been guided by various research questions that helped achieve the desired results. The research questions of the study comprised the effect that currency depreciation had on the profitability of listed manufacturing and allied companies; the effect that currency depreciation had on the cost of production of listed manufacturing and allied companies; the effect that currency depreciation had on the export sales to
clients of listed manufacturing and allied companies and ultimately, the effect that currency depreciation had on the competitiveness of the listed manufacturing and allied companies.

Each research question focused on individually and various factors affecting each of them had been taken into consideration during the study. The research methodology involved extensive research during which the data collected, analyzed and interpreted was defined both theoretically and in numeric form to establish the effect of currency depreciation. The questionnaires used contained both structured and semi-structured questions to examine the effect that currency depreciation had on the financial performance of listed manufacturing and allied companies. In the data analysis, descriptive statistics and graphical representations of data were used to analyze the quantitative data. In the quantitative information, the mean, median, mode and other data analysis mechanisms were utilized in order to what the respondents’ opinions on how currency depreciation has affected the financial performance on manufacturing and allied companies listed on the NSE.

On what the effect currency depreciation had on profitability of listed manufacturing and allied companies, the general findings were that most were significantly exposed to foreign exchange risk emanating from trading in all major currencies on the international markets. However, these companies were yet to implement some of the required risk management standards and procedures that could help minimize the risk. In addition, the study also noted that there was an absence of training when it came to the management of foreign exchange risk. A significant percentage of the employees were not aware of any risk management procedures they had in place within their company to cushion them against foreign exchange risk. This therefore showed that in these dynamic times, we need to continuously anticipate, prepare and manage such risk. Currency depreciation affected the cost to a large extent especially when the materials used in manufacturing were sourced abroad, in addition to the assets the company acquired for the processes. However, some companies had put in place some measures to reduce that risk including maintaining foreign currency balance, use of forex spots, forward contracts and currency swaps. Furthermore, the exposure arising from export sales lied at between 20% and 40%
and that could be reduced by invoicing in foreign currency, getting into forward contracts and the use of currency swaps.

On what the effect currency depreciation had on cost of production of listed manufacturing and allied companies, the study established that a majority of listed manufacturing and allied companies had total purchases of between KES 1.5 billion to KES 50 billion. Doigie, Griffin and Williamson (2002) found that large firms exhibited more foreign exchange exposure than smaller firms after controlling for the level of foreign activity. From the findings, we found out whether the imported purchases quantity has been influenced by currency changes and to what extent they had been influenced. The study also sought to establish which currencies the listed manufacturing and allied companies were invoiced by their suppliers. They had an option of the local currency, the Kenya Shilling, plus four other major currencies which include the United States Dollar (USD), the British Pound (GBP), the Euro (EUR) and the Japanese Yen (JPY). In addition, it sought to find out the currencies that the companies use to book purchases and accounts payables in the financial accounts of the company.

Manufacturing and allied companies listed on the NSE mostly invoiced their export clients in the United Stated Dollar and Kenya Shilling. Moreover, the study further revealed that the listed manufacturing and allied firms recorded their sales and accounts receivable in various currencies, the most frequent being the Kenya Shilling, at 57.1%. The United States Dollar was the second most frequently used currency at 42.9%. The British Pound was frequently used by 57.1% of the respondent’s companies whereas the Euro was often used by 57.10%. The Japanese Yen was rarely used to record sales and accounts receivable by any of the respondent’s companies. Therefore, manufacturing and allied firms listed on the NSE recorded their sales and accounts receivable mostly in the Kenya Shillings and the United States Dollar. From the findings, the United States Dollar was the most frequently used currency to invoice their exports at 83.3%. The Kenya Shilling was the second most frequently used currency at 50% of the respondent’s companies. The British Pound was frequently used by 50% of the respondents and the Euro was often used by the companies to invoice its clients at 66.7%. The Japanese Yen was rarely used by listed manufacturing and allied companies to invoice their export clients.
On what the effect currency depreciation had on competitiveness of listed manufacturing and allied companies, 71.4% of the respondents felt that currency depreciation over the last 10 years had an effect on the company competitiveness within the industry. Only 14.3% felt that there had been no effect on company competitiveness within the industry whereas the remaining 14.3% were not aware of any changes that had transpired as a result of currency depreciation. The findings therefore stated that the currency depreciation had an effect on company competitiveness within the industries that the listed manufacturing and allied companies operated in. The study also found that there were various impacts that currency depreciation had on company performance. 57.1% indicated that the depreciation had resulted in increased costs in doing business within the industry as a result of the rise of the prices and inputs imported for company use. Furthermore, 42.9% of the respondent’s reiterated that currency depreciation had a major impact on the reduction in the price competitiveness of the companies’ products.

5.3 Discussion

5.3.1 The Effect of Currency Depreciation on the Profitability of Listed Manufacturing and Allied Companies

The study sought to establish the departments that deal with foreign exchange, whether there is a well documented foreign exchange policy, whether the company had a hedging policy in place and who was responsible for implementing the hedging policy in the respondent’s companies. Furthermore, it sought to establish the rate of foreign exchange exposure that the company is hedging and it reviewed the effectiveness of the various hedging techniques that the companies chose to implement within the course of business.

According to Bodnar and Wong (2005), just like themselves, those tasked with the responsibility of foreign exchange management should have a clear background in management of modules on effective risk management. Furthermore, they reiterate that management of foreign exchange risk, like any other risk management, should be handled by those in strategic levels within a company. From the findings of the departments that dealt with foreign exchange and related subjects in the manufacturing and allied firms listed on the Nairobi Securities Exchange, the study established that the treasury and finance departments were responsible for dealing with foreign exchange related matters in
the respondent's companies, with 71% of the respondent's companies had the Finance department deal with it. This therefore showed that most listed manufacturing and allied companies had a finance department and not a treasury department which took care of the foreign exchange exposure of the company. This is in line with Bradley and Mole (2002) who believed that foreign exchange was a finance function which affected the financial position of a firm. The aim of exchange rate management was limiting volatile forex exposure on a firm's performance. Hence, they were responsible for ensuring that the risk of currency was minimized and that the company profitability was not compromised because of failing to hedge against that risk.

On whether the companies had well documented foreign exchange policies, the study established that 71% of the respondents indicated that their companies had such a policy in place. This therefore meant that a majority of the manufacturing and allied companies listed on the NSE had a well documented foreign exchange policy. Martin and Maurer (2003) found that the estimated number of firms with significant foreign exchange exposure that go unmonitored was higher in longer time horizons. This went contrary to the findings of the study that established that most had well documented foreign exchange policies, and increasingly so due to the dynamic nature of risks. Furthermore, the study sort to find out whether the firms had a hedging policy and found out that 71% of the respondents indicated that they had such a policy in place. Therefore, the study had established the majority of manufacturing and allied firms listed on the NSE had a hedging policy in place to mitigate the uncertain variations in the exchange rates. This showed the importance that the companies had placed on putting measures in order to minimize the effect of currency depreciation on the profitability of the company. Key to note was that the multinational companies listed on the NSE, including Unilever and British American Tobacco were heavily dependent on foreign currency in running their operations and in the reporting of their financial performance to their parent companies.

On who was responsible for implementing the hedging policy in the organisation, the study has established that 29% of the respondents indicated that it was the Treasury Manager; another 29% indicated it is the Chief Financial Officer (CFO) and 14% of the respondents indicated it was the senior accountant. Therefore, most manufacturing and allied companies listed on the NSE had their foreign exchange related matters handled by
either the Treasury manager, the CFO or the Senior Accountants. Dash (2012) explains from his experience in Japan that those in management level are best suited to handle foreign exchange risk which requires speedy decision making during times of uncertainty and volatility. These individuals have the expertise and experience required to make decisions that will safeguard and maximise the shareholders returns and ensure that the risk is minimised to acceptable levels.

On what the percentage of the foreign exchange rate exposures the companies were exposed to, a majority of respondents had between 20% - 40%. This meant that manufacturing and allied companies listed on the NSE had a foreign exchange rate exposure of between 20% - 40%. Hence, major efforts should be put in place by the companies to ensure that the exposure is minimised and effective techniques put in place for the same.

The study also sought to establish the internal and external techniques the companies used to hedge against risk and found that most manufacturing and allied had put in place various techniques to do so. The most used internal methods of hedging against currency risk were invoicing in foreign currency and maintaining foreign currency accounts. Some of the respondents indicated netting as a technique. This meant that a majority of manufacturing companies listed on the NSE invoiced their clients or were invoiced in foreign currency in addition to maintaining foreign currency reserves for collection and payments. Kumar (2004) indicates that most companies have a mandatory policy to hedge against currency fluctuation, and utilisation of netting and forward helps reduce the risk of currency fluctuation. The most frequently used external techniques to hedge against currency depreciation were the use of Forward agreements and getting into Forex Spot contracts. Very few respondents made reference to the use to swap agreements. Therefore, a majority of listed manufacturing and allied companies got into Forex Spot contracts and Forward agreements in the course of business to reduce the effects of currency fluctuations.
5.3.2 The Effect of Currency Depreciation on the Cost of Production of Listed Manufacturing and Allied Companies

The study sought to establish the total annual purchases that the company made and what percentage of that was imported. This would therefore help quantify how much of their purchases are exposed to currency fluctuations. Furthermore, the study went forward to establish what the average change in the import purchases had been over the 10 years under the study. From the findings, we found out whether the imported purchases quantity had been influenced by currency changes and to what extent they had been influenced. The study also sought to establish which currencies the listed manufacturing and allied companies were invoiced by their suppliers. They had an option of the local currency, the Kenya Shilling, plus four other major currencies which include the United States Dollar (USD), the British Pound (GBP), the Euro (EUR) and the Japanese Yen (JPY). In addition, it sought to find out the currencies that the companies use to book purchases and accounts payables in the financial accounts of the company. According to Shapiro (2003) a company can have an exposure in more than one currency, which is the case mostly in the developed world.

From the findings of the total purchases the companies made on an annual basis, the study established that a majority of listed manufacturing and allied companies had total purchases of between KES 1.5 billion to KES 50 billion. Doighe, Griffin and Williamson (2002) find that large firms exhibit more foreign exchange exposure than smaller firms after controlling for the level of foreign activity.

Furthermore, the study set to find out how much of the companies purchases was imported. The findings revealed that most manufacturing and allied companies listed on the NSE imported between 10% and 40% of their total purchases in any given year. The study also sought to find out the average annual growth of the imports of the companies over the last 10 years. Mean annual growth of imports was 26.14%, with a standard deviation of 8.355%. This therefore meant that the listed manufacturing and allied companies had greatly grown their imports over the period under study to cater for growing output and demand. As the imports had grown within the 10 year period, some of the major currencies like the USD had strengthened by 6.7%, the EUR had strengthened by 7.8% over the same period and the JPY has strengthened by 13.9%
against the KES. Therefore, this implied that the value of the imports had increased over time with the increase in the volumes and also an increase in the unit price of the goods. As McKinnon and Schnabl (2004) have stated, fluctuations in the exchange rate level constitute a risk for the competitiveness of enterprises and companies which have been forced to absorb shocks during times of drastic volatility. This is essentially what the manufacturing and allied companies had been subjected during the changing economic times.

On the currencies used by suppliers to invoice the manufacturing and allied firms listed on the Nairobi Securities Exchange, the study found that the most frequently used currency is the Kenya Shilling at 57.10%, the second most frequently used currency is the United States Dollar at 57.10%. The British Pound is also frequently used at 42.9% and the Euro is often used at 42.9%. The Japanese Yen is rarely used to invoice listed manufacturing and allied companies. Therefore, manufacturing and allied companies listed on the NSE are mostly invoiced in the Kenya Shilling and United Stated Dollar.

On the currencies used to book purchases and accounts payables, the study established that the most frequently used currency was the Kenya Shilling at 57.10%, whereas the second most frequently used currency was the United Sates Dollar at 57.10%. The British Pound was frequently used at 42.9% whereas the Euro was often used at 42.9%. The Japanese Yen was rarely used to record purchases and accounts payable by listed manufacturing and allied companies. Thus, manufacturing and allied companies listed on the NSE mostly recorded their purchases and accounts payables in the Kenya Shilling and United Stated Dollar since majority of them were invoiced in the USD since it was a global trading currency acceptable everywhere in the world. In addition, since some of them sourced for their products locally, they paid for the purchases in KES. Furthermore, most international suppliers requested for payment in the USD excluding those in the Europe, where the EUR and GBP were most common and main currencies within the region. This had come at a time when there had been structural and institutional indicators in the financial market seeking to promote an environment that is conducive for trade (Ndikumana, 2007).
5.3.3 The Effect of Currency Depreciation on Export Sales to Clients of Listed Manufacturing and Allied Companies

The study sought to establish the total annual sales that the company made and what percentage of that was exported. This would therefore help quantify how much of their sales are exposed to currency fluctuations. Furthermore, the study went forward to find out what the average change in the export sales has been over the 10 years under the study. From the findings, we found out whether the exported sales quantity had been influenced by currency changes and to what extent they had been influenced. The study also sought to establish which currencies the listed manufacturing and allied companies used to invoice their foreign clients. They had an option of the local currency, the Kenya Shilling, plus four other major currencies which included the United States Dollar (USD), the British Pound (GBP), the Euro (EUR) and the Japanese Yen (JPY). In addition, it sought to find out the currencies that the companies used to book sales and accounts receivables in the financial accounts of the company.

The study also sought to determine the total annual sales of the respondent's companies. From the findings, the study established that most of the manufacturing and allied companies listed on the NSE had sales of between KES 1.5 billion and KES 50 billion. Furthermore, the study wanted to establish the proportion of the sales that were exported by the respondent's companies. The findings of the study showed that majority of the firms, which was 43% of the firms, exported between 20% and 40% of their output. 29% of the companies exported between 0% to 20% while another 29% of the companies exported between 40% and 60% of their product output. Therefore, a majority of listed manufacturing and allied companies exported mostly between 20% and 40% of their output. On the annual average percentage change in the companies exported sales over the last 10 years, the findings of the study were that the exports had grown at a mean rate of 16.86% with a standard deviation of 14.029%. Lee (2010) has shown that with the ever growing international trade, firms become more susceptible to foreign exchange risk therefore; those with exceptional risk management frameworks understand this and continue to maximize shareholder value for their owners.

The study also sought to establish the currency that the respondent's firms invoice their exports. From the findings, the United States Dollar was the most frequently used
currency to invoice their exports at 83.3%. The Kenya Shilling was the second most frequently used currency at 50% of the respondent's companies. The British Pound was frequently used by 50% of the respondents and the Euro was often used by the companies to invoice their clients at 66.7%. The Japanese Yen was rarely used by listed manufacturing and allied companies to invoice their export clients. Therefore, manufacturing and allied companies listed on the NSE mostly invoiced their export clients in the United States Dollar and Kenya Shilling. Moreover, the study further revealed that the listed manufacturing and allied firms recorded their sales and accounts receivable in various currencies, the most frequent being the Kenya Shilling, at 57.1%. The United States Dollar was the second most frequently used currency at 42.9%. The British Pound was frequently used by 57.1% of the respondent's companies whereas the Euro was often used by 57.10%. The Japanese Yen was rarely used to record sales and accounts receivable by any of the respondent's companies. Therefore, manufacturing and allied firms listed on the NSE recorded their sales and accounts receivable mostly in the Kenya Shillings and the United States Dollar. Forbes (2002) emphasize that the sales a company does in foreign currency are a key measure to their performance in this competitive environment.

The Kenya shilling was used mainly due to the statutory requirements whereas the USD was due to its nature as a global trading currency, and this is where the most risk lied since the currency had been volatile over the last 10 years, experiencing the greatest highs during the 2011 Financial Crisis where the USD/KES rate shot to over 100 signalling rapid depreciation of the local currency and its susceptibility to movements in the global financial markets.

5.3.4 The Effect of Currency Depreciation on the Competitiveness of the Listed Manufacturing and Allied Companies

The study sought to find out how currency depreciation over the period of the study had influenced the competitiveness of the companies. Furthermore, it went ahead to get the effects that this had on the manufacturing and allied companies listed on the NSE. In addition, the study wanted to find out whether the hedging techniques implemented by the different companies have had any impact on company competitiveness and performance. If went further to get the various effects that have arisen as a result of the hedging techniques put in place by the companies.
According to Reddy (2010), the long term performance of a company can be affected by various factors including inflation, interest rates, industry-related risks and currency volatility. From the findings of the study, 71.4% of the respondents felt that currency depreciation over the last 10 years had an effect on the company competitiveness within the industry. Only 14.3% felt that there had been no effect on company competitiveness within the industry whereas the remaining 14.3% were not aware of any changes that had transpired as a result of currency depreciation. The findings therefore stated that the currency depreciation had an effect on company competitiveness within the industries that the listed manufacturing and allied companies operated in.

The study also found that there were various impacts that currency depreciation has on company performance. 57.1% indicated that the depreciation had resulted in increased costs in doing business within the industry as a result of the rise of the prices and inputs imported for company use. Furthermore, 42.9% of the respondent’s reiterated that currency depreciation had a major impact on the reduction in the price competitiveness of the companies’ products. Hill (2004) indicates that there is an inverse relationship between product price and product competitiveness. This is a true reflection of the Kenyan context. 28.6% of the respondents further emphasized that currency depreciation had stifled the growth prospects of the companies within the industry due to high operating costs and a reduction in the profitability of the business making such prospects to seem unreachable. Frankel (2002) explains that investors in economies with the least volatility realize more value for their investments and therefore grow them over time. 14.3% of the respondents also stated that currency depreciation had caused the companies to withdraw from some markets since it was no longer profitable to operate in them. In addition, only 14.3% stated that they were not aware of any effect that currency depreciation had on industry operations in the last 10 years. Hence, manufacturing and allied companies listed on the NSE had experienced an increase in operating costs over time, experienced a reduction in competitiveness of the prices of its products, stifled growth prospects within the industry and retraction of products or subsidiaries from other markets.

From the findings of the study, 57% of the respondents believed that hedging techniques when put in place, had an impact on company competitiveness and company
performance. 43% of the respondents believed that hedging techniques had no resulting effect on company competitiveness and performance. Thus, majority of manufacturing and allied companies listed on the NSE believed that hedging techniques had a role to play in reducing the impact of currency depreciation. The findings further suggested that 57.1% of the respondents believed that the hedging techniques helped reduce costs incurred by the company, and another 57.1% of the respondents believed that these hedging techniques improved the growth prospects of the companies within the industry.

Bhagat and Bolton (2008) explained the growing importance of the hedging products and emphasized its importance in remaining globally competitive. 28.6% reiterated that the hedging techniques had improved product price competitiveness as companies were able to ride on the savings to adjust prices accordingly. A further 28.6% believed that hedging had enhanced expansion into other markets where the firm could reap increased benefits.

5.4 Conclusions

5.4.1 The Effect of Currency Depreciation on the financial performance of Listed Manufacturing and Allied Companies

The study found that the finance and treasury departments dealt with foreign exchange, and thus concluded that this was common practice in listed manufacturing and allied companies. The study also concluded that a majority of the manufacturing and allied companies listed on the NSE had a well foreign exchange policy which documented the rules and procedure governing how the company’s operations were run. The study also concluded that a majority of the listed manufacturing and allied companies had a hedging policy in place to help reduce the effects of currency fluctuations. Furthermore, the study also concluded that those responsible for implementing the hedging policy in the listed manufacturing and allied companies were the treasury managers or the senior accountants or the Chief Financial Officers (CFO).

The study also concluded that listed manufacturing and allied companies had foreign exchange rate exposures of between 20% and 40% . This was a high level of exposure should there be any drastic movements in foreign exchange markets as was witnessed during the Global Financial Crisis in 2009, where the Kenya Shilling lost ground to all
Major currencies, making the costs of imports unfathomable and hence escalating the cost of business.

5.4.2 The Effect of Currency Depreciation on the Cost of Production of Listed Manufacturing and Allied Companies

The study sought to find out the percentage of the company's total purchases that were imported. It established that a majority of listed manufacturing and allied companies import between 10% and 40% of their total purchases in any given year. The study therefore concluded that a significant proportion of the purchases of listed manufacturing and allied companies are susceptible to foreign exchange movements. Therefore these companies should be very careful when it comes to implementing techniques that will mitigate this. The study established the average mean change in the levels of imports over the period of the study is 26.14%, and this goes to show that there has been considerable change in the level of imports over the period of the study. With such change, the company experiences changes in their exposure over time and it is important that the companies come up with tools to reduce the impact of the risk.

5.4.3 The Effect of Currency Depreciation on Export Sales to Clients of Listed Manufacturing and Allied Companies

The study sought to find out the percentage of the company's total sales that were exported. It established that a majority of listed manufacturing and allied companies export between 20% and 40% of their total sales in any given year. The study therefore concluded that a significant proportion of the sales of listed manufacturing and allied companies were susceptible to foreign exchange movements since they were denominated in foreign currency. The study established the average mean change in the levels of export sales over the period of the study was 16.86%, and went to show that there had been considerable change in the level of exports over the period of the study as listed companies grew and increased their output and footprint.
5.4.4 The Effect of Currency Depreciation on the competitiveness of the listed manufacturing and allied companies

The study sought to establish what impact the currency depreciation had on the competitiveness of the listed manufacturing and allied companies. The study concluded that this indeed had an impact on company competitiveness and performance over the period of the study. The study concluded that the effects of this included, but were not limited to, an increase in operating costs over time, a reduction in competitiveness of the prices of the companies’ products, stifled growth prospects within the industry and caused the retraction of products or subsidiaries from other markets. The study also sought to establish whether the hedging techniques put in place by the company had an effect on their competitiveness within the industry. Most respondents agreed that it had a positive impact on company performance and competitiveness. The study concluded that indeed this is true and the effects of the hedging techniques included reduced costs incurred by the company, improved the growth prospects of the companies within the industry, improved product price competitiveness as companies are able to ride on the savings and adjust prices accordingly and enhanced expansion into other markets where the firm can reap increased benefits.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 The Effect of Currency Depreciation on the financial performance of Listed Manufacturing and Allied Companies

From the research findings of the study, we established that the practical relevance in foreign exchange management lied in the fact that, even though there were a number of techniques such as hedging, use of forward and swaps, amongst others available to manage foreign exchange risk in most developed countries, these measures tend to be rather too difficult and sophisticated to implement in developing countries like Kenya with less developed financial systems. Nonetheless, given the degree of exposure revealed in this study, corporate managers and investors in Kenya should endeavour to apply a combination of simple tools such as the use of forward contracts and swaps to supplement price adjustments and investment in foreign currency in order to minimize their exposure to exchange risk.
5.5.1.2 The Effect of Currency Depreciation on the Cost of Production of Listed Manufacturing and Allied Companies

The study recommended that companies should have been able to plan and budget early enough so that they could access hedging tools that may mitigate the effect of changing input prices. Manufacturing companies for instance are heavily reliant on oil; hence, they can get in oil forwards and futures and budget appropriately since this is a manufacturing prerequisite. Where companies are not in a position to get into such agreements, they should ensure that they pass on the price increases made possible through currency depreciation to the end product users in order to cater to the increased costs. If the demand for such products is price inelastic, that might be helpful to Balance of Trade.

5.5.1.3 The Effect of Currency Depreciation on Export Sales to Clients of Listed Manufacturing and Allied Companies

Currency depreciation may have a helpful effect on export sales that a small business makes to foreign firms, irrespective of the cash used. The study recommended that if one’s small business needs payment in foreign currency for exports, customers may buy more of your products since there is a psychological feel that no conversions are being made, hence the cost per unit is believed to be cheaper. The study further recommends that payments in such scenarios should be accepted in foreign currency.

5.5.1.4 The Effect of Currency Depreciation on the competitiveness of the listed manufacturing and allied companies

Currency depreciation’s influence on firm’s competitiveness comes in various forms. Since currency depreciation has an effect on the cost of production, the prices of end products may vary depending on the extent of the effect on the company’s manufacturing operations. Untamed currency depreciation may result in high production costs, thus resulting in high prices of homogeneous goods. If this is passed on to the end user and the user perceives it to be expensive relative to similar products in the market, they may shy away from it, thus making the company products less competitive in the market. Companies should endeavour to price goods appropriately in the market to avoid losing market share to competitors.
Furthermore, manufacturing and allied companies should avoid compromising on the quality of their products irrespective of the effect of currency depreciation on their operations. In the face of depreciation, the firms should seek alternatives within their reach including getting into forward arrangement or commodity futures to enable efficient operations and pricing of goods.

5.5.2 Recommendations for Further Research

Further study is required to quantify the extent to which currency depreciation has affected the manufacturing and allied industry. This study should be more comprehensive and should incorporate information from some of the management reports of the company and link them to the day to day movements in currency movements to establish trend. This information will be used for future studies and by companies to forecast and prepare budgets and in the planning process. It is imperative that listed manufacturing and allied companies and generally all companies in Kenya with and without international operations effectively manage their risk to minimize their exposure to foreign exchange risk. In an increasingly globalizing economy, their supplier, their clients and the domestic corporations are not insulated from the effects of international economic cycles, currency movements, and global competition.
REFERENCES


APPENDICES

APPENDIX 1: RESEARCH QUESTIONNAIRE

PART 1 – EMPLOYER DETAILS

1) Company Name .................................................................

2) Company Industry..............................................................

3) Respondent’s Name (Optional) .............................................

4) Respondent’s Department....................................................

5) Size of Workforce

   □ 0 - 100  □ 100 - 500  □ 500 - 2,000  □

   □ 2,000 - 5,000  □ 5,000 - 10,000  □ Others (Specify) □

6) Years of Operation

   □ 0 - 1  □ 1 - 5  □ 5 - 20  □

   □ 20 - 50  □ 50 - 100  □ Others (Specify) □

PART 2 – FINANCIAL MANAGEMENT AND PERFORMANCE

7. Which department in your organisation deals with foreign exchange?
   Treasuty □  Finance □  Others (Specify) □

8. Does your company have a well documented foreign exchange policy?
   Yes □  No □  I Don’t Know □

9. Does your company have a hedging policy?
   Yes □  No □  I Don’t Know □

10. Who is responsible for implementing the hedging policy in your organization?
    Chief Financial Officer (CFO) □  Treasury Manager □

    Senior Accountant □  I Don’t Know □

11. What is the percentage of foreign exchange rate exposure is the company hedging?

    □ 0% - 20%  □ 20% - 40%  □ 40% - 60%  □

    □ 60% - 80%  □ 80% - 100%  □ I Don’t Know □
12. From experience, how effective do the below hedging techniques cater to your company’s needs?

I. Internal Techniques

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1 – Highly Effective  2 – Effective  3 – Not Applicable
4 – Ineffective  5 – Highly Ineffective

II. External Techniques

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</table>

1 – Highly Effective  2 – Effective  3 – Not Applicable
4 – Ineffective  5 – Highly Ineffective
PART 3 – EFFECTS OF CURRENCY DEPRECIATION ON IMPORT AND PRODUCTION COSTS

13. What are the company’s annual total purchases? (KES ‘millions’)

- 0 - 50
- 50 - 150
- 150 - 500
- 500 - 1,500
- Above 1,500

14. What percentage of the company’s total purchases is imported?

- 0% - 20%
- 20% - 40%
- 40% - 60%
- 60% - 80%
- 80% - 100%

15. What has been the average percentage change in the company’s imported purchases over the last 10 years?

.................................%

16. In what currencies are you invoiced by your suppliers? (Rank in order, where 1 is the Most Frequently Used Currency and 5 is the Most Rarely Used Currency)

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17. In what currency do you book your purchases and accounts payables? (Rank in order, where 1 is the Most Frequently Used Currency and 5 is the Most Rarely Used Currency)

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</table>
PART 4 - EFFECTS OF CURRENCY DEPRECIATION ON EXPORT SALES

18. What are the company’s annual total sales? (KES 'millions')

- 0 - 50
- 50 - 150
- 150 - 500
- 500 - 1,500
- Above 1,500

19. What percentage of the company’s total sales is exported?

- 0% - 20%
- 20% - 40%
- 40% - 60%
- 60% - 80%
- 80% - 100%

20. What has been the average percentage change in the company’s exported sales over the last 10 years?

..........................%

21. In what currencies do you invoice your exports? (Rank in order, where 1 is the Most Frequently Used Currency and 5 is the Least Frequently Used Currency)

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22. In what currency do you book your sales and accounts receivables? (Rank in order, where 1 is the Most Frequently Used Currency and 5 is the Least Frequently Used Currency)

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PART 5 – EFFECTS OF CURRENCY DEPRECIATION ON COMPANY COMPETITIVENESS

23. In your opinion, has currency depreciation over the last 10 years had an effect of the company competitiveness within the industry?

| Yes | No | Don't Know |

24. What impact do you think that currency depreciation has had on the company performance within the industry over the last 10 years?

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<tbody>
<tr>
<td>Increased Costs</td>
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<td>Reduced Costs</td>
</tr>
<tr>
<td>Improved Product Price</td>
</tr>
<tr>
<td>Reduced Product Price</td>
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<tr>
<td>Promoted expansion into other markets</td>
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<td>Encouraged retraction from other markets</td>
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<tr>
<td>Improved Growth Prospects</td>
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<tr>
<td>Stifled Growth Prospects</td>
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<tr>
<td>I Don't Know</td>
</tr>
</tbody>
</table>

25. Do you think the hedging techniques (if any) implemented by your company have had an impact on the company competitiveness and performance?

| Yes | No | I Don't Know |

26. What impact has the hedging techniques implemented by your company had in the company's competitiveness?

<table>
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<tr>
<td>Increased Costs</td>
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<td>Retraction from other markets</td>
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<td>Improved Growth Prospects</td>
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<tr>
<td>Stifled Growth Prospects</td>
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<td>I Don't Know</td>
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27. What other measures do you feel your company can put in place to remain competitive during times of foreign currency fluctuations in the global markets?

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APPENDIX II: MAJOR CURRENCY MEAN EXCHANGE RATES TO THE KES

BETWEEN 20004 AND 2013

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Appendix III: Selected Manufacturing and Allied Companies Listed on the Nairobi Securities Exchange

1. B.O.C. Kenya Limited
2. British American Tobacco Kenya Limited
3. Carbacid Investments Limited
4. East African Breweries Limited
5. Eveready East Africa Limited
6. Unga Group
7. A. Baumann & Co. Limited