EFFECTS OF EXCHANGE RATE FLUCTUATIONS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

This research project is my original work and has not been submitted for a degree award at the University of Nairobi or any other university.

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DEDICATION

I dedicate this study to my family for their constant encouragement and patience throughout my academic period. God bless you abundantly

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ABBREVIATIONS AND ACRONYMS

ADF	-	Augmented Dickey Fuller
ANOVA	-	Analysis of Variance
CBK	-	Central Bank of Kenya
CPI	-	Consumer price Index
DF	-	Dickey Fuller
ECM	-	Error Correction Technique
EU	-	European Union
GDP	-	Gross Domestic Product
GMM	-	Generalized Method Moments
GSE	-	Ghana Stock Exchange
I&M	-	Investments and Mortgages
IMF	-	International Monetary Fund
NIC	-	National Industrial Corporation
NIM	-	Net Interest Margin
NSE	-	Nairobi Securities Exchange
PPP	-	Purchasing Power Parity
ROA	-	Return on Assets
ROE	-	Return on Equity
SPSS	-	Statistical Package for Social Sciences
USD	-	United States Dollar

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ABSTRACT

Financial performance refers to the ability to leverage operational and investment decisions and strategies to achieve a business' financial stability. It is the measure of a bank's achievement of its financial goals guided by its financial objectives and benchmarks. Exchange rate fluctuations affect domestic prices through three channels; first is through prices of imported consumption goods, exchange rate fluctuation affects domestic prices directly, second is through prices of imported intermediate goods, exchange rate fluctuation affects production cost of domestically produced goods and third is through prices of domestic goods priced in foreign currency. Foreign exchange rate fluctuations could be an important source of risk for banking institutions. In the worst case, large foreign exchange losses could lead to bank failures besides causing huge burdens on banks' profitability. The research objective was to determine the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya. The study adopted a descriptive research design. The design was more appropriate because the study sought to build a profile on the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya. The target population comprised all 43 commercial banks operating in Kenya as at December 2014. For this study, all the 43 banks were included because the target population was small and the data was easily accessible from the Central Bank of Kenya. This study used secondary. Secondary data was collected from the banks' consolidated financial statements as well as Central Bank of Kenya offices. The study used Statistical Package for Social Sciences Version 21.0 to aid in data analysis. The study found that there was a positive relationship between foreign exchange rate fluctuations and the financial performance of banks as measured by the returns on assets ratio. The research findings further revealed that the strength of association between the fluctuations and the returns was a weak one. Results from co-relation analysis revealed that a fluctuation in the value of the domestic currency led to an effect on the financial performance of the banks. The study revealed that exchange rate movement also affects the stock market performance greatly especially through its spiral effects. The study concluded that there is a weak relationship between foreign exchange rate fluctuations and the performance of commercial banks in Kenya in the study period. Additionally, the Kenyan shilling exchange rates against the United States Dollar was observed to be really high during the study period. The study recommended relevant authorities for instance. The Central Bank of Kenya should adequately put measures to safeguard the value of the domestic currency. This would ensure that the value on the same does not fluctuate much day in day out.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In an international trade involve different currencies; the variability of foreign exchange rates is a potentially interesting factor that drives the level of profitability of commercial banks as it affects their financial intermediation process (Chiira, 2009). Because there is no country that is self reliant but instead they all transact business with one another, foreign exchange rates becomes handy. Exchange rate is a vital microeconomic variable and backbone of Trade (Adetayo, Dionco, & Oladejo, 2004). A variation of exchange rate plays an important role in determination of balance of trade. Exchange rates, like any other commodity, are based on supply and demand for particular forms of currency. Domestic currency supply changes as a result of a country's fiscal and monetary policies (Berger & Bouwman, 2010). Demand for currency can be influenced by a large number of factors, including interest rates, inflation, and views on impending government regulation. There are number of macroeconomic and industry related factors that potentially can affect the stock returns of the companies. The continuing increases in the world trade and capital fluctuations have made the exchange rates as one of the main determinants of business profitability and equity prices (Bradley & Moles, 2002).

This study was anchored on two theories i.e. the purchasing power parity theory and the international Fishers effect theory. The purchasing power parity (PPP) theory states that homogeneous goods in different countries cost the same in the very same countries when measured in terms of the same currency (Brunnermeier & Lasse, 2009). The theory is

linked to the arbitrage hypothesis that states that if two homogeneous goods are traded at different prices in different countries, this arbitrage opportunity would be utilized, which leads to convergence of the deviations from Purchasing Power Parity towards equilibrium in the absence of arbitrage costs. The international Fisher Effect states that the difference in returns between two countries is just equal to the difference in inflation rates (Ross, 2008). The theory suggests that foreign currencies with relative high interest rates would depreciate because the high nominal interest rates reflect expected inflation. The nominal interest rate would also incorporate the default risk of an investment (ICAI, 2012).

The level of exchange rate fluctuations in Kenya have gone high forcing the Central Bank of Kenya to intervene so as to ensure stability. For the past one year, the exchange rate against the United States Dollar (USD) has depreciated from Ksh. 83 to a low of Ksh 106 making it difficult for the banks to predict the future rate with precision. This has greatly affected the performance of commercial banks as they seek to provide adequate currency to promote international business.

1.1.1 Exchange Rate Fluctuation

The exchange rate is the price of a unit of foreign currency in terms of the domestic currency (Nydahl, 1999). Exchange rate serves as the basic link between the local and the overseas market for various goods, services and financial assets (Reid and Joshua, 2004). Using the exchange rate, one is able to compare prices of goods, services, and assets quoted in different currencies. Exchange rate fluctuations can affect actual inflation as well as expectations about future price fluctuations (Omagwa, 2005). Changes in the exchange rate tend to directly affect domestic prices of imported goods and services. Exchange rate fluctuations can affect the country's external sector through its impact on

foreign trade. The exchange rate affects the cost of servicing on the country's foreign debt (Omagwa, 2005).

Under the system of freely floating exchange rates, the value of the foreign currency in terms of the local currency, like any commodity or service being sold in the market, is determined by the forces of supply and demand (Nydahl, 1999). Under a fixed exchange rate system, a par value rate is set between the local currency and the foreign currency by the central bank. The par value may be adjusted from time to time (Reid and Joshua, 2004).

1.1.2 Financial Performance

Financial performance refers to the ability to leverage operational and investment decisions and strategies to achieve a business' financial stability. It is the measure of a bank's achievement of its financial goals guided by its financial objectives and benchmarks. Profit is the ultimate goal of firm. To measure the profitability, there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy and Sree, 2003).

One such measure is the Return on Assets (ROA); which is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment" (Mutua, 2013). ROA is a major ratio that indicates the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of an organization's management to generate

income by utilizing company assets at their disposal. Net Interest Margin (NIM) is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders, relative to the amount of their assets. It is usually expressed as a percentage of what the financial institution earns on loans in a specific time period and other assets minus the interest paid on borrowed funds divided by the average amount of the assets on which it earned income in that time period (the average earning assets) (Olweny, and Shipho, 2011). ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment.

1.1.3 Exchange Rates Fluctuations and Financial Performance of Banks

Exchange rate fluctuations affect domestic prices through three channels; first is through prices of imported consumption goods, exchange rate fluctuation affects domestic prices directly, second is through prices of imported intermediate goods, exchange rate fluctuation affects production cost of domestically produced goods and third is through prices of domestic goods priced in foreign currency (Gatobu, 2013). As the main function of commercial banks is to mediate between the supply side and the demand side of the foreign currency, any restrictions on how commercial banks go about their business would affect their financial performance.

The fluctuations in currency exchange rates could generate significant gains or losses and the entry of these into the income statement could produce a distorted impression of what is happening to financial institution concerned (Watkins, 2014). Jamal and Khalil (2011) documented that the more a company is involved in international trade, the more its

accounting exposure and unless a company hedges this risk then it faces financial gains and/or losses from transaction and translation of foreign activities. Another unique dimension of exchange rate exposure is that of projects funded by foreign donors as Kinyuma (2013) investigated. Unrealized foreign exchange gains/losses according to Gatobu (2013) have an effect on the Net Income of multinational companies as posted to either income statement or owners 'equity reserves. Foreign exchange fluctuations affect the companies' imports, accounts payables, export sales and accounts receivables; with the net effect on the Net Income of multinational companies through the income statement or the owners' equity reserves.

1.1.4 Commercial Banks in Kenya

The banking sector in Kenya is regulated by the Central Bank of Kenya (CBK). Commercial banks are licensed and regulated under the Banking Act cap 488; deposits taking micro finance institutions are regulated under Micro Finance Act and the Forex Bureaus under the Central Bank of Kenya Act cap 491. As at 31st December 2014, the sector comprised 44 banking institutions (43 commercial banks and 1 mortgage finance company), 9 deposit taking microfinance institutions, 8 representative offices of foreign banks, 87 foreign exchange bureaus, 13 money remittance providers and 2 credit reference bureaus. Out of the 44 banking institutions, 30 are locally owned and 14 are foreign owned. The locally owned banking institutions comprise 3 banks with significant shareholding by the Government and State Corporations, 27 privately owned commercial banks and 1 mortgage finance institution (CBK, 2014).

Kenyan commercial banks are further classified into three peer groups using a weighted composite index that comprises net assets, customer deposits, capital and reserves,

number of deposit accounts and number of loan accounts. A bank with a weighted composite index of 5 per cent and above is classified as a large bank. A medium bank has a weighted composite index of between 1 per cent and 5 per cent while a small bank has a weighted composite index of less than 1 per cent. For the period ended 31st December 2014, there were 6 large banks with a market share of 49.9 per cent, 16 medium banks with a market share of 41.7 per cent and 21 small banks with a market share of 8.4 per cent (CBK, 2014).

Only ten commercial banks are listed in the Nairobi Stock Exchange (Barclays Bank, CFC Stanbic Holdings, Diamond Trust Bank, Equity Bank, Kenya Commercial Bank, National Bank of Kenya, NIC Bank, Standard Chartered Bank, I&M Holdings and The Co-operative Bank of Kenya). The Kenyan Banking Sector continued on a growth trajectory with the size of assets standing at Ksh. 3.2 trillion, loans & advances worth Ksh. 1.8 trillion, while the deposit base was Ksh. 2.3 trillion and profit before tax of Ksh. 141.1 billion as at 31st December 2014.

1.2 Research Problem

Foreign exchange rate fluctuations could be an important source of risk for banking institutions. In the worst case, large foreign exchange losses could lead to bank failures besides causing huge burdens on banks' profitability (Jamal and Khalil, 2011). The foreign exchange exposure can be discerned largely from their accounting data, the indirect exposure, which arises from impacts of exchange rate fluctuations on the economy in general and banks' customers in particular (Kinyuma, 2013).

Exchange rate movement in Kenya has been variable with periods of rapid depreciation of the domestic currency Kenya Shilling, which adversely affect the Kenyan economy. This has seen the exchange rate against the USD to get to as high as Ksh. 106 making it difficult for the banks to predict the future rate with precision. This has greatly affected the performance of commercial banks as they seek to provide adequate currency to promote international business.

Several studies have been done on the effects of exchange rate fluctuations on financial performance in other nations. For instance, Elhiraika and Ismail (2006) looked at financial sector policy and poverty reduction in Sudan. They examine the structure and performance of the financial sector in Sudan and its role in poverty alleviation. Financial sector reforms should be widened and deepened to foster both financial and real growth and a radical paradigm shift is imperative for developing a pro-poor financial structure involving both Islamic and conventional microfinance programs. Adam (2012) examined exchange rate options for South Sudan. It argues that the exchange rate regime currently sits uncomfortably between two regimes. The first is a fixed exchange rate anchored by a set of 'currency board' rules. Though broadly effective in a macroeconomic sense, this regime has been plagued by quite serious problems of rent-seeking and corruption more or less since its inception in July 2011. Pitia and Lado (2015) sought to test of relationship between exchange rate and inflation in South Sudan using granger-causality approach using time series monthly data for the period August 2011 to November 2014. The study reveals that there exists a unidirectional causality from exchange rate to CPI without feedback.

Locally, Cherop (2010) did a survey on exchange rate fluctuation on tea export earnings among smallholders' tea factories in Kenya where she established that the exchange rate fluctuations greatly affected the earnings of smallholders at tea factories. During the time of depreciating local currency, the export earnings were higher even with low export quantities while export earnings reduced when the currency was appreciating. Maina (2010) did a study on the impact of exchange rate variability on investment in the electric power sub-sector in Kenya. Mania's findings show that the investments were high in the power subsector when the exchange rates were stable as compared to times of high fluctuations. Mwaniki (2012) examined the sensitivity of Kenya banks' stock returns to interest rate and exchange rate changes. This study measured performance using stock returns in Kenya. The findings show that 73.2 % changes stock price of commercial banks listed in the NSE could be accounted for by changes in foreign exchange. Njenga (2014) examined the impact of real exchange rate volatility on economic growth in Kenya and established that exchange rate volatility positively impacts on GDP growth but is not significant in affecting GDP growth rate. Ramos (2013) examined the effects of exchange rate fluctuations on changes in retail oil prices in Kenya.

From the analysis of previous studies above, the existing studies have been conducted on exchange rate fluctuations and firm performance from other countries targeting different sectors. However, their findings may not be applicable for the banking sector in South Sudan due to different macro-economic variables. This study therefore seeks to fill this research gap by seeking answers to one research questions: what are the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya?

1.3 Research Objective

To determine the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya.

1.4 Value of the Study

This study would be of benefit to several individuals including: For the managers of commercial banks in South Sudan, the findings of this study would provide information to guide their management decisions following the changes in the exchange rate in South Sudan for a strong banking industry. It would equip them with the necessary knowledge for taking the necessary action to protect the performance of their organizations.

For the Government of Kenya, the findings of this study would inform the formulation of policies and regulations for a strong and resilient banking industry. The findings of this study would inform the fragile foreign currency reserves making it difficult for the banking industry to transact freely.

For future academicians and researchers, the findings of this study would be important in providing material for their reference besides suggesting areas for further research. Future scholars would find this study important because it would identify areas for further studies which future scholars can study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature reviewed in order to provide a basis for the study and the concepts. In addition, the chapter highlights theories guiding the study, determinants of financial performance, empirical studies thereby illustrating the research gap after which it presents the summary of empirical literature.

2.2 Theoretical Review

This study is founded on two key theories including Purchasing Power Parity Theory and the International Fischer Theory. These theories are discussed in details below.

2.2.1 The Purchasing Power Parity Theory

The purchasing power parity (PPP) theory originated from the writings of the Swedish economist Gustav (Menon & Viswanathan, 2005). The theory states that homogeneous goods in different countries cost the same in the very same countries when measured in terms of the same currency. This implies that exchange rates between currencies are in equilibrium when their purchasing power is the same in each of the two countries. The willingness to pay a certain amount for foreign money must ultimately and essentially be due to the fact that this money possesses a purchasing power against goods and services in that country (Reid & Joshua, 2004). Any variance from this statement implies that a country's currency is incorrectly valued. According to Yin-Wong and Kon (1994) "PPP theory suggest that currencies are valued for the goods they can purchase and, in arbitrage equilibrium, the exchange rate between two countries   currencies should equal

the ratio of their price levels, of which a testable implication is that real exchange rate should display mean reversion, at least in the long-run.

The theory is linked to the arbitrage hypothesis that states that if two homogeneous goods are traded at different prices in different countries, this arbitrage opportunity would be utilized, which leads to convergence of the deviations from Purchasing Power Parity towards equilibrium in the absence of arbitrage costs. There are two forms of PPP, absolute and relative. The absolute PPP, also known as the Law of One Price, states that a commodity costs the same regardless of what currency is used to purchase it or where it is selling (Reid & Joshua, 2004). This theory is based on the assumptions that there are no transactional costs, no barriers to trade and the commodities being traded are homogeneous. If the trading currency is exchanged at the spot exchange rate, the price of a homogenous commodity should be identical across borders. The theory suggested use of price indexes to determine the exact price of a homogenous commodity between countries. The main challenge of this belief is in measuring Purchasing Power Parity constructed from price indexes given that different countries use different goods to determine their price level (Reid, 2005).

Due to these limitations in the absolute PPP, another form of PPP has evolved, the relative PPP which acknowledges market imperfections such as transport costs, tariffs and quotas. Relative PPP defines what determines change in exchange rate over time, rather than what determines absolute level of the exchange rate. It states that the exchange rate change is determined by the difference in the inflation rates of the two countries (Ross, 2008). According to relative PPP, any differential exchange rate to the one propounded by the theory is the real appreciation or real depreciation of one currency

over the other (Reid & Joshua, 2004). This theory is relevant for this study as it explains the value of one currency in terms of another country's currency in terms of the basket of goods and services it can purchase with reference to the demand and supply. This theory argues that in the equilibrium exchange rate is one that ensures that the value exchanged can purchase the same basket of goods and services from either of the countries involved.

2.2.2 The International Fisher Effect

The international Fisher Effect states that the difference in returns between two countries is just equal to the difference in inflation rates (Shapiro, 2007). According to International Fisher Effect, nominal risk-free interest rates contain a real rate of return and anticipated inflation. This means if all investors of all countries require the same real return, interest rate differentials between countries may be the result of differential in the expected inflation. The theory suggests that foreign currencies with relative high interest rates would depreciate because the high nominal interest rates reflect expected inflation. The nominal interest rate would also incorporate the default risk of an investment (Staikouras and Wood, 2004).

If the theory holds, a strategy to borrow from one country and invest in another country should not provide any positive return on average, since exchange rates would adjust to offset interest rate differentials on the average. However, this theory is limited by the sense that there are other factors other than inflation that affect exchange rate, thus the exchange rates do not adjust in accordance with the inflation differential (Ubindi, 2006). Empirically, it has been demonstrated that there is a long-run tendency for interest rates

differentials to offset exchange rate changes. This theory is relevant for this study as it explains the purchasing power of each currency which captures the inflation across countries to ensure that at equilibrium exchange rates, the basket of goods and services purchased by one unit of a country's currency equals to those purchased in the second country.

2.3 Determinants of Financial Performance

Generally, the performance of organizations is influenced by both internal and external factors. Internal factors focus on an organization's specific characteristics whereas the external factors concern both industry features and macroeconomic variables.

2.3.1 Bank Liquidity

Liquidity plays an important role in the financial performance of commercial banks. In order for the commercial banks to smoothly mediate between the deficit and surplus households, they need to have adequate liquidity. As such, bank managers have to strike an optimal balance given the risk/return trade-off of holding a relatively high proportion of liquid assets (Ubindi, 2006). Too little liquidity might force the bank to borrow at penal rates from the interbank market and/or central bank, depending on its reputation. On the other hand, a high ratio could result in lost profitable investment activities, making the sign of the coefficient unclear (Waheed, 2009).

Tabari, Ahmadi and Emami (2013) indicate that liquidity risk arises from the inability of a bank to accommodate decreases in liabilities or to fund increases in assets. An illiquidity bank means that it cannot obtain sufficient funds, either by increasing liabilities or by converting assets promptly, at a reasonable cost. In periods the banks don't enjoy

enough liquidity, they cannot satisfy the required resources from debt without converting the asset into liquidity by reasonable cost (Wamukhoma, 2014). Under critical conditions, lack of enough liquidity even results in bank's bankruptcy. Bourke (1989) examined the performance of banks in twelve European, Northern American and Australian countries. Using of international data for 1972-1981, he found that both ratios of capital and liquidity have a positive relationship with the profitability.

2.3.2 Capital Adequacy

Bank capital is those fund attributed to the proprietors as published in the balance sheet (Nwankwo, 1991). These funds perform a number of functions but a consensus exists that the fundamental and overriding function is to provide a cushion against losses not covered by current earnings and to protect depositors and other creditors against loss in the event of liquidation. George and Dimitrios (2004) suggest that banks with higher levels of capital perform better than their undercapitalized peers. Staikouras and Wood (2003) claimed that there exists a positive link between a greater equity and profitability among EU banks. Abreu and Mendes (2001) also trace a positive impact of equity level on profitability.

Goddard Molyneux and Wilson (2004) support the prior finding of positive relationship between capital/asset ratio and bank's earnings. Again the direction of the relationship between bank capital and bank profitability cannot be unanimously predicted in advance. Pasiouras and Kosmidou (2007) identify that the performance of domestic and foreign commercial banks in 15 EU countries during the period 1995-2001. They find that profitability of both domestic and foreign banks is affected by bank specific

characteristics. The results suggest that capital adequacy, credit risk, bank size, liquidity risk have significant relationship with bank profitability, although their impacts and relation is not always uniform for domestic and foreign banks. Chirwa (2003) studied the relationship between market structure and profitability of commercial banks in Malawi using of data of time series during the years 1970-1994. The results of research show that there is a negative relationship between profitability and capital adequacy ratio and gearing ratio.

2.3.3 The size of the Bank

The size of the bank is another factor that determines an Organization's financial performance. The size of the bank affects its financial performance in many ways (Ahmed, Ahmed and Ahmed, 2010). Large banks can exploit economies of scale and scope and thus being more efficient compared to small firms (Wild, Wild & Han, 2010). Size can be determined by net premium which is the premium earned by a bank after deducting the reinsurance ceded. The premium base of insurers dictates the quantum of policy liabilities to be borne by them (Teece, 2009).

2.3.4 Credit Risk Management

Among other risks faced by banks, credit risk plays an important role on banks' profitability since a large chunk of banks' revenue accrues from loans from which interest is derived. However, interest rate risk is directly linked to credit risk implying that high or increment in interest rate increases the chances of loan default (Tabari, Ahmadi and Emami, 2013). Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it, and mitigation

of risk using managerial resources. The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk, and accepting some or all of the consequences of a particular risk. The process of risk management is a two-step process (Tabari, Ahmadi and Emami, 2013). The first is to identify the source of the risk, which is to identify the leading variables causing the risk. The second is to devise methods to quantify the risk using mathematical models, in order to understand the risk profile of the instrument.

Once a general framework of risk identification and management is developed, the techniques can be applied to different situations, products, instruments and institutions. It is crucial for banks to have comprehensive risk management framework as there is a growing realization that sustainable growth critically depends on the development of a comprehensive risk management framework (Greuning and Iqbal, 2007). Increasing amount of non-performing loans in the credit portfolio is inimical to banks in achieving their objectives. Non-performing loan is the percentage of loan values that are not serviced for three months and above (Ahmad and Ariff, 2007). Kargi (2011) evaluated the impact of credit risk on the profitability of Nigerian banks. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks.

2.4 Empirical Review

This section reviews the various international and local studies conducted by various scholars on the subject of foreign exchange rate fluctuations and financial performance of commercial banks or organizations in general. It is divided into international and local studies.

2.4.1 International Empirical Studies

Wong, Wong and Leung (2008) examined the foreign exchange exposure of Chinese banks. Using the Capital Market Approach and equity-price data of 14 listed Chinese banks, this empirical study finds that there is a positive relationship between bank size and foreign exchange exposure, which may reflect larger foreign-exchange operations and trading positions of larger Chinese banks, and their significant indirect foreign-exchange exposure arising from impacts of the renminbi exchange-rate fluctuations on their customers. Empirical evidence also suggests that the average foreign-exchange exposures of state owned and joint-stock commercial banks in China are higher than those of banks in Hong Kong, notwithstanding that their participation in international banking businesses is still limited compared with their Hong Kong counterparts. It was also found that negative foreign-exchange exposure was prevalent for larger Chinese banks, suggesting that an appreciation of the renminbi tends to reduce their equity values, and was therefore likely to hamper the banking sector's performance.

Opaluwa, Umeh and Ameh (2010) examined the effect of exchange rate fluctuations on the Nigerian manufacturing sector during a twenty (20) year period (1986 – 2005). The argument was that fluctuations in exchange rate adversely affected output of the manufacturing sector. This was because Nigerian manufacturing was highly dependent on import of inputs and capital goods paid for in foreign exchange whose rate of exchange was unstable. The methodology adopted for the study was empirical. The econometric tool of regression was used for the analysis. In the model that was used, manufacturing output employment rate and foreign private investment were used as the explanatory variables. The result of the regression analysis shows that coefficients of the variables

carried both positive and negative signs. The study shows adverse effect and is all statistically significant in the final analysis.

Gachua (2011) examined the effect of foreign exchange exposure on a firm's financial performance: a case of listed companies in Kenya. This study developed a model of foreign exchange exposure dependent on three variables, the firm's imports, exports and their effect on profits formulating the problem statement of the effects that variations in the exchange rate has in the financial performance of the selected listed companies in the Nairobi Stock Exchange for the period covering years 2001 to 2010. The study was to find out whether foreign exchange exposure is minimized where firms have been able to match their foreign currency revenues and costs leaving them with little net exposure. The research design was descriptive which involving the use of both qualitative and quantitative data. The sample size constituted of 38 firms except for financial and investment but the results of 32 firms were analyzed after eliminating spoilt and inconsistent questionnaires. The research utilized questionnaires for data collection comprising of structured questions. In analyzing the responses, the Microsoft Excel Spreadsheet tool was used to calculate descriptive statistics and the Statistical Package for Social Sciences (SPSS) was also used. This generated descriptive statistics such as percentages, frequency distribution, measures of central tendency and graphical expressions. From the findings the study found that listed firms used the income statement and the owner's equity account to record foreign exchange differences.

Owoeye, and Ogunmakin (2013) examined exchange rate volatility and bank performance in Nigeria. This study investigated the impact of unstable exchange rate on bank performance in Nigeria using two proxies for bank performance, namely loan loss

to total advances ratio and capital deposit ratio. Government expenditure, interest rate, real gross domestic product were added to exchange rate as independent variables. The two models specified show that the impact of exchange rate on bank performance is sensitive to the type of proxy used for bank performance. Loan loss to total advance ratio shows that fluctuating exchange rate may affect the ability of lenders to manage loans resulting into high level of bad loans while capital deposit ratio does not have significant relationship with exchange rate. A core recommendation of this study is that a stable exchange rate is needed to improve the ability of the banking sector to channel credit to the economy.

Adetayo (2013) examined management of foreign exchange risks in a selected commercial bank, in a selected commercial bank, in Nigeria. The study sought to determine how the risk involved in foreign exchange can be effectively managed, by determining the following specific objectives: to determine the various exchange risks which the treasurer of the selected bank is exposed to in its foreign exchange transaction; to investigate how these risks can be effectively managed and to identify risk and exposure management techniques required for treasury management. The selected firm used for this study was a Commercial Bank of International Standard, located in Lagos, the business center of Nigeria. The study exploited both the primary and secondary sources of information. The primary source comprised of a structured questionnaires, to elicit pertinent responses from the respondents. A non-parametric measure based on chi-square statistics was employed to test the hypothesis and determine if there is any association between foreign exchange trading and risk management issues. Spot transaction technique was founded to be effective in minimizing foreign exchange risk.

Addae1, Nyarko-Baasi1 and Tetteh (2014) examined the effect of exchange rate fluctuations on Ghanaian banks. It looked at the exchange rate sensitivity of some listed banks on the Ghana Stock Exchange (GSE) between 2005 and 2010. It adopted both quantitative and qualitative approaches. Econometric models were employed to deal with both the exchange rate sensitivities and to ascertain the exchange rate exposure of the Banks. The study established that all the banks studied engaged in forex trading and made gains/profits from such activities. It was further found that apart from Ghana Commercial Bank and Standard Chartered Bank who were exposed to foreign exchange risk - pound sterling, the rest of the banks had no exposure to any of the currency risk. All the banks on the other hand had risk management structures in place to mitigate any risks that arise as a result of their operations.

Adam (2012) examined exchange rate options for South Sudan. The study compares the strengths and weaknesses of fixed exchange rate regimes, including the special cases of a currency-board and full dollarization, with a floating regime. It argues that the exchange rate regime currently sits uncomfortably between two regimes. The first is a fixed exchange rate anchored by a set of 'currency board' rules. Though broadly effective in a macroeconomic sense, this regime has been plagued by quite serious problems of rent-seeking and corruption more or less since its inception in July 2011. As pressures on the balance of payments increase, this arrangement appears to be giving way to a less robust 'conventional' fixed exchange rate regime that relies for its stability on a level of fiscal control that is becoming increasingly hard for the authorities to deliver and as such the parallel market premium is beginning to increase. The severity of the impending economic crisis for South Sudan makes it likely that this fixed regime would disintegrate,

inflation would spike and, with some likelihood, the economy would revert to a de facto dollarization.

Pitia and Lado (2015) sought to test of relationship between exchange rate and inflation in South Sudan using granger-causality approach using time series monthly data for the period August 2011 to November 2014. The study reveals that there exists a unidirectional causality from exchange rate to CPI without feedback. This means depreciation of South Sudanese currency is detrimental to the economy of South Sudan. Although CPI failed to cause changes in exchange rate, there is no way to conclude with greater confidence that the results are true. The effect of the pressure of an increase in price level on exchange rate could have been from the response of monetary authorities in bridging the gap between the price level and the purchasing power of people in the economy.

Elhiraika and Ismail (2006) looked at financial sector policy and poverty reduction in Sudan. They examine the structure and performance of the financial sector in Sudan and its role in poverty alleviation. The Sudanese financial sector is largely rudimentary and dominated by banks that are extremely small, generally undercapitalized and concentrated in big cities. Despite the full adoption of Islamic methods of finance, these banks are not prepared to promote lending for poverty reduction, while state-owned development banks are a failure in terms of outreach and viability. Financial sector reforms should be widened and deepened to foster both financial and real growth and a radical paradigm shift is imperative for developing a pro-poor financial structure involving both Islamic and conventional microfinance programs. A dual banking system would enhance the process of financial development and access to credit through

increased competition and broader alternatives for clients. It is important to link microfinance programs to socio-economic institutions involved in poverty reduction such as Zakat and Awqaf funds in order to increase the efficiency of resource mobilization and use.

Ebaidalla (2014) examined real exchange rate misalignment and economic performance in Sudan. The study investigates the behavior of equilibrium exchange rate and real exchange rate misalignment in Sudan over the period 1979–2009. In addition, the impact of real exchange rate misalignment on economic performance is examined. The empirical results show that the equilibrium exchange rate is significantly influenced by economic policy variables such as trade openness, government expenditure and taxes. The results also reveal that the Sudanese economy exhibited an exchange rate overvaluation over the period under consideration.

2.4.2 Local Studies

Cherop (2010) did a survey on exchange rate fluctuation on tea export earnings among smallholders tea factories in Kenya where she established that the exchange rate fluctuations greatly affected the earnings of smallholders at tea factories. During the time of depreciating local currency, the export earnings were higher even with low export quantities while export earnings reduced when the currency was appreciating. This study centered on the tea export earnings and ignored the other larger part of firms quoted on the NSE.

Maina (2010) did a study on the impact of exchange rate variability on investment in the electric power sub-sector in Kenya. Mania's findings show that the investments were

high in the power subsector when the exchange rates were stable as compared to times of high fluctuations. Kipchirchir (2011) studied the relationship between financial performance for multinational corporations in Kenya and exchange rates volatility. Kipchirchir found that there was a strong relationship between financial performance for multinational corporations and exchange rate volatility in Kenya. This was attributed to the difference between trading currency and financial reporting currency.

Ambunya (2012) examined the relationship between exchange rate movement and stock market returns volatility at the Nairobi Securities Exchange. The study adopted a quantitative design. The target population for this study included 56 companies quoted at the NSE as of December 2011. Since the population was small and the study is using secondary data, the study conducted a census. The study used secondary data collected from the Nairobi Securities Exchange and the Central bank of Kenya for the period 2007-2011. The study regressed stock market returns volatility against exchange rate movement. Study concludes that there is a strong relationship between exchange rate movement and stock market returns volatility. This is especially carried through the information content of exchange rate movement on the security's business. The study concludes that exchange rate movement also affects the stock market performance greatly through its spiral effects. Through over macroeconomic variables, exchange rate movement indicates the state of the economy hence the likely future state of the economy. These variables would include things like interest rate and the money supply in the economy which has great impact on the activity level of the security's performance.

Gachua (2011) examined the effect of foreign exchange exposure on a firm's financial performance using a case of listed companies in Kenya. The research design was

descriptive which involved the use of both qualitative and quantitative data. The sample size constituted of 38 firms except for financial and investment but the results of 32 firms were analyzed after eliminating spoilt and inconsistent questionnaires. The research utilized questionnaires for data collection comprising of structured questions. From the findings the study found that listed firms use the income statement and the owner's equity account to record foreign exchange differences. The study concluded that unrealized foreign exchange gains/losses had an effect on the Net Income of listed companies as it was posted to either income statement or owners'equity. The study also found that there had been significant percentage growth in imports and exports for firms listed in the Nairobi Stock Exchange.

Musyoki, Pokhariyal and Pundo (2012) examined the impact of real exchange rate volatility on economic growth using Kenyan evidence. The study employed the Generalized Autoregressive Condition of Heteroscedasticity (GARCH) and computation of the unconditional standard deviation of the changes to measure volatility and Generalized Method Moments (GMM) to assess the impact of the real exchange rate volatility on economic growth for the period January 1993 to December 2009. Data for the study was collected from Kenya National Bureau of Statistics, Central Bank of Kenya and International Monetary Fund Data Base by taking monthly frequency. The study found that RER was very volatility for the entire study period. Kenya's RER generally exhibited a appreciating and volatility trend, implying that in general, the country's international competitiveness deteriorated over the study period. The RER Volatility reflected a negative impact on economic growth of Kenya.

Wanjau (2014) examined the relationship among real exchange rate, current account balance and real income in Kenya. The study is based on two main theories, the neoclassical elasticity approach and balance of payment constraint model. First was to determine the effect of real exchange rate change on current account balance in Kenya. Secondly was to determine the extent to which import growth rate is consistent with balanced economic growth in Kenya. The first objective was tested by regressing the trade balance against real exchange rate, foreign income and relative prices, degree of openness and government expenditure. The significance and signage of real exchange rate coefficient was used to determine whether Marshal-Lerner condition holds. To test the second objective, elasticity of income was estimated using an import function and compared to the theoretical income elasticity proposed in the balance of payment constraint model. Annual time series data from 1980 to 2011was modeled using ARDL model. The data were subjected to Stationarity test using Augmented Dickey Fuller (ADF) test and Phillip Perron test. The results showed that Marshal-Lerner-Conditions hold in Kenya and the J-curve phenomena is supported by data. Secondly import growth rate is significantly higher than the level consistent with long run growth of the economy. One of the recommendations is to introduce policies that would trigger increase in demand for export and thereby drive the economy towards sustainable growth and development.

Rutto and Ondiek (2014) examined the impact of exchange rate volatility on Kenya's tea exports. The objective was to determine the impact of exchange rate volatility on tea exports, the contribution of tea exports earning to Kenya's economy and draw policy

recommendations emanating from empirical findings for enhancing tea exports. Johansen and Julius Multivariate co-integration technique was applied to annual time series data for the period of 1970-2008 in order to recognize the short run and long run behavior of the variables in the study. Co-integration and error correction technique (ECM) developed by Engle and Granger was used. Dickey fuller (DF) and Augmented Dickey Fuller (ADF) unit root test for stationarity was employed in this study. Phillips Perron (pp) on first difference was adopted to test stationarity in their first difference and testing co-integration feasibility. The data was sourced from central bank of Kenya, Kenya National Bureau of Statistics, Tea Board of Kenya and the International financial statistics of International Monetary Fund (IMF). The results indicate that exchange rate volatility negatively affects performance of tea exports in the country. This paper recommends periodic monitoring of the exchange rate so as to reduce its impact and drawing of fiscal and monetary policy that would make exchange rate manageable.

2.5 Summary of Literature Review

This chapter has reviewed literature relevant for the study. It specifically reviewed the theories guiding the study including: the purchasing power parity, the international Fischer effect and the unbiased forward rates which all explain how foreign exchange rates affect organizations engaged in international trade. The study further reviewed empirical studies done both from international and local perspectives. The empirical studies (Wong, Wong and Leung, 2008; Opaluwa, Umeh and Ameh, 2010; Gachua, 2011; Owoeye and Ogunmakin, 2013; Adetayo, 2013) were done on international setting in countries whose findings may not apply to Kenyan firms. The ones done in Kenya

(Cherop, 2010; Maina, 2010; Ambunya, 2012; Gachua, 2011; Musyoki, Pokhariyal and Pundo, 2012; Wanjau, 2014; and Rutto and Ondiek, 2014) focused on other aspects of foreign exchange rate fluctuations and not performance of commercial banks. This study therefore seeks to fill this gap by seeking to determine the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methods that were used by the study to achieve the study objectives. It presents the research design, population and sample, data and data collection, data reliability and validity and data analysis where the model is discussed.

3.2 Research Design

The study adopted a descriptive research design. Mugenda and Mugenda (2003) describes descriptive research design as a systematic, empirical inquiring into which the researcher does not have a direct control of independent variable as their manifestation has already occurred or because the inherently cannot be manipulated. Descriptive studies are concerned with the what, where and how of a phenomenon hence more placed to build a profile on that phenomenon (Mugenda & Mugenda, 2003). Descriptive research design was more appropriate because the study sought to build a profile on the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya.

3.3 Population

Population in statistics is the specific population about which information is desired. According to Kothari (2004), a population is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. The target population comprised all 43 commercial banks operating in Kenya as at December

2014. For this study, all the 43 banks were included because the target population was small and the data was easily accessible from the Central Bank of Kenya.

3.4 Data and Data Collection

This study used secondary. Secondary data was collected from the banks' consolidated financial statements as well as Central Bank of Kenya offices. Secondary data assessed included the Return on Assets of all the banks as at the end of 2014 for a period of thirteen years starting from 2002 when the Exchange rate started fluctuating. Data on the foreign exchange rate fluctuations was collected for the period 2002 to 2014. Semi annual data used.

3.5 Data Analysis

The study used Statistical Package for Social Sciences Version 21.0 to aid in data analysis. The paired t-test, a non-parametric test of differences developed by Sir Williams Gosset was used as a test of significance (Mugenda & Mugenda, 2003). The analysis was conducted at 0.05 level of significance.

3.5.1 Analytical Model

In order to the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya, the researcher conducted a multiple regression analysis using the following analytical model.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + €$

Where: Y= Profitability of banks (Return on Assets)

β_0 = Constant (y-intercept)

X_1= Foreign exchange Rate fluctuations (Standard deviation of the changes against the United States Dollar)

X_2 = Interest Rate Spread (Lending Rates- Interest rate on deposits)

X_3 = Inflation (Consumer Price Index)

X_4 = Size of the Bank (Natural log of Total Assets)

€ = Error term

In order to test the significance of the relationship between the effects of exchange rate fluctuations and financial performance of commercial banks in Kenya, the study conducted an Analysis of Variance (ANOVA). On extracting the ANOVA statistics, the researcher looked at the F calculated (F-values). The study tested at 95% confidence level and 5% significant level. If the F- calculated figure was less than the critical value set 2.4, then the conclusion was that the model was significant in explaining the relationship.

CHAPTER FOUR

DATA ANALYSIS PRESENTATION AND FINDINGS

4.1 Introduction

The study objective was to determine the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya. This study explored the effects of inflation rates, interest rate spread, foreign exchange rate fluctuations and size of the banks on the performance of commercial banks in Kenya from 2002 to 2014. The chapter presents the analysis, presentations and discussions of the study findings.

4.2 Co-relation Analysis

The researcher conducted a co-relation analysis to depict the extent of the relationship between the study variables. The results of co-relation are as explained from Table 4.1.

Table 4. : Co-relation Analysis

		ROA	Inflation rates	Interest rates spread	Exchange rate	Size
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
Inflation rates	Pearson Correlation	-.031	1			
	Sig. (2-tailed)	.843				
Interest rates spread	Pearson Correlation	-.026	-.177	1		
	Sig. (2-tailed)	.868	.250			
Exchange rate	Pearson Correlation	-.201	-.036	-.047	1	
	Sig. (2-tailed)	.009	.818	.761		
Size	Pearson Correlation	.004	.032	.408	-.339	1
	Sig. (2-tailed)	.799	.835	.006	.025	

Correlation is significant at the 0.05 level (2-tailed).

The inflation rates and the Returns on assets had a negative co-relation with a co-efficient of -0.031. The co-relation was also negative between the returns on assets and the interest rates spread as indicated by a co-efficient of -0.026. The interest rate spread also had a negative co-relation with the inflation rates with a co-efficient of -0.177. The exchange rates had a weak negative co-relation with returns on assets as shown by the -0.201 co-relation co-efficient. This rate also had a weak negative co-relation with the inflation rates as shown by a co-efficient of 0.036. However, the co-relation between the exchange rates and the interest rates spread was negative as shown by the value of - 0.047. Co-relations between size and the returns on assets was a weak one due to the small co-efficient of 0.004. The relationship between size and inflation rates was also weak since the co-efficient of co-relation was 0.32. Co-relation between size and interest rates spread was moderately strong indicated by the co-efficient of 0.408. The exchange rates and size however had a negative co-relation as indicated by a co-efficient of -0.339. The co-relation findings revealed a weak association between the exchange rates fluctuations and the returns of banks in the study period. The exchange rates fluctuations were also found to be negatively related to changes in inflation rates. These findings disagree with study conclusions by Kipchirchir (2011) that there is a strong positive relationship between financial performance for multinational corporations in Kenya and exchange rates volatility. This was attributed to the differences between trading currency and financial reporting currency. The study concentrated on the effects of foreign exchange fluctuation on the financial performance of banks. Results from co-relation analysis revealed that fluctuations in the value of the domestic currency had an effect on the financial performance of the studied banks. These findings concur with studies done on other

sectors using the same variables. Precisely, these findings concur with Ambunya (2012) that foreign exchange rate movements actually affect the stock market performance greatly through its spiral effects.

4.3 Descriptive Statistics
Table 4. : Descriptive Statistics

	Minimum	Maximum	Mean	Std. Deviation
ROA	.01	.05	.0330	.01181
Inflation Rates	2.63	19.17	8.5013	4.76605
Interest Rate Spread	8.54	14.42	10.3468	1.42985
Exchange Rate	.01	.10	.0181	.02271
Size of Banks	8.61	18.47	12.9788	3.26806

During the study period, ROA had a minimum of 0.01 and a maximum of 0.05. The mean for the returns was 0.0330 with a standard deviation of 0.01181. The inflation rates had a minimum of 2.63 with 19.17 as the maximum, mean for the rate was 8.5013. The high standard deviation value of 4.76605 revealed that the inflation rates in Kenya have really increased and varied over the years. The interest rate spread had a minimum of 8.54 with a maximum of 14.42. This revealed that the margin in the difference between deposit and lending rates was getting big with time. Exchange rate fluctuations had a 0 as the minimum value whereas the maximum fluctuation difference was 0.10. The mean was 0.0181 with a meager standard deviation of 0.02271. Bank size as measured by the natural log of total assets had a minimum of 8.61 and a maximum of 18.47. The mean was 12.9788 with a standard deviation of 3.26806 this therefore implied that there was a big jump in the total assets owned by commercial banks in the study period. The Kenyan USD exchange rate was observed to have really increased over time hence the high fluctuations. The exchange rate was therefore volatile for the entire study period and

generally exhibited a depreciating and volatility trend, implying that in general, the country's international competitiveness had deteriorated over the study period.

4.4 Discussions of findings

The study had sought to to determine the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya. The study found out that a negative relationship existed between foreign exchange rate fluctuations and the financial performance of banks as measured by the returns on assets ratio. The research findings further revealed that the strength of association between the fluctuations and the returns was a weak one. To a small extent this finding slightly agreed with findings by Kipchirchir (2011) who observed existence of a strong relationship between financial performance for multinational corporations in Kenya and the exchange rates fluctuations. The observed relationship could have been attributed by the differences between trading currency and financial reporting currency. Results from co-relation analysis revealed that a fluctuation in the value of the domestic currency led to a negative effect on the financial performance of the banks.

However the research findings as under the banking sector concurred with research findings from other sectors, for instance. Ambunya (2012) had examined the relationship between exchange rate movement and stock market returns volatility at the Nairobi Securities Exchange. The study revealed that exchange rate movement also affects the stock market performance greatly especially through its spiral effects. Gachua (2011) also observed that unrealized foreign exchange gains or losses had an effect on the net income of listed companies as it was posted to either income statement or owners` equity.

The Kenyan USD exchange rate was observed to have really increased over time thus the high volatility over time. The exchange rate was volatile for the entire study period and generally exhibited a depreciating and volatility trend, implying that in general, the country's international competitiveness had deteriorated over the study period. The Kenyan currency has simply been losing to the US dollar over the entire study period. This has negatively influenced the Kenyan economy by making the cost of living expensive since the country heavily relies on imports. The findings however agree with Owoeye, and Ogunmakin (2013) who observed through their study model that the impact of exchange rate on bank performance was sensitive to the type of proxy being used for bank performance. Therefore, commercial banks in Kenya are exposed to foreign exchange risks that negatively affects their performance.

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The research findings indicated that foreign exchange fluctuations had an influence on bank`s performance in the study period. The co-relation findings revealed a weak negative association between the exchange rates fluctuations and the returns of banks in the study period. The exchange rates fluctuations were also found to be related to changes in inflation rates. The Kenyan USD exchange rate was observed to have really increased over time hence the high fluctuations. The exchange rate was therefore volatile for the entire study period and generally exhibited a depreciating and volatility trend, implying that in general, the country's international competitiveness had deteriorated over the study period.

The study found out that there was a weak negative relationship between exchange rate fluctuations (Kshs /USD) and the bank`s financial performance. This therefore meant that as the Kenyan currency reduced in value, the returns by banks were also decreasing. However, the co-relation between foreign exchange rate fluctuations and inflation rate was also a weak positive one. This translates to positive movements in exchange rates as a result of increments in inflation. From the research findings, banks total assets and inflation rates had increased over the research period. The exchange rates were observed to be volatile and reached the lowest levels in 2011 and 2012.

5.2 Conclusions

The study objective was to determine the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya. This study explored the effects of inflation rates, interest rate spread, foreign exchange rate fluctuations and size of the banks on the performance of commercial banks in Kenya from 2002 to 2014.

From the research findings, the study concluded that there is a weak negative relationship between foreign exchange rate fluctuations and the performance of commercial banks in Kenya in the study period. Additionally, the Kenyan shilling exchange rates against the United States Dollar was observed to be really high during the study period. In essence, the Kenyan currency has been depreciating in values against the dollar over the recent years and this depreciation has had a negative impact on the returns of commercial banks in Kenya. The researcher also concludes that total assets owned by commercial banks and the inflation rates were increasing over the years.

With regards to the inflation rate, the conclusions are that the inflation rates have been increasing yearly over the entire study period. The relationship however between inflation and returns on assets was negative and hence it negatively impacted performance. The difference in rates termed as interest rate spread had a negative relationship with returns on assets. The study concludes that interest rates especially lending rates have been increasing over time whereas the same observation was not eminent in deposit rates by banks. The study therefore concludes that the interest rates spread has been increasing in the recent years since borrowing had become expensive thus profitable whereas deposits rates were very small. This therefore translated to higher

returns by banks since customers pay more and earn less when they make deposits in banks.

This study concludes that the government should deploy adequate measures to safeguard the domestic currency. It should promote foreign direct investments so as to spur economic growth and consequently cause the local currency currency to appreciate. This would translate to a more stable currency against international currencies. This would consequently lower borrowing costs thus making loans even more affordable.

5.3 Recommendations to policy and practice

From the research findings, the researcher made the following recommendations with regards to policy and practice in the foreign exchange markets. The relevant authorities for instance The Central Bank of Kenya should adequately put measures to safeguard the value of the domestic currency. This would ensure that the value on the same does not fluctuate much day in day out.

The Kenyan government should streamline the immediate economic environment whereby all commercial banks operate in this country. This measure would curb variances in the deposit and lending rates. Market stabilization of the banking sector would regulate lending and deposit rates thus ensuring that the rates are almost uniform across all banks.

The Central Bank of Kenya ought to implement efficient monetary and fiscal policies so as to help curb significant deficits in balance of payments. The government at large should deploy measures that are aimed at increasing the national income of the country based on investments funded locally. International funding should be limited to small

extent so that the domestic currency can be strong in the international money markets. Banks were observed to be profitable at a time when the economy was bad whereby other sectors were experiencing difficulties in remaining afloat. The banking industry benefits in such times since the interest rate spread and inflation are high. However, the government should put measure to curb the rising of inflation in double digits. Banks Management in Kenya should adopt hedging strategies so as to mitigate against foreign exchange risks since it affects the performance of the banks in Kenya.

5.4 Limitations of the study

The research concentrated on the study period 2002 to 2014. The study period was therefore not entirely exhaustive in assessing the effects of exchange rate fluctuations on financial performance of commercial banks in Kenya. Research with a wider time span would be imperative in assessing the independent variables against the dependent variables.

The research used four independent variables (the inflation rate, interest rate spread, exchange rate fluctuation and the banks total assets) in assessing their effects on banks financial performance. Therefore effects of the other economic variables were not analyzed in this research. Effects of non financial paradigms on performance were not studied by this research; therefore the study did not address the effects of non economic variables on performance.

The study used secondary data that had been primarily collected for other objectives. Data on some variables for instance quarterly inflation data in the earlier years of the study was a problem. The research findings are therefore entirely dependent on the accuracy and validity of the data obtained from the secondary sources.

5.5 Suggestions for further research

Further assessment should be done to address the challenges that are faced by commercial banks in their attempts to mitigate against foreign exchange risks.

This researcher used the US dollar fluctuation to measure the foreign exchange fluctuations. Future studies ought to be done using other international currencies for instance the Sterling pound or the Euro with reference to the Kenya shilling. This would ensure that comparisons in fluctuations with other currencies can be done and the effects of such changes studied against firm performance.

Further studies can be done on other sectors and not entirely the banking sector for instance firms in energy, manufacturing, agriculture, tourism and other sectors. This would provide a wide pool of research findings that can be compared across the business fraternity for optimal policy formulation. Future researchers can also undertake to ascertain the effectiveness of hedging strategies for instance usage of forwards contracts in reducing foreign exchange risks.

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