The Effects of Foreign Exchange Risks on the Financial Performance of Commercial Banks in Kenya.

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DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other university. To the best of my knowledge and belief, the research project contains no material previously published or written by another person except where due reference is made in the research project itself. No part of this research project may be reproduced without the permission of the author and Strathmore University.

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ABSTRACT

In a world where countries can now trade with each other, foreign exchange risk has become one of the key factors affecting the performance of companies all over the world. The banking industry may argue that it one of the most affected industries by this risk. In Kenya, banks provide foreign currency at rates regulated by the Central Bank of Kenya. The rates vary on each day whether it goes up or down it will have a positive and negative effect on the performance of banks respectively. Empirical review has shown various results. Some have shown that variations in the foreign exchange risk does affect the performance of banks while others have dismissed this notion. This study seeked to determine the effect of foreign exchange risk on the financial performance of commercial banks in Kenya. The study specifically identified the foreign exchange risks facing commercial banks in Kenya and determined the effect of the foreign exchange risk on the financial performance on commercial banks in Kenya. The theories that formed the basis of the study were risk management theory, finance distress theory and international fisher's effect theory. The study adopted a descriptive research design. The unit of analysis was banks located in Kenya and regulated by the Central Bank of Kenya. All banks registered by the end of December 2020 were analysed and no sampling occurred. The population for the secondary data were the 41 commercial banks in Kenya of which two were under receivership and one under statutory management. Data was collected from 25 commercial banks that had data for the 5 years being studied that is 2016 to 2020 which was obtained from the Central Bank of Kenya website. No primary data was used only secondary data. Descriptive statistics, regression analysis and correlation analysis were used for analysing the data using SPSS software. The findings were for a short period to be able to bring out the effect of foreign exchange risk and its control variables on the commercial banks' performance. The main foreign exchange risk was the fluctuation of the Kenyan shilling. The foreign exchange risk measured using US Dollar, Tanzanian shillings and Ugandan shilling had a positive relationship with performance apart from the Tanzanian shilling which had a negative relationship. For the control variables i.e. liquidity risk, credit risk and interest rate risk all had a positive relationship with the performance of banks. The research recommended that the Central Bank will need to liaise with the government to ensure the Kenyan Shilling improves its performance. The commercial banks to trade using foreign currencies so that their performance increases.

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LIST OF ABBREVIATIONS

CBK – Central Bank of Kenya

CPI – Consumer Price Index

CR – Credit Risk

CSR - Corporate Social Responsibility

ECM – Error Correction Technique

IRR – Interest rate Risk

IT – Information Technology

KPIs – Key Performance Indicators

LR – Liquidity Risk

NSE – Nairobi Securities Exchange

SPSS – Statistical Package for the Social Sciences

TZS – Tanzanian Shillings

UGX – Ugandan Shillings

USD – US Dollar

CHAPTER ONE

INTRODUCTION

1.1 Background to Study

With the ever changing and challenging business environment, businesses continue to be exposed to various risks especially as a result of adverse fluctuations in the macroeconomic environment and increased competition. Firms operating in such volatile environments are most likely to be vulnerable to financial risk. In Kenya, many firms are making losses due to foreign exchange rate fluctuations. A good example is in 2015 two giants, Kenya Airways and Uchumi supermarket reported 25.7 billion Kenyan Shillings and 262.3 million Kenya Shillings losses respectively which was associated with foreign exchange rate fluctuations (Kiio & Ambrose, 2017).

Commercial Banks are key contributors of economic growth globally (Cavusgil, Knight, Riesenberger, Rammal, & Rose, 2014). They play a vital role of economic development by collecting savings from entities that have idle surplus fund and mobilize savings of investment and industrial projects. The commercial banks provide the capital needed for development to entrepreneurs starting businesses, they give direct loans to the government and provide payment services for their clients. Economic development of any country is determined by the activities of the commercial banks (Juma, Atheru, & Nzai, 2018).

Thumbi & Ragui (2019), stated that the performance of commercial banks in Kenya determines the financial position of the nation. They brought out that a major contributor to this idea was the fact that the government had placed tough regulations on the industry. Ochanda (2018), concurred by bringing out how the capping of interest rates by the CBK on loans affected employee job satisfaction as they were scared of being retrenched as banks went ahead to heavily invest in IT and reduced expenditure on recruitment and selection so that they can improve their financial performance.

Corporate Social Responsibility (CSR) is the corporate philanthropy efforts of companies to increase their competitive advantage. Corporate philanthropy aligns the social goals of the organisation with economic goals of profitability thereby creating long-term business success (Muthee, 2015). He brought out that CSR does have a fair positive effect and influence the performance of aggregated commercial banks in his study.

There has been a moderate research done on how foreign exchange risk affects the financial performance of banks. (Ahmed, 2015) illustrated that foreign exchange exposure by banks had a had a negative effect on their financial performance. Furthermore, (Majok, 2015) shared that there is a weak negative relationship between foreign exchange rate fluctuations and the performance of commercial banks in Kenya. The findings were aligned with (Muriayi, Atheru, & Nzai, 2018) who stated that that foreign exchange risk has a negative and significant effect on ROA. Their study showed that foreign currency exchange exposure has an adverse effect on banks income.

1.1.1 Banking Sector in Kenya

Kenya's financial history may be traced back to pre-colonial times. The first banks specialized on funding international trade along the Europe-South Africa-India axis. Later, they expanded their activities to take advantage of the lucrative banking prospects presented by a rapidly developing farming settler group and early traders in the local economy to whom they supplied deposit and credit facilities. Indian money lenders offering quasi-bank services were operating in East Africa as early as the 18th century. Jetha Lila Bankers from India formed the first recognizable bank in Zanzibar in 1880. The National Bank of India appointed Smith Mackenzie as their representative in Zanzibar in 1889; they would later create a branch in Mombasa in July 1896. In 1904 they opened a branch in Nairobi. The Ordinance for the Regulation of Banks Established or to be Established in the East Africa Protectorate was passed in April 1909, and the East Africa Post Office Savings Bank Ordinance was passed in April 1910. Kenya had three banks by 1911: The National Bank of India, which had branches in Nairobi, Nakuru, Mombasa, and Kisumu, The Standard Bank of South Africa, which had branches in Nairobi, Nakuru, Mombasa, and Kisumu, and Kathiawad and Ahmedabad Banking Corporation, which operated from 1910 to 1925. Due to the world Wars and the Great Depression, banks were established in ten towns, with Nyeri, Nanyuki, Kitale, Kericho, and Nyahururu being the most new additions. With the passage of time, truly indigenous banks began to emerge. The Co-operative Bank of Kenya, formerly known as the Co-operative Society, was Kenya's first wholly locally owned commercial bank. It first opened the doors in 1968. In the same year, Kenya's National Bank became the nation's first fully owned government bank. Kenya Commercial Bank was founded in 1971 as a consequence of the merging of the National and Grindlays Banks, with the government owning a 60% stake. Kenya has over 30 licensed commercial banks operating in the region (Central Bank, 2017).

The Central Bank of Kenya was established on March 24, 1996, by an Act of Parliament, and it began operations on September 14, 1996. Article 231 of the Constitution currently establishes the bank. The bank's responsibility is to design and execute monetary policy that promotes price stability, fosters liquidity, solvency, and stability in the banking sector, and issue currency notes and coins while also offering banking services to the government, commercial banks, and other financial institutions. (Central Bank, 2017).

1.2 Problem Statement

Financial management practices are an important element in the performance and management of the banking industry (Alnajjar, 2017). Hence, it is important that banks' management seek strategic ways of enhancing profitability in order to realize sustained growth and stability of the financial institutions. Today, all forms of businesses, banks included, are under constant pressure to develop, implement and rapidly revise their financial management strategies (Kirkpatrick, 2009). Financial management is one of the several functional areas of management, but it is the centre to the success of any business. Inefficient financial management practices, combined with the uncertainty of the business environment often leads business enterprises to serious problems (Chandra, 2015). According to Golda (2012), careless financial management practices are the leading cause of failure for banks in Sub-Saharan Africa. Harrison and Muiru (2021), further emphasized that a business organization's performance could be damaged because of improper financial management practices. Many firms have often failed due to lack of knowledge of efficient financial management policies.

A number of previous researchers have found divergent results as to whether foreign exchange risk does affect the financial performance of banks. Maniagi (2018), went ahead to state that when data results for regression and correlation analysis came out, foreign exchange risk had a significant positive relationship with performance of banks. While it was found out by Omondi (2016), that foreign exchange risk had a substantial detrimental effect on Kenyan commercial banks' financial performance.

Previous studies have shown that there is a negative relationship and weak correlation between foreign exchange risks to the bank financial performance. Nevertheless, the studies leave some room for further research to be carried out. The purpose of this research is to determine the correlation and effect of foreign exchange risk on commercial bank financial performance in Kenya.

1.3 Research Objectives

1.3.1 General Research Objectives

The main objective of the study was to determine the effect of foreign exchange risks on the financial performance of commercial banks Kenya.

1.3.2 Specific Research Objectives

1. To identify the main foreign exchange risk facing commercial banks in Kenya.

2. To determine the effect of the foreign exchange risk on the financial performance on commercial banks in Kenya.

1.4 Research Questions

1. What are the foreign exchange risks facing commercial banks in Kenya?
2. What is the effect of foreign exchange fluctuations of the financial performance on commercial banks in Kenya?

1.5 Scope of Study

The general purpose of this study was to determine the effects of foreign exchange risk on the financial performance of commercial banks in Kenya. The physical scope was in Nairobi Metropolis, Kenya. The banking industry is one of the major industries directly affected by fluctuations of the Kenya shilling to the major currencies. The study was focused on the forty-one (41) commercial banks in Kenya. The time period will be between 2016 to 2020. The five-year gap would provide a strong basis for one to analyse how the change in foreign exchange rates affects the performance of banks.

The contextual scope of this study was to determine how the foreign exchange risks affect the financial performance of commercial banks. There are three risks that are linked to foreign exchange namely: transaction risks, economic risks and translation risks. The research was focused on how the above risks affect the performance of banks. The study also focused on determining the correlation between the foreign exchange fluctuations and the performance of banks.

1.6 Significance of the Study

The study's objective was to see how foreign exchange risks affect commercial banks' financial performance in Kenya. Furthermore, the foreign exchange risk was the main focus. Some of the beneficiaries of the study will be:

1.6.1 Management of Banks and Financial Institutions

The managers of banks and financial institutions will be able to see and understand how foreign exchange risk has an impact on the performance of banks. This will help in their decision making and also, they will develop strategies on how they can factor in foreign exchange risk as they look on how they can improve their financial performance.

1.6.2 Stakeholders

Various stakeholders such as the general public and private investors will be able to understand and appreciate how the foreign exchange risk affects the financial performance of banks. This will make them to be more aware and decide on the best economic times to be investing their assets in banks. They will also be able to see how banks have tried to mitigate the risks.

1.6.3 Students

Students interested in the finance and accounting area of study will be able to see how to apply the material they learn in class can be brought out in a research paper and be used to apply in real life situations when making investment decisions.

1.7 Chapter Summary

This chapter has introduced the study area which is "The Effects of Foreign Exchange Risks on the Financial Performance of Commercial Banks in Kenya". It has started from the background of the study which briefly explains how foreign exchange fluctuations have affected other firms and how the performance of banks affects the economy of Kenya. The problem statement explained the area of interest that the study will be based on while trying to solve and highlighted the variables involved in the study. The research objectives have two parts. The first one is the general research objectives which highlights the area to be studied. The second part is the specific research objectives identify the exact area where the study will focus on. The chapter the goes ahead to discuss the significance of the study and the parties that will gain from it. The chapter finalizes by discussing the scope of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will be focused on discussing pertinent literature on electrical banking and customer satisfaction. This chapter presented theoretical reviews of the various theories anchoring the study, empirical review of relevant and related studies, the summary of knowledge gaps, conceptual framework supporting the research and finally the operationalization of variables.

2.2 Concepts

This section will aim to explain the independent and dependent variables that will form the basis of this study.

2.2.1 Foreign Exchange Risk

Mugi (2014), in a study he conducted stated that foreign exchange risk is the exposure of a company's financial power to the potential effect of movements in forex rates. The risk of negative forex rate volatility could cause a drop in financial strength metrics. Unanticipated variations in forex rates computed in terms of exposures pose a risk to companies trading in several currencies. Exposure, as according to him, is a projected or contingent cash flow whose magnitude is uncertain at the moment and is dependent on the value of foreign exchange rates.

2.2.2 Financial Performance

Financial performance is a subjective measure of how well a company can generate revenue using assets from its primary code of business. The term is also used as a broad measure of a company's financial performance over period (Kenton, 2021). Stobierski (2020), went further to state that key performance indicators are metrics organizations use to track, measure and analyse the financial health of the company. These financial KPIs fall under a variety of categories, including profitability, liquidity, solvency, efficiency and valuation. Also, another angle is that financial performance is the company's financial condition over a certain period that includes the collection and use of funds measured by several indicators such as of capital adequacy ratio, liquidity and leverage (Fatihudin, Jusni, & Mochklas, 2018).

2.3 Theoretical Review

The theoretical framework is the structure than can support a theory of a research study. It introduces and describes the theory which explains why the research problem under study exists. Theoretical framework involves the presentation of a specific theory, empirical and conceptual framework about that theory (Rocco & Plakhotnik, 2016). The main theories to be discussed are Risk Management Theory, Finance Distress Theory and International Fishers Effect.

2.3.1 Risk Management Theory

This theory was developed by Pyle (1997), as he aimed to study why risk management was required and it outlines theoretical underpinning under contemporary bank risk management. Its emphasis is on market and credit risks. Eichhorn (2004), also went ahead to state that the theory shows that market and credit risks would have either direct or indirect effect on banks survival. One would usually expect the credit risk indicators to influence banks profitability if there is no effective and efficient credit risk management (Gakure , Ngugi , Ndwiga , & Waithaka, 2012). Wu and Olson (2010) also stated that this theory identifies major source of value loss as market risk being a change in net value of asset due to change of interest rate, exchange rate and commodity prices.

Regulators are concerned with overall risk and have minimum concern with individual risk of portfolio components as managers are capable of window dressing the bank position. The need for total risk also shows that measurement of risk cannot be centralized as risk of a portfolio is not just a sum of component as per Markowitz theory. This implies that portfolio risk must be driven by portfolio return which is invariant to changes in portfolio composition (Beverly, 2015).

Sovan (2010), went ahead to state that measurement of risks is costly and thus bank managers compromise between precision and cost as regulatory requirements and alternative choices require managers to consider risk return trade off. Trade-offs have profound effects on any method adopted by the bank. They have one risk measurement goal knowing to a high degree with precision and the maximum loss that the bank will likely experience (Muhammad & Bilal, 2014). The risk management theory has two main approaches to measurement of risk which are scenario analysis and value at risk (Sovan , 2010).

Wilfred (2006) stated that the scenario analysis approach doesn't require distribution assumption of the risk calculation and it's very subjective and assumes that future results will resemble those of the past. Value at Risk (VAR) uses asset return distribution to estimate the potential losses. Monte-Carlo simulation and analytical value at risk method are two principal methods of estimating value at risk and they enable managers to estimate forecast (Muhammad & Bilal, 2014). Analytical value at risk uses standard portfolio theory that is the return distribution is described in terms of variance and covariance representing risk attributed to a portfolio over horizon as stated by (Sovan , 2010).

2.3.2 Finance Distress Theory

Beaver in 1996 classified and modelled corporate distress and noted that financial distress comprised of liquidation, bankruptcy, mergers absorption or major structural changes to a company (Maniagi, 2018). Baldwin and Scott (2013) went further to state that since prediction of financial distress is difficult there is an overlap between non-failed and failure. In most studies filling of bankruptcy occurs where the business deteriorates making it difficult to meet its short-term obligations when they fall due ass the key factor.

Whitaker (1999) shared that financial distress is accompanied by many factors including failure to pay debts when due, reduction or failure to pay dividends, current liabilities maturing faster than current assets, these activities may occur just before the payments due for outstanding debts. Boritz (1991), postulated that financial distress is characterized with bad economic conditions coupled with poor financial risk management. For commercial banks, the ability to provide cash to depositors and conditions that make depositors to rush to withdraw to withdraw their funds causing the banks to have less funds and this should be monitored as it will put the bank in liquidity problems hence bringing about liquidity risk.

Giroux, James and Wiggins (1984) related some part of this theory to the decline of sales and generation of negative profits to financial distress. Literature related to finance notes of two types of financial distress which include indirect and direct costs. Indirect financial distress costs are consequences of running a company that cannot meet its financial obligations such costs are unobserved and include opportunity cost (Whitaker R. , 1999).

2.3.3 International Fishers Effect

According to Shapiro (2007), the theory states that the difference between two countries' returns is precisely equal to the difference in inflationary pressures. Staikouras and Wood

(2004), went further to elaborate that according to the International Fishers effect, the nominal risk-free interest rates, but from the other hand, include a real rate of return along with predictable inflation. It implies that if all investors/financiers in different countries seek the same real return, interest differentials between countries may be the consequence of future inflation variations. Foreign currencies with comparatively high interest rates, as per the hypothesis, would fall because the high nominal interest rates reflect anticipated inflation. An investment's default risk would be included into the nominal interest rate.

Mugi (2014), also shared that the International Fishers effect states exchange are balanced out by interest changes. Due to arbitrage opportunities between financial markets, which usually take the form of capital flows, the Fisher effect maintains that real interest rates across countries were equal. The fact that real interest rates are equal shows that the country with the higher interest rate will also have higher inflation. The real value of the country's currency, on the other side, will erode with time. She went on to argue that Fisher's model does not use inflation rates, but rather market interest rates and foreign exchange rates, and that exchange rate variations are explained by the interest rate theory. Giddy (1977), named this the International Fisher effect which has a close relationship to the Fisher effect which is an observation by Irving Fisher. Where International Fisher effect holds, interest rates in appreciating currencies tend to be low, while interest rates in depreciating currencies tend to be high, this helps to offset expected currency gains and losses (Mugi, 2014).

If the theory is correct, lending from one country and making investments in another should not yield a good return on average, given exchange rates would adjust to counteract interest rate differentials on average (Majok, 2015). Ubindi (2006), disagreed by stating that the 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 rate differential.

Madura (2010), contributed to the discussion by sharing that the International Fisher Effect theory suggest that foreign currencies with relatively high interest rates will tend to depreciate because the high nominal interest rates reflect expected rate of inflation. Hakiko and Craig (1986), asserted that long-run correlations between inflation rate differentials and exchange rates weren't really perfect, but instead acknowledged use of inflation differentials in forecasting long-term changes in exchange rates. This was supported by Cumby and Obstfeld (1981), as they also he stated that in the long run, the relationship between the two

would be beneficial. Interest rate differentials and successive adjustments in the spot exchange rate appear to exist, but with significant short-term swings. Moreover, in the short run, the International Fisher Effect cannot effectively foretell spot exchange rates.

2.4 Empirical Review

This section brings about the empirical review of this study. It reviews literature on how foreign exchange affects the financial performance of companies and indicators of financial performance for banks.

2.4.1 Effects of foreign exchange risk on financial performance on companies.

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, the empirical study brought out 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 hints that the average foreign-exchange exposures were 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.

Ebaidalla (2014), carried out a study which examined real exchange rate misalignment and economic performance in Sudan. Over the period 1979–2009, the research focuses on the behaviour of the equilibrium exchange rate, real exchange rate, and real exchange rate misalignment in Sudan. The effect of real exchange rate misalignment on economic performance is also studied. The empirical results reveal that economic policy variables such as trade openness, government expenditure, and taxes have a significant impact on the equilibrium exchange rate. The results also reveal that the Sudanese economy had an overvaluation of its currency over the study period.

Pitia and Lado (2015), sought to bring to light the 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 indicates that there is a one-way causation from exchange rate to CPI that does not require feedback. This indicates that a drop in the value of the South Sudanese currency is bad for the country's economy.

Despite the fact that the CPI failed to influence changes in the exchange rate, there is no way to be certain that the results are accurate. The response of monetary authorities in bridging the gap between the price level and the purchasing power of people in the economy should have been the effect of the pressure of an increase in price level on exchange rate.

Cherop (2010), conducted a survey on exchange rate fluctuations in tea among smallholders' tea factories in Kenya, finding that exchange rate changes had a significant impact on smallholders' tea factory earnings. When the local currency depreciated, export revenues were higher, even though export volumes were low. When the currency appreciated, total exports decreased. The focus of this analysis was on tea export revenues, ignoring the vast majority of companies listed on the NSE.

Maina (2010), conducted research on the influence of exchange rate volatility on investment in Kenya's electric power sector. According to Maina's results, when exchange rates were steady, investments in the electricity subsector were higher than when they were volatile.

Kipchirchir (2011), studied the relationship between financial performance for multinational corporations in Kenya and exchange rates volatility. The data revealed that there was a strong link between multinational firms' financial performance and Kenyan exchange rate volatility. The disparity between trading currency and financial reporting currency was responsible for this.

The impact of foreign exchange exposure on a firm's financial performance was also investigated, with a case study of Kenyan publicly traded enterprises as a case study by Gachua (2011). The model developed in the study a model of foreign exchange exposure dependent on three variables, the firm's imports, exports 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 Securities Exchange (NSE) for a ten-year period from 2001 to 2010. The objective of 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 in which qualitative and quantitative data was used. The findings of the study showed that listed companies used the income statement and the owner's equity account to record foreign exchange differences. At the NSE, Ambunya (2012), looked at the relationship between exchange rate movement and stock market return volatility. The study adopted a quantitative design. The target population for this study was fifty-six (56)

companies listed in the NSE as of December 2011. Secondary data was collected from the NSE and Central Bank of Kenya for the period covering 2007 to 2011. Regression analysis was used on the stock market returns volatility against the exchange rate movement. The conclusion was that there was a strong relationship between exchange rate movement and stock market returns volatility. Also, it concluded that the exchange rate movement also affects the stock market performance mainly through its spiral effects.

Rutto and Ondiek (2014), carried out their study based on the effect of currency fluctuations on Kenya's tea exports the study's goal was to establish the influence of exchange rate volatility on tea exports, the contribution of tea exports to Kenya's economy, and make policy recommendations for increasing tea exports based on empirical findings. On recognize the short run and long run behaviour of variables in the study, the Johansen and Julius Multivariate co-integration technique was applied to annual time series data from 1970 to 2008.Also, co-integration and error correction technique (ECM) was used. The data comes from the Kenyan Central Bank and the International Monetary Fund. The study's findings revealed that exchange rate volatility has a detrimental impact on the country's tea export performance.

Singh (2013) carried out a study on the relationship between foreign exchange trading and financial performance of commercial banks in Kenya. The study's goal was to determine the link between forex trading and commercial banks' financial performance in Kenya. All commercial banks were the subject of the study, which was conducted using a survey research design. Data was gathered from secondary sources, such as commercial bank annual reports and CBK-reported derivatives data. The researchers employed Pearson correlation, descriptive statistics, and multiple linear regression analysis. As a result, currency swaps, futures, and spots have a strong link to commercial banks' financial success.

2.5 Conceptual Framework

It's a network of interlinked concepts put together to provide a comprehensive understanding of a phenomenon (Jabareen, 2009). The study aims to hypothesize the interaction between foreign exchange risk and the financial performance of commercial banks in Kenya.

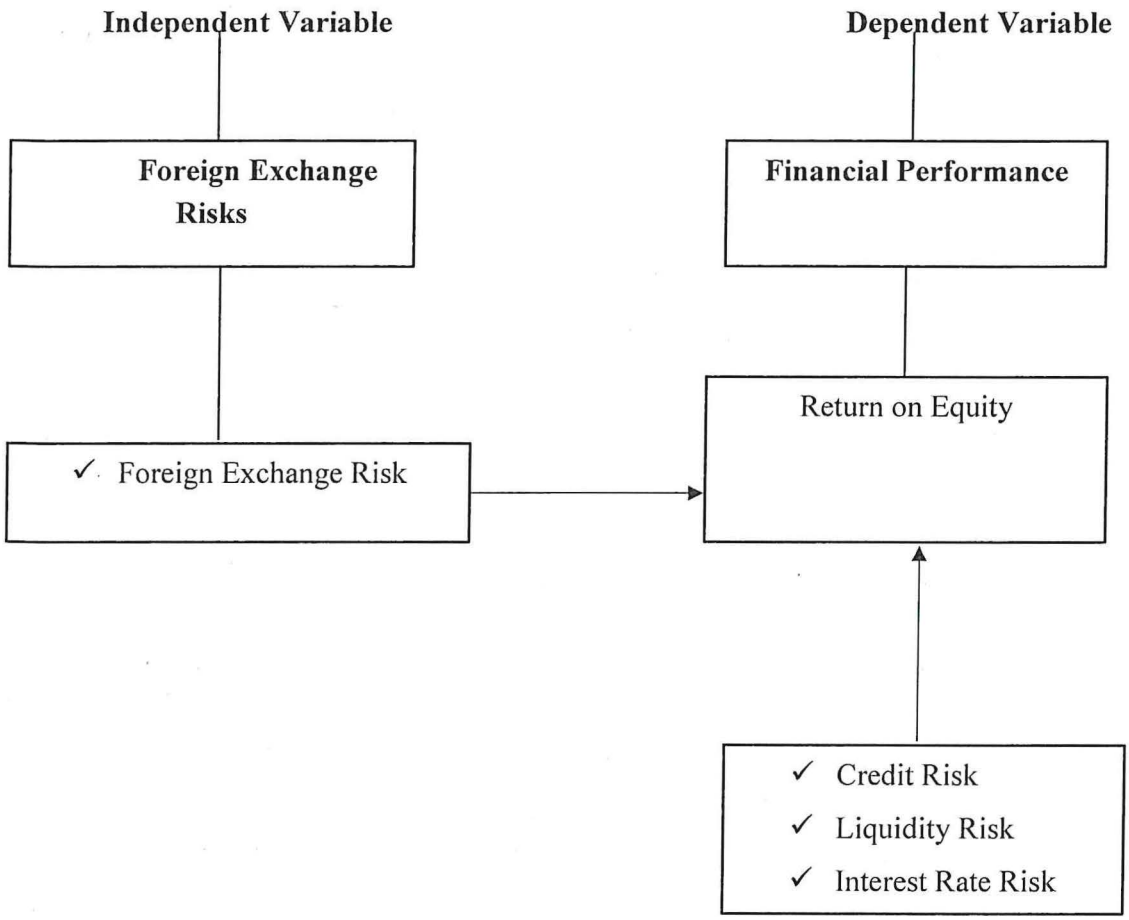


FIGURE 2.1 CONCEPTUAL FRAMEWORK

The conceptual framework depicts the potential effects of foreign exchange risks on commercial bank performance in Kenya. The foreign exchange risk will be measured using standard deviation while the financial performance will be measured using return on equity (ROE).

2.6 Operationalization of Variables

Variables	Constructs/ Indicators	Operation Definition	Rating Measures	Source(s)
Foreign Exchange Risk	Fluctuation in foreign exchange gains and losses	The potential gain or loss of income a bank may experience due to currency changes.	Standard deviation of foreign exchange rate	(Maniagi, 2018)
Liquidity Risk	Ease in which the bank is able to meet its present obligations.	Assess construction of the bank's assets and liabilities that will enable it to meet its obligations as and when they fall due.	Total assets to total deposit ratio	(Maniagi, 2018)
Credit Risk	Borrower being able to repay their loans.	Assess the total loans issued and compare them the total assets the bank has to be able to check the credit risk exposure.	Total loans to total assets ratio	(Maniagi, 2018)
Interest Rate Risk	Gain or losses in investment and loans issued.	Assess the interest income and losses from the loans that have been issued.	Interest income to total assets ratio	(Maniagi, 2018)

TABLE 2.1: OPERATIONALIZATION OF VARIABLES

2.7 Chapter Summary

This chapter aimed to critically describe to detail the literature that has been previously done in relation to the area being studied. It started off by defining the concepts which are foreign exchange risk and financial performance using opinions from past researchers. Secondly, the theories related to the study we examined and explained which are Risk Management Theory, International Fishers Effect and Finance Distress Theory. The empirical review illustrated the effects of foreign exchange risk on financial performance on companies all over the world and here in Kenya. It also brought out how the studies had varying results. The third part was the conceptual framework which shows how foreign exchange risk, credit risk, liquidity risk and interest rate risk are related to the performance of banks. The operationalization of variables illustrates how the variables will be measured.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter reviews the systematic methodology that is applied in the process of solving the research problem. This chapter focused on the research design, population, sampling method and size, data collection methods and procedures, research quality and validity and ethical issues.

3.2 Research Design

The study adopted a descriptive research design. Mugenda and Mugenda (2003), states that 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 with the what, where and how of a phenomenon hence more placed to build a profile on that phenomenon (Mugenda and Mugenda, 2003).

Upagade and Shende (2012), on the other hand describes research design as the arrangement of conditions from collection to analysis of data in a way that will aim to combine relevance of research purpose with economic implication. It is the logical manner by which elements of research are compared and analysed so as to interpret the data. Research design is a blueprint that guides the process of research from the formulation of the research questions and hypotheses to reporting the research findings (Sekaran & Bougie , 2011). Lavrakas (2008), states that selection of an appropriate research design is determined by the nature of research questions and hypothesis, the variables, the sample of participants, the research settings, the data collection methods and data analysis methods. Since the study's goal was to provide a profile of the effects of exchange rate variations on commercial banks' financial performance in Kenya, a descriptive research methodology will be more suited.

3.3 Data Collection Methods

Secondary data was used in the investigation. Secondary data was gathered from the CBK website using annual reports filed by banks to the CBK. Reports for the year banks will be examined from 2016 to 2020, which is also the study period.

3.4 Data Analysis

Mugi (2014), states that analytical tools data analysis aim to address the research questions of the study which is an assessment of foreign exchange risk management practices effect on financial performance of commercial banks in Kenya. To ensure that the data obtained in the study is of the highest quality and accuracy, it was sorted, revised, and coded. It was then entered into SPSS for the creation of frequency tables, charts, correlations, and regressions that aided in determining the magnitude of the independent variable's influence on the dependent variables using multiple linear regression analysis. The regression model is a multivariate model that expresses the bank performance of commercial banks as a function of the foreign exchange risk management techniques chosen. The regression function includes the dependent function to be used includes the dependent variable and independent variables will be written as follows;

$$Y= \beta 0 + \beta 1X1+\beta 2X2 +\beta 3X3+\beta 4X4 + \varepsilon$$

Where:

Y = Financial Performance

$\beta 0$ = Y intercept

X1 = Foreign exchange rate fluctuations

X2 = Credit Risk (control variable)

X3 = Liquidity Risk (control variable)

X4 = Interest rate risk (control variable)

ε = Error term

The dependent variables X1 represent the factors that affect the financial performance of a bank that will be under consideration in this study. X2, X3 and X3 will be used as control variables for the study.

In its simplest form the regression analysis allows researchers to analyse the relationships between the independent variables and the dependent variable. Regression analysis can provide insights that few other techniques can. The benefits of using regression analysis are

that it can: indicate if independent variables have a significant relationship with a dependent variable, indicate the relative strength of different variables' effects on a dependent variable and finally it allows one to make predictions (Sarstedt & Mooi, 2014).

3.5 Research Quality

3.5.1 Reliability

Reliability is the faith that the user or other researchers who might use this research have in the data obtained and the extent to which this study has no error (Kumar, 2017). To make sure that this research is reliable, the test-retest method will be used. The test-retest method is where the same sampling method is conducted for the same population at two different times (Vaz, 2013). This research did the same by using the financial statements for five years to pick data for the banks and this ensures the data was picked for different years but, for the same population.

3.5.2 Validity

The validity of a research is how the observations are interpreted and whether the conclusion the researcher makes are supported by the data collected or the existing research (Perakyala, 2011). The unified concept of validity integrates considerations of content, criteria, and consequences into a construct framework for theoretically testing the relationship between the study variables i.e., foreign exchange risk and financial performance (Messick, 2008). The importance of unified validity is that the correctness, importance, and practicability of the conclusions are inseparable and that they are trustworthy (Messick, 2008). The validity of this research was supported by the evidence collected which in turn ensured the appropriateness of the research. The evidence was in terms of the research design, the population, the data collection methods and the analysis of the data collected. The research was focused on the content and criteria validity.

3.5.3 Criteria Validity

It predicts how we'll the measure in a specific research is related to the outcome (Yaghmaei, 2003). For this research, through the population, the data collection method and finally the data analysis there was evidence of how each factor affects the conclusion of the research.

3.6 Ethical Issues

This research ensured that ethical guidelines are obeyed during the course of the data collection. The researcher undertook to seek and obtain clearance and approval from Strathmore University Ethics Review office before commencing with this research. The researcher also ensured that the data collected was used for academic purposes. The data that was collected was also treated with the highest confidentiality to protect the respondents that participated.

CHAPTER FOUR

PRESENATION OF RESEARCH FINDINGS

4.1 Introduction

This chapter will be focused on bringing to light the findings of the study and also explain the evidence presented. This chapter contains details of secondary data analysis, sample representation, descriptive analysis, correlation analysis and summary of the findings.

4.2 Sample Representation

There are 41 commercial banks in Kenya as per the CBK report in 2020 of which two banks are under receivership that is Chase Banks and Imperial Bank hence they did not present financial statements for publication for the year. Charter House bank as well was under statutory management hence it did not publish their financial statements for the year. National Bank was acquired by KCB Bank in 2019 hence it did not have financial reports for the year 2020 rather it was consolidated under KCB Bank. For this dissertation 25 banks were used financial five-year period 2016 to 2020 were available giving a response rate of 60%. For the missing twelve banks, some did not have financial statements available to the public, for some the reporting currency was not in Kenyan Shillings and for some they were missing financial statements for some years. The table below illustrates the above figures.

Banks Listed on annual CBK report	41	100%
Banks under receivership	(2)	5%
Banks under statutory management	(2)	5%
Banks missing reports for some years	(2)	5%
Banks presenting information in foreign currency	(1)	2%
Banks not having financial statements available for the public	(9)	22%
Banks selected for analysis	25	60.9%

TABLE 4.1 BANK POPULATION BREAKDOWN

4.3 Descriptive Analysis

From the table 4.1 below, the natural logarithms of return on equity had a mean of 3.2380 and 0.70899 while the standard deviation were 24.70 and 4.08317 respectively. The foreign currencies used for this study were US Dollar (USD), Tanzanian Shilling (TZS) and Ugandan Shilling (UGX).

TABLE 4.2 DESCRIPTIVE STATISTICS TABLE

	ROE	Credit Risk	Liquidity Risk	Interest Rate Risk	TZS	UGX	USD
Minimum Statistic	0.14	0.52	1.33	0.08	-0.97	-13.66	-5.16
Maximum Statistic	0.25	0.57	2.44	0.11	0.90	11.45	2.11
Mean	0.21	0.54	1.62	0.09	-0.14	-0.40	-0.84
Std. Deviation	0.04	0.02	0.47	0.01	0.81	8.95	2.82
Skewness	-1.51	1.15	1.87	0.41	0.19	-0.39	-0.95
Kurtosis	2.89	2.00	3.44	-0.18	-2.04	1.88	0.54

The measures of foreign exchange risk as per their natural logarithms had a mean of -0.8337, -0.4024 and -0.1375 while the standard deviations are 2.822, 8.9450 and 0.80966 for the USD, TZS and UGX respectively. The measures of credit risk (CR) which were total loans to total assets ratio, their natural logarithms had a mean of 0.5400 with a standard deviation of 0.01871. The liquidity risk (LR) measured using the total assets to total deposit ratio, their natural logarithms had a mean of 1.6240 and a standard deviation of 0.47395. The interest rate (IRR) risk measured using interest income to total assets ratio, their natural logarithms had a mean of 0.0940 and a standard deviation of 0.01140. The mean value of return on equity are significantly positive thus commercial banks in Kenya are enjoying a healthy profitability.

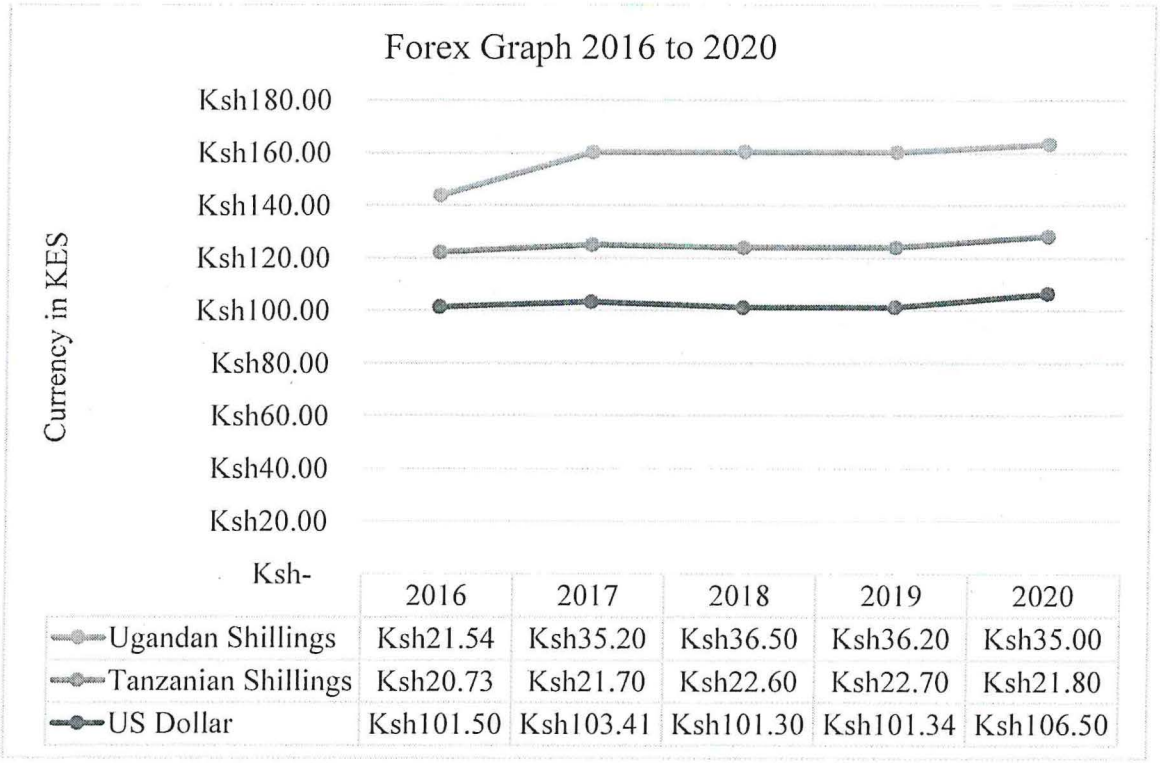
Two statistical methods that were used to test normality were skewness that measures symmetry of a distribution and kurtosis that identifies the sharpness of the peak of a frequency distribution curve. A distribution is considered normal if the values of skewness and kurtosis are equal to zero. Return on equity, Ugandan Shillings and US Dollar are negatively skewed, they are flatter to the left as compared to normal distribution except for credit risk, interest rate risk, liquidity risk and the Tanzanian Shilling which are positively skewed. Monte-carlo simulations indicate that skewness of value smaller than 2 and kurtosis value smaller than 6 should be considered normal. Skewness of value 2.02 to 3.0 and

kurtosis value 6.0 to 21.0 are considered non-normal. Skewness of value greater than 3 and kurtosis greater than 21 is considered extremely non-normal (Tabor, 2010). From the table above skewness ranges from -1.509 to 1.145 hence indicating all measures of variables are normal. Negative skewness meant asymmetrical distribution for ROE, UGX and USD with a long tail to the left meaning decrease in performance in the observed periods. Kurtosis had a range of -2.038 to 2.891 indicating the data for all measures are normal.

4.4 Identify Foreign Exchange Risks

The main foreign exchange risks facing banks was the constant depreciation of the Kenyan Shilling as compared to the US Dollar. This led to increase in cost of imports and decrease in value of exports hence affecting the balance of payment. The fluctuation of the Kenyan Shilling compared to its neighbour's also led to a small reduction in the value of exports. The graph below brings about how the Kenyan Shilling was fluctuating compared to USD, TZS and UGX from 2016 to 2020.

FIGURE 4.1 FOREIGN EXCHANGE FLUCTUATIONS GRAPH



	2016	2017	2018	2019	2020
Ugandan Shillings	Ksh21.54	Ksh35.20	Ksh36.50	Ksh36.20	Ksh35.00
Tanzanian Shillings	Ksh20.73	Ksh21.70	Ksh22.60	Ksh22.70	Ksh21.80
US Dollar	Ksh101.50	Ksh103.41	Ksh101.30	Ksh101.34	Ksh106.50

4.5 Correlation Analysis

The main objective of the study was to identify and determine the effect of foreign exchange risks on the financial performance of banks. Apart from the three foreign currencies used, three control variables were used namely liquidity risk, interest rate risk and credit risk

4.5.1 Effect of Foreign Exchange Risk

This area was measured using correlation coefficient more specifically Pearson's correlation that is mostly used for linear regression. The formula will return a value between -1 and 1 which are interpreted as follows:

- 1 indicates a strong positive relationship.
- -1 indicates a strong negative relationship.
- 0 indicates `no relationship at all.

On a scale of 0.1 to 0.9 it is divided into three parts. They are broken down as follows:

- 0.1 to 0.4 indicates the relationship is weak.
- 0.5 indicates the relationship is medium
- 0.6 to 0.9 indicates the relationship is strong.

Correlations

		ROE	USD	TZH	UGH	Interest	Liquidity	Credit
ROE	Pearson Correlation	1	.915*	-.476	.246	.792	.581	.617
	Sig. (2-tailed)		.029	.418	.690	.110	.304	.268
	N	5	5	5	5	5	5	5
USD	Pearson Correlation	.915*	1	-.542	.245	.509	.307	.540
	Sig. (2-tailed)	.029		.346	.691	.382	.615	.347
	N	5	5	5	5	5	5	5
TZH	Pearson Correlation	-.476	-.542	1	.675	-.225	.183	.361

	Sig. (2-tailed)	.418	.346		.211	.716	.768	.551
	N	5	5	5	5	5	5	5
UGH	Pearson Correlation	.246	.245	.675	1	.217	.531	.903*
	Sig. (2-tailed)	.690	.691	.211		.726	.358	.036
	N	5	5	5	5	5	5	5
Interest	Pearson Correlation	.792	.509	-.225	.217	1	.898*	.586
	Sig. (2-tailed)	.110	.382	.716	.726		.038	.299
	N	5	5	5	5	5	5	5
Liquidity	Pearson Correlation	.581	.307	.183	.531	.898*	1	.764
	Sig. (2-tailed)	.304	.615	.768	.358	.038		.133
	N	5	5	5	5	5	5	5
Credit	Pearson Correlation	.617	.540	.361	.903*	.586	.764	1
	Sig. (2-tailed)	.268	.347	.551	.036	.299	.133	
	N	5	5	5	5	5	5	5

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

TABLE 4.3 CORRELATION OF RETURN ON EQUITY WITH INDEPENDENT VARIABLES

From the table above, it can be concluded that the Ugandan Shilling registered a weak positive correlation with the return on equity with a coefficient of 0.246. The interest rate risk, liquidity risk, credit risk and US Dollar registered a strong positive correlation with the return on equity with a coefficient of 0.792,0.581, 0.617 and 0.915. The Tanzanian Shilling registered a weak negative correlation with a coefficient of -0.476 with the return of equity for commercial banks in Kenya.

4.6 Regression Analysis

The study main objective was to examine the effects of foreign exchange risk in the financial performance of commercial banks in Kenya. Once a relationship was identified between the independent variables and dependent variables, multiple regression analysis was carried out to establish the effects of each independent variable to dependent variable individually. The overall significance of the model was also established using analysis if variance (ANOVA).

4.6.1 Diagnostic Tests

This section entails the diagnostic tests carried out before the multiple regression is carried out.

4.6.1.1 Test for Normality

The histogram was used to check for normality by having a normality curve drawn on the histogram. If the histogram is well covered by the normality, density curve it implies the data is normal. From the figure below, the histograms were slightly positively skewed and since the mean was also positive it shows that the data collected was good.

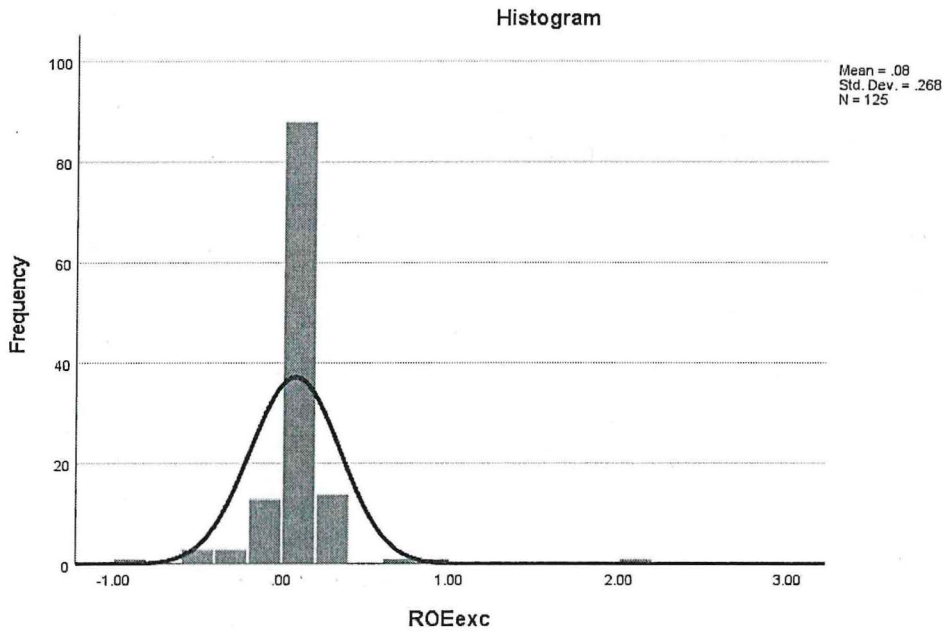


FIGURE: 4.2 ROE HISTOGRAM

4.6.1.2 Test for Autocorrelation

Autocorrelation refers to a situation where the residuals in the model are correlated which would have a negative influence on the model that is correct inference cannot be made. Durbin Watson statistic was used to test for autocorrelation. The table below shows the DW statistic being 2.228 for both ROE hence there is a positive autocorrelation.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.318[a]	.101	.079	.49526	2.228

a. Predictors: (Constant), Liquidity, Credit, USD

b. Dependent Variable: Log10ROE

TABLE 4.4: DURBIN WATSON TABLE FOR ROE

4.6.2 Overall Regression Models

In the regression below, a combination of one independent variable made up of three currencies (US Dollar) and three control variables were used (Liquidity Risk, Interest Rate Risk and Credit Risk) were used to explain the financial performance of commercial banks in Kenya (measured using ROE).

4.6.2.1 Regression Model for ROE

The regression model given by the table is summarized below:

ROE = -0.561 + 0.91 * USD – 0.0488 * LR – 0.246 * CR

Where:

ROE represents the financial performance of commercial banks in Kenya, USD represents the US Dollar, LR represents the liquidity risk and CR represents the credit risk.

-0.561 is the constant term that represents the financial performance of commercial banks when there is no US Dollar, interest rate risk, liquidity risk and credit risk.

0.91– Co-efficient of US Dollar. For every unit of increase in US Dollar the financial performance of commercial banks increases by 0.091 provided all other factors remain constant.

-0.0488 – Co-efficient of liquidity risk. For every unit of liquidity risk the financial performance of commercial banks decreases by 0.0488 provided all other factors remain constant.

-0.246 – Co-efficient of credit risk. For every unit of increase credit risk, the financial performance of commercial banks decreases by 0.246 provided all other factors remain constant.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Liquidity, Credit, USD[b]	.	Enter

a. Dependent Variable: Log10ROE

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.318[a]	.101	.079	.49526

a. Predictors: (Constant), Liquidity, Credit, USD

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.334	3	1.111	4.530	.005[b]
	Residual	29.679	121	.245		
	Total	33.013	124			

a. Dependent Variable: Log10ROE

b. Predictors: (Constant), Liquidity, Credit, USD

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-.561	.195		-2.883	.005
	USD	.091	.180	.044	.506	.614
	Credit	-.488	.283	-.149	-1.722	.088
	Liquidity	-.246	.077	-.276	-3.195	.002

a. Dependent Variable: Log10ROE

TABLE 4.5: REGRESSION MODEL AND ANALYSIS FOR ROE

The table above presents a coefficient of correlation (R), Coefficient of determination (R Square), Adjusted R square and standard error of the estimate. The R-value explains what percentage of the model is described by the data. In this case, 31.8% of the data explains the model. R square is used to explain the percentage of the independent variables that can be used to explain the dependent variable. In this case, 10.1% of the three factors under investigation can be used to explain financial performance of commercial banks in Kenya, and the rest (100-10.1=89.9%) is due to unexplained variations. Adjusted R square is an

extension of the R square and its used to take care of the number of independent variables in the model. So, from the table, only 7.9% of the three factors can be used to explain financial performance of commercial banks in Kenya and the rest is due to unexplained variations.

In the table above the overall significance of the model is presented. Analysis of variance (ANOVA) shows whether the percentage explained by the independent variables is statistically significant. It concluded that the model is statistically significant at 1% significance level (p-value = 0.005 < 0.01). The table also looks at individual independent variable to ascertain their effect in the model and whether they are statistically not significant. From the table US dollar was statistically not significant with a coefficient of 0.614.

4.7 Summary of Findings

The aim of this chapter was to thoroughly bring to light the two main objectives of the study which are to identify the man foreign exchange risks affecting the financial performance of bank as well as determine the effect of foreign exchange risks on the financial performance of banks. The data was collected from 60% of the banks listed in the CBK report for the year 2020. The missing 40% were due to factors like some were under statutory management such Chatter house bank, others did not have financial statements for the study period, others were reporting in a different currency while others were didn't have their financial statements available to the public. The descriptive statistics brought out how mean calculation, standard deviation, kurtosis and skewness were applied to the study. Finally, the correlation analysis illustrated that the main foreign exchange risk is fluctuation of the Kenyan currency. It also showed how the correlation coefficient was used to show the relationship between ROE with the independent variable and control variables. From the regression analysis used USD as the foreign exchange risk and two control variables. The results showed that liquidity risk and credit risk had a negative co-efficient while the US dollar had a positive co-efficient to the performance of commercial banks in Kenya.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The objective of the study was to determine the effect of foreign exchange risk on the financial performance of commercial banks in Kenya. From this overall objective, this study aimed at finding out the main cause of foreign exchange risk facing commercial banks in Kenya and the effect of foreign exchange on the financial performance of commercial banks in Kenya. This chapter presents the summary of major findings of the study, the conclusions of effect of foreign exchange risk on the financial performance of commercial banks in Kenya. The chapter will also comprise of recommendations, suggestions for further research and finally limitations of the research.

5.2 Discussion

This study was carried out on the aim of determining the effect of foreign exchange risk on the financial performance of commercial banks in Kenya. The study reviewed theoretical as well as empirical literature on financial risk. From the review of related literature, the conceptual framework was constructed to conceptualize the relationship between foreign exchange risk and financial performance of commercial banks in Kenya. From the previous research done Ahmed (2015), Majok (2015) and Muriyai, Atheru and Nzai (2018) all found out that the foreign exchange risk had a negative correlation with the financial performance of commercial banks in Kenya. Maniagi (2018) however, showed that the foreign exchange risk had a positive correlation with the financial performance of commercial banks in Kenya. This study had a result the same as that of Maniagi (2018). The main reason why the results were positive was that there were two control variables in place that is credit risk and liquidity risk. Also, the use of three foreign currencies helped the conclusion to be drawn fairly apart from using the US Dollar like all other previous studies had done. The US Dollar was mainly used to carry the regression analysis which showed that the foreign exchange risk was statistically not significant in affecting the financial performance of banks.

This relationship was then empirically tested under the guidance of the following specific objectives. To identify the main foreign exchange risk facing commercial banks in Kenya and to determine the effect of the foreign exchange risk on the financial performance on commercial banks in Kenya. The above relationships were brought out in the conceptual framework.

Using the conceptual framework along with the research objectives, the research used secondary data tools. Financial information relating to the financial statements of commercial banks in Kenya were obtained from the Central Bank of Kenya Website an individual banks website for the period 2016 to 2020. Financial ratios were used to measure the control variables for foreign exchange risks such as interest rate risk, credit risk and liquidity risk. Foreign exchange risk was measured using standard deviation of exchange rate of Kenyan shilling against the US Dollar, Tanzanian Shilling and Ugandan Shilling. Stationarity of the data was checked, this helped to obtain a meaningful sample mean, variance which would show future behaviours if series was stationary. For the secondary data, ROE was calculated by the CBK for all the years being studied. The correlation between the independent variable and dependent variable was carried out.

Statistical package for social sciences (SPSS) was used for analysis all through. Quantitative data was analysed using descriptive statistics. The linear regression analysis was used to test the combined effect of all the independent variables using US dollar for the foreign exchange.

5.2.1 Main Foreign Exchange Risk.

The first objective was to identify the main foreign exchange risk facing the commercial banks performance in Kenya. The results were that the constant depreciation of the Kenyan currency vs the US Dollar meant the value of the Kenyan shilling went down. The effect was that the imports were more expensive as compared to the export's revenue coming in. This led to the imbalance of payment. The Kenyan Shilling compared to the Tanzanian and Ugandan shilling as well was also fluctuating and it also affected the revenue from exports and costs related to imports. Although the fluctuations were not high enough it led to high unrealised losses due to the constant fluctuations.

5.2.2 Effects of Foreign Exchange Risks on Financial Performance.

The results from the data collected for correlation and regression, US Dollar had a high positive correlation with performance (0.876), Ugandan shilling has a weak positive correlation with performance (0.222) while the Tanzanian shilling had weak negative correlation with performance (-0.477). As for the control variables, they all had a strong positive correlation with performance.

From the regression analysis the US dollar factor was 0.005 for ROE. For every unit increase in US dollar, it's expected that the financial performance of commercial banks will increase

by 0.005 for ROE. The R value was 31.8% of the data collected can be used to explain the model. R square in this case was 10.1% as well. The US dollar was statistically significant from the regression model. This shows that the US dollar positively influenced the financial performance of commercial banks in Kenya.

The analysis from the research showed that there was a strong relationship between US dollar fluctuation. Similarly, Regression Analysis shows that the fluctuation of the US dollar positively influenced the financial performance of commercial banks in Kenya.

5.3 Conclusion

Based on the empirical evidence, a number of logical conclusions can be made as follows in the sections below.

5.3.1 Effect of Exchange Risk Facing Commercial Banks.

It can be concluded that the constant fluctuation of the Kenyan currency was the major foreign exchange risk facing commercial banks. This meant that if the value of the Kenyan shilling it had a major impact on the performance of banks and when it went down it also had a major impact on the financial performance of banks. The risk management theory is contrary to the study findings as the regression coefficient was 0.614 on the financial performance of banks, showing that the foreign exchange risk doesn't have a significant effect on the financial performance of commercial banks. Using the Pearson's correlation method, the relationship of the foreign currencies was positive for the USD and UGX and negative for TZS. When the control variables are factored in they also have a positive correlation with the financial performance of commercial banks.

5.4 Recommendations of the Study

The following recommendations have been made based on the study findings as shown below.

5.4.1 Fluctuation of Foreign Currencies

The main foreign exchange risk identified was the fluctuation of the Kenyan shilling. The CBK should work hand in hand with the central government to try and stabilize the economy. This will help stabilize the Kenyan shilling and also help it appreciate up instead of the trend being uncertain. It should also work hand in hand with the finance ministry to try and curb inflation and keep at a low rate to enable the currency to stay stable.

5.4.2 Foreign Exchange Risk and Its Influence on Performance.

Foreign exchange risk and the control variables were positively related to performance, this means that any changes in the Kenyan shilling and the control variables increased the financial performance of commercial banks in Kenya. Thus, banks should be encouraged toward trading in foreign exchange as this will improve the performance of the banks as increase in foreign exchange risks leads to increase in performance profitability.

5.5 Limitations of the Research

While conducting the research a few limitations came up and are explained in this section. The first main limitation is that out of thirty-six eligible banks not under outside management, only twenty-seven could qualify for the study. This meant that the study population was smaller than anticipated. Out of the twenty-five eligible banks some of them had not been in operation during the study period of 2016 to 2020 meaning they couldn't qualify for the study.

The second limitation was that some banks had different formats of presenting their information and some did not have audited accounts which raises the questions of their credibility. Some banks reported on a quarterly bass and missed uploading their 2020 financial statements or some years were missing.

The third limitation was that some banks would make adjustments on the previous years reports. This meant that a lot of time was spent confirming the values which meant a lot of time was taken to review figures.

5.6 Suggestions for Further Research

This study mainly focused on how foreign exchange risks affect the financial performance of commercial banks in Kenya. Further studies should be done to identify other factors causing foreign exchange risks and financial risks affecting the financial performance of banks. Establishing a mix of various factors causing foreign exchange risk and financial risks affecting the financial performance of banks can be taken as a better variable.

Further studies can also be done to determine the causes of foreign exchange risk on financial performance. This can be done by getting input from the bank managers and evaluating their foreign transaction policies. Also input from CBK representatives can help determine how the Kenya shilling is always fluctuating which is one of the major causes of

foreign exchange risk. This will help give an inside depth of how foreign exchange risk is treated from both the banks perspective and the CBK perspective.

Further studies can also be done to see how the foreign exchange risk can be mitigated and if that will improve the banks financial performance. Also, more research can be done to determine future trends and challenges facing foreign exchange risk management in the digital economy so as to have insight of foreign exchange risk issues as now more people and companies are starting to trade on forex market which in itself is also complex. This will help form an understanding on how trading in the forex market can affect the financial performance of banks.

REFERENCES

Alnajjar, D. (2017). *Impact of Accounting Information System on Organizational Performance: A Study of SMEs in the UAE.*

Ahmed, L. (2015). *The Effect of Foreign Exchange Exposure on the.* International Journal of Scientific and Research Publications.

Baldwin, C., & Scott, M. (1983). The resolution of claims in financial distress: The case of Massey Ferguson. *Journal of Finance*, 505-516.

Beverly, H. (2015). *Public Disclosure and Risk-Adjusted.* Federal Reserve Bank of New York, Staff Reports , New York.

Boritz, J. E. (1991). *The hypothesis of the continuity of the operation and its Impact on Accounting and checking.* CICA Plublication.

Cavusgil, S. T., Knight, G., Riesenberger, J. R., Rammal, H. G., & Rose, E. L. (2014). International Business. *2nd Edition.*

Central Bank: History. (2017). From Central Bank of Kenya Web site: https://www.centralbank.go.ke/bank-history/

Chandra, P. (2015). *Financial Management: Theory and Practice.* Mc Graw Hill India.

Chen, J. (2020, October). What is Foreign Exchange? *Foreign Exchange (Forex).*

Cherop, C. K. (2014). A Survey of Exchange Rate Fluctuation on Tea Export Earnings among Smallholder Tea Factories in Kenya. *Research Journal of Finance and Accounting, 5*(18).

Cumby, R. E., & Obstfeld, M. (1981, June). A Test of the Fisher Hypothesis. *A Note on Exchange-Rate Expectations and Nominal Interest Differentials, 36*(3), 697-703.

Ebaidalla, D. (2014). Real exchange rate misalignment and economic performance in. *Journal of Finance*, 166-185.

Eichhorn , M. (2004). Management of Risks. *Insurance Journal on Risk Management*, 3-5.

Fatihudin, D., Jusni, & Mochklas, M. (2018). *How To Measure Financial Perfomance.* IAME.

Gachua, N. F. (2011). *The effect of foreign exchange exposure on a Firm's financial perfomance.*

Gakure , R., Ngugi , J., Ndwiga , P., & Waithaka, S. (2012). Effect of Credit Risk Management Techniques on the Performance of Unsecured Bank Loans Employed Commercial Banks in Kenya. *International Journal of Business and Social Research,*, 221-236.

Giddy, I. H. (1997, Summer). Exchange Risk: Whose View? *Financial Management, 6*(2), 22-33.

Giroux, G. A., James, F. C., & Wiggins , C. E. (1991). Predicting corporate bankruptcy using failing firms. *Review of Financial Economics.*

Golda, A. D. (2012). *Effects of financial management practices on performance of Kenya Medical.*

Hakkio, & Craig, S. (1986). *Interest Rates and Exchange Rates-What Is the Relationship?*

Jabareen, Y. (2009, December 1). Building a Conceptual Framework: Philosophy, Definitions, and Procedure. *International Journal of Qualitative Methods.*

Juma, A. M., Atheru, G., & Nzai, D. (2018). Financial Risks Analysis and Performance of Commercial Banks in Kenya. *Journal of Finance and Accounting, 2*(2), 76-95.

Kenton, W. (2021). Tools For Fundamental Analysis: Financial Perfomance . *Fundamental Analysis.*

Kiio, J. M., & Ambrose, J. (2017, January). Financial Risk Hedging Practices and Performance of Firms Listed in Nairobi Securities Exchange (NSE), Kenya. *International Journal of Scientific Research and Innovative Technology, 4*, 1 - 18.

Kipchirchir, D. T. (2011). *Foreign Exchange Risk Management Practices: A Survey of Motor Vehicle Industry in Kenya.*

Kirkpatrick, G. (2009). *The Corporate Governance Lessons from the Finacial Crisis.*

Kumar, H. (2017). Citeria for good measurements in research. *Validity and Reliability*, 59-82.

Lavrakas, P. (2008). Encyclopedia of Survey Research Methods. *1*, 784-785.

Madura, J. (2009). *International Financial Management.* South-Western College.

Majok, E. (2015). *EFFECTS OF EXCHANGE RATE FLUCTUATIONS ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA.*

Maniagi, G. M. (2018). *Influence of Financial Risk on Financial Perfomance of Commercial Banks in Kenya.*

Messick, S. (2008). Foundations of Validity. *Research Report Series,*, 18.

Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and Qualitative Approaches.* African Centre for Technology Studies., Nairobi.

Mugi, A. N. (2014). *The effect of foreign exchange risk management practices on financial performance of commercial banks in Kenya.*

Muhammad, E., & Bilal, K. (2014). A Review of Risk Management Theory in Commercial and Islamic Banks. *International Journal of Management & Organisational Studies*, 1-5.

Muriayi, J. A., Atheru, G., & Nzai, D. (2018). *Financial Risks Analysis and Performance of Commercial Banks in Kenya.*

Muthee, G. (2015). *DOES CORPORATE SOCIAL RESPONSIBILITY INFLUENCE FINANCIAL.*

Ochanda, C. A. (2018). *The effect of interest rates caps on bank perfoance amongst Kenyan Commercial Banks.*

Omondi, N. O. (2016). *FINANCIAL RISKS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA.*

Perakyala, A. (2011). Quantitative Research. *Validity in Quantitative Research*, 382.

Pitia , E., & Lado, Z. (2015). Test of relationship between Exchange Rate and Inflation. *Economics, 4*(2), 24-40.

Pyle, D. H. (1997). Risk Management and Regulation in Banking. In *Bank Risks Management: Theory* (p. 7 to 14). New York: Springer, Boston, MA.

Sarstedt, M., & Mooi, E. (2014). Regression Analysis. In *A Concise Guide to Market Research* (pp. 193-233).

Sekaran , U., & Bougie , R. (2011). *Research Methods for Business: A Skill Building Approach*.s

Shapiro, A. C. (2007). *Multinational Financial Management* (9th ed.). New York: Willey.

Sing, K. S. (2013). *The relationship between foreign exchange trading and financial performance of commercial banks in Kenya.*

Sovan , M. (2010). Risk Measures in Quantitative Finance. *International Journal of Business Continuity and Risk Management*, 130-142.

Staikouras, C., & Wood, G. (2004). The determinants of European bank profitability. *International Business and Economics Research Journal*, 57-68.

Tabor, J. (2010). Investigating the Investigative Task: Testing for Skewness - An Investigation of Different Test Statistics and their Power to Detect Skewness. *Journal of Statistics Education*, 1 - 13.

Thumbi , G. W., & Ragui, M. (n.d.). Environmental Factors and Performance of Commercial Banks in Kenya. *International Journal of Current Aspects, 6*(3), 149-175.

Tuovila, A. (2020, May 29). Sampling. *Corporate Finance and Accounting*.

Ubindi, B. S. (2006). *A survey of foreign exchange risk management practices by Forex Bureaus in Kenya.*

Upagade, V., & Shende, A. (2012). *Research Methodology*, 311-341.

Vaz, S. (2013). Test-retest reliability. *Repeatability coefficient when calculating test-retest reliability*, 82.

Whitaker, R. (1999). Elsevier Advanced Technology Publications. *Elsevier Advanced Technology Publications*, 123-133.

Whitaker, R. B. (1999). The early stages of financial distress. *Journal of Economics and Finance*, 123-132.

Wilfred, C. (2006). Philosophy, Methodology and Action Research. *Journal of Philosophy of Education*, 421-436.

Wong, J. J., Wong, T., & Leung, F. (2008). The foreign exchange exposure of Chinese Banks. *Journal of finance and economics, 12*(3), 123-134.

Wu, D., & Olson, D. L. (2010). Enterprise risk management: Coping with model risk in a large bank. *Journal of the Operational Research Society*, 179-190.

Yaghmaei, F. (2003). A quantitative approach to content validity. *Content validity and its estimation*, 25-27.

APPENDICES

APPENDIX I: LIST OF COMMECIAL BANKS REGISTERED IN KENYA ON 31ST DECEMBER, 2020.

	BANK NAME	DATE LICENCED
1	African Banking Corporation Limited	8th December, 1994
2	Bank of Africa Limited	30th April, 2004
3	Bank of Baroda (K) Limited	1st July, 1953
4	Bank of India	5th June, 1953
5	Barclays Bank of Kenya Limited	1916
6	Charterhouse Bank Limited **UNDER STATUTORY MANAGEMENT**	1ST August,1998
7	Chase Bank (K) Limited **IN RECEIVERSHIP**	1st April, 1996
8	Citibank N.A. Kenya	1st July, 1974
9	Consolidated Bank of Kenya Limited	18th December, 1989
10	Co-operative Bank of Kenya Limited	1st July, 1968
11	Credit Bank Limited	30th November, 1994
12	Development Bank of Kenya Limited	20th September, 1996
13	Diamond Trust Bank Kenya Limited	15th November 1994
14	DIB Bank Kenya Limited	13th April, 2017
15	Ecobank Kenya Limited	16th June, 2008
16	Equity Bank Kenya Limited	28th December, 2008
17	Family Bank Limited	1st May, 2007
18	First Community Bank Limited	29th April, 2008
19	Guaranty Trust Bank (K) Limited	13th January, 1995
20	Guardian Bank Limited	20th December, 1995
21	Gulf African Bank Limited	1st November, 2007
22	Habib Bank A.G. Zurich	1st July, 1978
23	I&M Bank Limited	27th March, 1996
24	Imperial Bank Limited	8th January, 1996

	IN RECEIVERSHIP	
25	Jamii Bora Bank Limited	2nd March, 2010
26	KCB Bank Kenya Limited	1st January, 1896
27	Mayfair Bank Limited	20th June, 2017
28	Middle East Bank (K) Limited	28th November, 1980
29	M-Oriental Bank Limited	8th February, 1991
30	National Bank of Kenya Limited (under KCB FY 2020)	1st January, 1968
31	NCBA Bank Kenya PLC (started in 2019)	5th November, 2019
32	Paramount Bank Limited	5th July, 1995
33	Prime Bank Limited	3rd September, 1992
34	SBM Bank Kenya Limited	1st April, 1996
35	Sidian Bank Limited	23rd March, 1999
36	Spire Bank Limited	23rd June, 1995
37	Stanbic Bank Kenya Limited	1st June, 2008
38	Standard Chartered Bank Kenya Limited	1910
39	Trans-national Bank Limited	8th January, 1985
40	UBA Kenya Bank Limited	25th September, 2009
41	Victoria Commercial Bank Limited	11th January, 1996

Source: Central Bank of Kenya – Directory of Licenced Commercial Banks 2020

APPENDIX II: PLAIGERISM REPORT

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Document Information

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Sources included in the report