EFFECT OF INTEREST RATE SPREAD ON THE PERFORMANCE OF MORTGAGE FINANCING IN COMMERCIAL BANKS IN KENYA

JACQUELINE NECOLINA MAKENA

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DECLARATION

DECLARATION

This research project is my own original work and has not been presented for the award of degree in other university.

Signature: **……..…** Date: **……...…**

JACQUELINE NECOLINA MAKENA REG NO: **D61/64488/2013**

This research project has been submitted for examination with my approval as university supervisor

Sign: _____ Date_____

Dr Cyrus Iraya,

Lecturer,

Department of Business Administration,

School of Business,

University Of Nairobi

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DEDICATION

I dedicate this work to lovely and wonderful daughter Tiffany Joy Kanana, my loving mother Agnes Gauku Itunga and all those who supported me in the completion of this project for their patience, humility and understanding.

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LIST OF ABBREVIATIONS

CAHF	Centre for Affordable Housing Finance
CBK	Central Bank of Kenya
GDP	Gross Domestic Product
HFCK	Housing Finance Corporation of Kenya
HFIs	Housing Finance Institutions
IPAR	Institute of Policy Analysis and Research
WACC	Weighted Average Cost of Capital

ABSTRACT

The objective of the study was to determine the effect of interest rate spread on the Performance of mortgage financing in commercial banks in Kenya. The study was a descriptive study which utilized secondary data on mortgage performance from the 41 Commercial banks in Kenya, with the period of study being between the years 2011 to 2014. The data was analyzed by using descriptive statistics as well as inferential statistics. Descriptive statistics was useful for coming up with an understanding of the data and thus helped in organizing and summarizing of the data while inferential statistics was to help in making of valid conclusions from the data. Correlation and regression analysis were used in order to find the degree and nature of the relationship and thus help in fulfilling the purpose of the study. The findings of the study indicate that interest rate spread is significant in influencing mortgage performance of banks as indicated by a coefficient of determination of 0.999. There is a positive significant relationship between the interest rates spread and the performance of mortgages.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Financial sector role in facilitating economic growth and development is well recognized. In Kenya, banking industry performs a critical role in the financial sector, predominantly with a lot of value to mobilization of funds and stipulation of credit-Mortgages being the most important business segment. Kenyan mortgage market has been undergoing tremendous growth over the years; and even if it's still in its early stages and undergoes diverse hindrances which slows growth; Kenya's banking institutions have shown immense interest in improving the performance of their mortgage business segments; because of significantly large number of lenders within the market environment; demand for mortgages is still moderately small. Consequently the overall returns on investment from mortgage lending have remained low. (Ngugi, 2004)

An analysis of effect of the rate of interest on performance of mortgage loans in the industry is not only important in its own right, though it's central in thoughtful of financial intermediation procedure and macroeconomic surrounding in which commercial banks function. Consequently, the cost of financing by use of loans from the bank and effectiveness of banking structure are important for the allocation possibility hence the economies financial latent, and therefore for sustainability or acceleration of the growth of the economy. This paper will examine and empirically investigate factors that drive the interest rate increase in banking industry and its impact on mortgage segment business performance

Economic growth in this nation is slow due to increased price of loans and interest rate which is comparatively high hence restraining access to funds. Lending rates are moderately high despite of the trend towards narrower spreads and reducing lending rates in immediate past, up to now economic intuition is used to analyze factors which determine lending rates and interest rate spreads, by looking at the various categories dynamics which are always seen as to impact the policy of the rate of interest of most commercial banks and also by use of professional opinions.

1.1.1 Interest Rate Spread

According to Crowley (2007) from his research study finding he defines rate of interest as money which the debtor pays back utilizing money he/she borrowed from financial institutions or lending organizations that is amount paid on assets borrowed. Another definition of interest rate is that fee which is charged to the borrower of the funds for using the cash that is shown as the annual percentage of initial amount the rate for repayment of the money is mostly dependent on time value of money, inflation and credit risk. According to Brock & Rojas (2000) from their research piece of work they concluded interest rate spread to be the margin among interest expense and income as the share of earning assets total. On the other hand policy environment and market microstructure characteristics of the banking sector define spread.

Total understanding of competitive environment and interest of targeted clients is used to set spread. Any amount of borrowed money from the CBK is required to be paid back with an interest hence this helps the government in generating a lot of profit as this will help in serving its citizens. This concept makes interest rate to be the

business to the government and other interested parties in the business tool. According to Chirwa (2002) from his research study which consisted of Malawi commercial banks he found out that if interest rate is not well managed most big banks which have major control may exploit clients by increasing interest rate while maintaining low interest rate earned by clients.

Implications by interest rate spreads within the economy has significant implication on growth and development of a particular economy hence this is supported by a lot of different authors who suggest that a critical link among effectiveness of bank intermediation and economic growth also plays a vital role.

According to Quaden (2004) in his piece of research work he suggested that well-organized banking structures will benefit real economy by allowing for 'more anticipated proceeds for savers with a financial excess, and lower borrowing outlay for investing in new projects which require outside financing hence if the banking sector's interest rate spread is great it discourages prospective savers due to low proceeds on deposits and thus limits financing for potential investors. Also according to Valverde (2004) he concluded by saying that due to the costs of intermediating among savers and borrowers only a small fraction of the investments mobilized by commercial banks can be channeled into savings. Intermediation expenses are mostly increased by the increase in the inefficiency of commercial banks which will definitely lead to an increase in the amount of savings which was lost which slows down investment, lending and economic growth.

1.1.2 Performance of Mortgage Financing

According to (Venkatraman and Ramanujam, 2001) the two define performance as the result of all the firm's operations and the strategies. Performance of the organization is appraisal of the prescribed indicators and the principles of helpfulness, competence and ecological accountability which entail regulatory fulfilment and reducing dissipate. Another definition of performance is about metrics regarding how certain requests are handled or the point of doing something efficiently.

The mortgage market consists of financial institutions such as banks, mortgage companies and regulatory body. Another player is the investors who take up the loans. The housing or buildings is another important component. Growth in the mortgage market can occur when the types of mortgage loans increase, when the rates of these mortgages are affordable, when mortgage financing is the preferred mode for acquiring housing for companies and individual, when the housing supply meets the demand in the market, when the competition in this market is strong enough to moderate rates through several competitive commercial mortgage providers.

Financial performance examination is a method of identifying financial muscles and weaknesses of a given organization by appropriately establishing association among items of balance sheet and profit and loss account. The examination of financial performance is a process of evaluating relationship between component parts of financial statement to obtain a better understanding of firm's position and performance. According to (Bekana, 2011) from his research finding he concluded by saying that ratios such as efficiency ratios, liquidity ratio, leverage ratios, profitability

ratios, solvency ratios and coverage ratios are mostly used to assess bank's financial performance.

1.1.3 Interest Rate Spread and Performance of Mortgage Financing

According to (Edmister and Merriken, 1989) from their research wok they said Interest rate changes have been shown to have a direct effect on revenues and costs of financial institutions. From the work of (Madura and Zarruk, 1995), they said that interest rate changes are likely to substantially have an effect on their revenues and cost streams beyond protection which is offered by hedging.

Ngugi (2004) from his finding he notes that high interest rate on borrowers of funds will discourage borrowing that mighty result to shrinked savings through multiplier effects. This will cause savings to reduce hence have a negative effect on the performance of commercial bank. From this examination it states that the opposite is indeed true during season of low interest rate. Interest rate has an impact on financial performance of the bank both negatively and positively.

Interest rate impact on the profit of the bank functions using two main channels from the revenues side. An increase in the interest rate will scale up amount of income the particular bank will earns on the new assets it will acquire hence speed of revenue adjustment will be as a result of the function of speed of interest rate adjusted. According to (Okech, 2013) from his report he says that in the event of rising interest rates, rates on the borrowed funds will be more than the marketable securities I that the strong incentives will prevail for commercial banks to get more loans instead of buying new securities.

1.1.4 Commercial Banks in Kenya

Banking sector in the nation is guided by Companies Act, Banking Act, Central Bank of Kenya Act, and different prudential rules issued by Central Bank of Kenya. Banking industry was liberalized in 1995 hence exchange controls lifted. Central Bank which falls under the Ministry of National Treasury is in charge of formulating and implementing monetary policies and fostering liquidity. It publishes information on Kenya's commercial banks and non-banking financial institutions, interest rates and other publications and guidelines.

Commercial Banks represent an important and very influential sector of business across the world which plays a vital role in global economy. Commercial banks role in the economy is very vital since they implement monetary policy and provide a way of facilitating payment for commodities and services in both domestic and international trade. They also serve as financial resource mobilization points in the entire global economy. According to (Johnson and Johnson, 1985) they said that resource mobilizing institutions channel funds needed by business and household sectors from surplus spending to deficit spending units within the economy. To have a rapid economic growth, a well developed efficient banking sector is regarded as a very significant prerequisite for investment decisions and savings.

Resource mobilizing institutions role within the economy is supreme since they carry out monetary policy hence offer means for facilitating payment for commodities and services in both domestic and global trade (Government of Kenya, 2007). Commercial banks are custodians of depositor's funds and operate by receiving cash deposits from the general public and loaning them out to the needy at statutorily

allowed interest rates. Loans are based on the credit policy of the bank that is tightly coupled with the central bank interest rate policy. These in effect determine the level of financial risk in a particular bank (CBK, 2010). Mortgage loans in Kenya comprises of 90% of the outstanding loan assets portfolio.

According to Mang'eli (2012) from his research work he observes that risk-averse commercial banks function by means of a lesser spread than risk-neutral banks hence risk aversion will raise bank's optimal interest rate and reduce amount of credit supplied. Interest rate spread within the nation has been widening because of interest rate liberalization characterized by more inherent expenses with stiff monetary policy attained by a lot of reserve and cash ratios and deteriorating non-performing loans. According to Were and Wambua (2013) from their research finding they examined determinants of interest rate spreads in Kenya's banking sector based on panel statistics investigation. From their study empirical findings reveal that bank-specific variables perform a vital function in determining interest rate spread which comprise of bank size based on bank assets, credit risk as measured by non-performing loans to total loans ratio, liquidity risk, return on average assets and operating costs.

Financial performance is an indicator which shows how beneficial an organization is vital to its total assets. It's calculated by return on asset which provides a thought of how well-organized management is at utilizing assets available in generating earnings. The rate has an impact on the financial performance both directly and indirectly, when the rate is high most of the borrowers are discouraged to borrow this is according to Were and Wambua (2013) The mortgage market in Kenya has been performing poorly with the demand for housing far surpassing that of supply by over

75% (Kippra, 2014). This is attributed to high cost of mortgage associated with higher interest rates. Despite this; The Kenyan Banking Sector have consistently recorded improved performance with the size of, loans & advances worth Ksh.938billion with an annual average growth rate of 3%

1.2 Research Problem

Demand for housing in the country is very immense and driven by an increasing population and urbanization. Thus, effective housing finance structure can have a cruial impact in meeting peoples' housing demands by creating a multiplier effect on the development of construction, finance and other relevant sections of the economy. Despite the the growth rate of mortgages rising steadily at 14% per annum, the loan portfolio remains relatively low; with 90% of Kenyans cannot afford to buy the houses they live in.(Makori and Memba, (2014). Rising levels of inflation and interest rate, limited foreign exchange and high poverty levels level have made access to better housing become an indefinable dream to bulge ranks of citizens living below absolute paucity line.

According to Boldbaatar (2006) from his piece of work he argued by saying interest rate spread remains to be a divisive area while majority link it to market or personality banks incompetence. Also according to Ng`etich (2011) he suggested that commercial banks which do well manages to at least keep interest spread broad. Most of the findings conclude by saying spread is a result of incompetence within banking sector. From the finding a large bank is more resourceful than smaller and growing banks. Again Boldaatar (2006) says that a big commercial bank is projected to have a narrow spread than compared to a slightly small bank. According to Ngugi (2000) again from his finding says there is a conflicting disagreement that spread is core to

performance of the bank hence most banks which manage to continue with wider spread tend to do well than other banks holding if all other variables are held constant. Omole (1999) form his research on interest spread found out that smaller banks have narrow spread than big banks, his disagreement was for lesser and growing banks which reduce interest charged and eventually reimburse savers fairly.

Ngugi (2001) from his work interest rate spread effect on financial performance of the bank, the finding didn't involve all commercial banks in the nation. Most findings done considered only fewer factors which have an impact on the financial performance of the bank. According to Were (2013) interest rate spread effect on performance of the bank. Majority of the findings don't show degree of the effect, which is whether interest rate spread has strong or weak association financial performance of the bank.

Although the countries financial sector was liberalized in early 1990s to allow for market determination of interest rates, concern about more interest rate spreads have increased hence engrossed much debate in public and policy forum. However, there have been very small experimental study on the subject, mostly with respect to the analysis of interest rate spreads at the micro or bank level. Few studies exist that examine the effect of interest rate spreads impact on mortgage performance. According to Beck (2010) from his report he examines growth in county's fiscal spread to be proxy for capability of financial intermediation. Examination is based on constructed spreads and decomposed spreads into a variety of mechanism based on a set of variables such as overhead costs, loan loss provisions and taxes. According to Ndung'u and Ngugi (2001) from their piece of work they derived variables likely to

provide facts on spread hence empirically approximated interest rate spread equation by use of monthly time series information for duration (1993-1999), while Ngugi (2001) extended monthly time series statistics to December 1999. Some of the variables applied by former are deposits. Loans, Treasury bill rate and finally rate among commercial banks. From the findings they found out that the spread was optimistically related with deposits and negatively associated to loans. Furthermore Ngugi (2001) included excess liquidity and non-performing loan ratio as instructive factors and found out that increase in non-performing loan ratio contributes to an increase in spreads whereas surplus liquidity is negatively associated with the spreads. Most of these findings were done at macro level, majorly concentrating on macro industry-level factors. However, both didn't pay much attention to macroeconomic indicators like gross domestic product and inflation.

Increase in mortgage lending especially among the non-prime lending has brought with it a more diverse range of new mortgage goods. Tremendous expansion has contributed to more credit to clients who for a long period of time haven't been properly served mortgage market by enabling millions of homeowners in tapping into the accumulated home equity hence assist them meet expenditure and savings needs. According to (Ndirangu, 2004) said that falling asset prices had adversely interfered with Mortgage financing.

There are a number of experimental findings that focus on the on the impact of interest rate margins and spreads, focusing on various set of variables for example bank-specific or macroeconomic variables depending on the type of information, incidence and reporting. Though majority of descriptive factors measured are similar

or more or less connected, depending on kind of study and coverage. Relatively there are few research findings which directly compute interest rate spread based on practical real interest rates levied on loans in relation to interest rate on deposits as it has been proposed in the research finding.

The current study goes beyond the previous Kenyan studies by considering individual bank-explicit factors using financial information for the resource mobilizing institutions. Additionally, research entails added recent phase starting from 2004-2014 during which there has been a lot of important changes in both policy and macroeconomic surrounding. Therefore, this study filled this gap by answering the following research question: What is the impact of interest rate spread on the performance of mortgage financing in commercial banks in Kenya?

1.3 Research Objective

Research objective of the finding was to examine effect of interest rate spread on the performance of mortgage financing in commercial banks in Kenya.

1.4 Value of the Study

The research will guide fiscal and monetary policy makers in the Kenya government towards implementing expansionary monetary policy that will enhance citizen's ability to borrow from commercial banks and hence stimulating economic development. The study adds to body of knowledge, especially with view to interest rate spreads in Kenya with regard to quick shifting banking surrounding and hopefully ignites demand for additional research in particular focusing on competition and threats emanating from this industry. Through the body in charge will make well-versed decisions that will enhance bank competitiveness. It contributes to already

available information hence becomes a very useful tool for students, academicians, institutions, corporate managers and persons who want to know more about Interest rate Spreads (IRS) in Kenya.

To policy, the project will contribute to knowledge of the factors affecting interest rate spread on the performance of mortgage financing in Kenya and their effects. This facilitates policy Makers and business players with a foundation of making well-versed choices and policies which are very vital for having a good expansion framework hence come up with necessary mechanisms to solve future economic challenges. The study will also be of help to the government's regulatory agencies through the ministry of finance and central bank of Kenya in regulating the banking industry. Policy makers would infer from the study on government initiatives for financial deepening and bank regulation. The study enables the bank's executives and policymakers of most commercial banks and other financial institutions to be aware of the role of interest rate spreads.

The results will be useful to the government in setting interest rates through CBK, hence interest rate spread, to appropriately influence the level of borrowing and lending desired for economic development such as establishment of new microfinance firms which assist in reducing unemployment. From the results obtained in the research, most microfinance banks will be able to make informed decision on borrowing and lending to influence the financial performance of their firms positively

To practice, the commercial banks that provide mortgage products will find the study important since it seeks to examine why a specific type of interest rate can inhibit or

promote performance of mortgage financing. Therefore it will offer an insight to most commercial banks on how interest rates will assist them expand mortgage lending. This study will also be useful to the commercial bank managers who would in turn use it to solve bottlenecks of inflation and high interest rates to ensure survival of the commercial banks in Kenya. This will enable them to tailor their products to customers' needs and make wise marketing decisions in the restrained global economy.The outcome of the study will thus help managers in making informed decisions about the macroeconomic effects on the industry. The study findings will be informative to existing and potential mortgage borrowers from mortgage banks as they are able to infer the relationships between the differences between the deposit and lending rates and the performance of the institutions. The Mortgage industry regulators would use the information to develop a regulatory framework for management of interest rate spreads and subsequently optimizing performance of the mortgage banks which play a critical role in enhancing home ownership in Kenya. The information is suitable when understanding the setting of mortgage banks deposit rates.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section presents the available knowledge of the study available in the field of debt financing and in particular Mortgage loans in relation to factors affecting its growth. It is a summary of the theories used, findings and from studies.

2.2 Theoretical Review

This section focuses extensively on theoretical review of literature that attempts to explain the relationship between cost of debt and demand for debt financing. Their propositions are the foundation for understanding of factors affecting demand for debt financing and how it can be applied to the demand for Mortgage loans.

2.2.1 The Classical Theory of Interest

According to the theorem the capital supply and the capital demand determine the rate of interest. The level where the supply of capital and the demand for capital is the same is where the rate of interest is purposed to the point of determining the rate. The supply of capital comes from the savings while investment gives rise to the demand for capital. This theory is also refered to as the real theory or the non-monetary theory as it explains the determination of the interest rates by forces which are real like; time preference, productivity of capital and thrift (Blang, 1992). Because of its productivity the savings or capital is demanded. The demand for capital shall be greater if the interest rate is lower. The supply of capital comes from savings. The rate of interest affects savings. A higher savings volume signifies a higher interest rate, and if volume of savings is lower hence the interest rate will be lower.

The equilibrium demand and supply determines the rate of interest. When the foreign currency markets, money market, the economy and the loan-able funds market are in equilibrium Interest rates will remain stable. Hence because of the productiveness of capital there is demand, i.e., it provides an income after even interest costs. The demand curve for capital is thus determined by the marginal productivity curve of capital (Kaminsky and Reinhart, 2000). Increased interest rates discourage the uptake of mortgage facilities because of high costs of financing the loans.

2.2.2 The Loanable Fund Theory of Interest

This theory, also referred to as the neo-classical theory of interest, was formulated by economists including Wicksell, Ohlin, Robertson, Pigou and Viner. According to this theory, the intersection of the demand schedule for loanable funds with the loanake funds supply schedule determine the the rate of interest. The demand for loanable funds comprises investors demand for funds (I_D), consumers' demand fo funds (C_D) and demand for funds for hoarding (H_D). All the three kinds of demand for funds are inversely related to interest rate. The aggregate demand for loanable funds (D_L) is the horizontal summation of the three kinds of demand.

On the supply side, the supply of loanable funds consists of voluntary savings (V_s); that is, savings out of disposable income, bank credits (B_c); that is, borrowing from banks, and activated idle cash balance of dishoarding (D_h). All these three components of the supply of loanable funds are positively related to interest rate. A horizontal summation of the schedules voluntary savings, disposable income and idle cash balance of dishoarding gives the aggregate supply schedule of loanable funds. The interest rate is determined at the point of intersection between demand of loanable funds (D_L) and supply of loanable funds (S_L). Alternatively, interest rate is

determined by the equation:between demand of loanable funds (D_L) equals supply of loanable funds (S_L) i.e.$D_L = S_L$

2.2.3 Rational Expectations Theory

This theorem has its basis on the notion that human beings come up with expectations based on information available in the market. This theorem states that the rate at this moment of time or state is the most relevant estimating the rate of interest in the future and that if any changes take place it would be because of unexpected economic conditions changes. This theorem may be combined with the theorem of loan-able funds so as to consider better the information available in the economy. The disadvantages of rational expectation theorem are associated with the difficulties in information gathering and getting to know how the world utilizes its knowledge in the formation of expectations (Moore, 1988).

This theorem offers explanation of the yield curve on the basis the short term rates expected. It has an assumption that individuals form expectations about their future interest rates and are risk neutral. These future interest rates are the main determinants of the present structure of interest rates. Thus, it is therefore a hypothesis that prediction of the short term rates in the future is contained in the long term interest rates. According to the theorem, a person who invests will gain an equal amount of interest if he invests today or if he decides to invest after an year.. The expectations theory thus explains the fact that interest rates tend to move together over time for different maturities. It also shows the reason why yields on bonds that are short term are more volatile than long term yields. The rates that are long term are all means of future short term rates expected. Thus, if the rates that are long term change, the rates

that are short term will also change very direction. Furthermore the fact that long term rates are seen here as averages tends to smoothen them out.

2.3 Determinants of Performance of Mortgage Financing

2.3.1 The Market Value of a Company

Shareholders value is said to be the market value of a firm depends on factors like; risks, economic growth and current firm profitability essential earnings of the firm. (Chiorazzo, Milani and Salvini, 2008). According to D'Souza and Lai (2009) in order to determine the shareholders value basing on the information from accounting financial indicators are sufficient. A firm's market position directly influences a company's performance. Net profit margin and net turnover are the main components profitability can be decomposed into. Jones & Hill 14 (2008) says that both can impact a firm's profitability one time. A higher margin of profit signifies an organization has some significant power in the market because a turnover that is high symbolizes proper utilization of resources by the firm.

2.3.2 Interest Rate Spread

Financial institutions costs and revenues are known to be affected by the rate of interest changes (Edmister and Merriken, 1989; Saunders and Yourougou, 1990). As some of the large US banks have a very material part of their banking undertakings in countries outside of the United States. (Madura and Zarruk, 1995), Interest rate changes are probably going to considerably affect on their income and cost streams past the security that is managed by hedging.

2.3.3 Size of the firm

The size is a determinant of performance of the firm. Large firms are more likely to manage their working capitals more efficiently than small firms. Most large firms enjoy scale of economies and thus are able to minimize their costs and improve on their financial performance

2.3.4 Liquidity Management

A performance level of a firm is determined by Liquidity as another factor. The ability of a financial institution to fulfil its duties mainly to the people who have deposited is referred to as liquidity. According to Dang (2011) the profitability of financial institution is positively related to adequate liquidity of the firm. Customer deposits to total loan and asset are some of the mostly noticeable ratios in finance that signifies the banks position of liquidity. However, the research studies carried out in Malaysia and also conducted in China came up with findings that the level of liquidity of financial institutions has no known or existent relationship with the financial institution performance. (Said and Tumin, 2011).

2.3.5 Financial Strength

A measure of the money related power of a security or financial, normally communicated as its assets ratio to its capital is also a worth mentioning determinant of financial performance. The Basel Committee of the Bank for International Settlements drew up a worldwide standard capital adequacy for financial institutions. After its introduction in 1988 the Basel Capital Accord, requires financial institutions equity between its capital and the minimum of 8 per cent requirement of their

resources. The Basel II a revised framework which was done in 2004 was issued. Among its projects are those capitals prerequisites ought to be more sensitive to risks and that more prominent utilization ought to be made of risk assessment delivered by banks' internal frameworks. The updates, which have sparked contention, are being considered by national banking directors and execution is expected toward the end of 2007 (Woller & Gary, 1999).

2.4 Empirical Review

Gerlach and Peng (2005) with an application to the housing market of Hong Kong examined the relationship between mortgage credit and interest rates. According to their findings growth in the long term mortgage loans is significantly and positively related to the decrease in interest rates. Yuqi (2008) did a study by examining the determinants of 123 financial institutions from the United Kingdom (UK) the performance of mortgage and its implication on the management of risk from 2006 back to 1999. In the study the researcher utilized panel data estimation and multiple regression models. The findings which were econometric in nature indicated that adequacy of capital had a very great positive impact on the performance of mortgages. Risk of credit and liquidity had a great negative impact on performance of mortgages however; GDP and cost of interest have inconsequential negative effects on the mortgage performance of banks in UK.

Buyinza (2010) carried out a study and looked at a sample of financial institutions performance of mortgages from back in 1999 to 2006 in the countries south of the Sahara in Africa. The research utilized regression model and panel data. The findings of the study showed that efficient expenses management, credit risk, size of bank,

ability of the banks in diversified earnings capital, rate of growth, GDP per capital, and inflation have positive and better impact on the execution of mortgage in financial institutions. Ali and Ahmed (2011) study examined the financial institutions specific and macroeconomic indicators, they sampled 22 private and public sector commercial banks performance of their mortgage in Pakistan from 2006 to 2009. The researchers employed and utilized panel data estimation and multiple regression models. The study found that the efficiency in operations, management of assets and size of banks positively affected the establishments execution of mortgages.. However, credit risk and capital risks had an unwanted impact on the mortgage performance of the institutions in Pakistan.

Gul, Irshad, and Zaman (2011) carried out studies on the factors that affect 15 Pakistani financial institutions performances of mortgage between years 2005 to 2009. The researchers applied the use of model of regression, pooled ordinary least square method of computation and panel data estimation. Through the findings it was indicated that both the external factors and internal factors like GDP, market capitalization, size, deposit, inflation and loans have significant impact on the mortgage performance of the institutions as measured by Return on assets. Still in Pakistan, Gilchris (2013) did a study on the impact of specific bank i and macroeconomic conditions. It sampled 25 commercial banks mortgage performance between 2007 to 2011. After using regression analysis the findings showed that size of bank size, margin of net interest and industry production growth rate had an effect that was both significant and positive on the mortgage performance. Non-performing loans to aggregate advances and inflation have negative and huge effect on ROA

while GDP has positive effect on ROA. Capital proportion has positive huge effect on ROE.

Saidu and Tumin (2011) conducted a study on the financial ratios and performance of financial institutions in China and Malaysia between 2001 and 2007. A sample of four Malaysian and nine Chinese commercial banks was studied. In the research regression and panel data was utilized. The findings were that operating ratios, capital, and credit did not have influence on Malaysian institutions but had impact on the performance on Chinese firms. According to the research findings the study found that banks size and liquidity does not to impact the execution of the banks in both nations. Khrawish, and Siam, (2011) carried out research on the determinants on three Jordan Islamic banks mortgage performance from 2005 and 2009. The relationship between performances of Islamic banks in Jordan was significantly negative with the GDP growth rate, inflation, exchange rates, financial risk, capital and size of banks as per the results of the multiple linear regressions.

Rachdi (2013) researched on the determinants of the performance of mortgage of banks during and before the international recession period. As per the results indicated by the regression analysis, in the USA before the financial crisis, yearly real GDP growth, capital adequacy, size of banks and liquidity affect the banks performance positively. Yearly growth of deposits, cost-income ratio, and inflation rate however has a negative correlation across all measures of bank mortgage performance. In the recession period operational efficiency, GDP growth, inflation and yearly growth of deposits mainly explain the bank mortgage performance.

Kipng'etich, (2011) set out with an objective of establishing the ties between interest rates and commercial banks in Kenya financial performance. To achieve objective of the study regression models were developed with the independent variable as financial performance and dependent variables as interest rates. In the model, ROE was defined as the profitability indicator. Secondary data was collected from published documents between a five year period between 2006 and 2010. The study utilized regression analysis to find out the ties if any between interest rates and ROE. The findings obtained from the regression model indicate there are a positive tie between interest rates and the Kenya's bank performance. Banks should hence prudently manage their interest rates and other factors which influence profitability to improve their financial performance.

Njoroge (2013) assessed the nature of the ties between the financial performance of NSE listed firms and rates of interest. The study is significant to the government in setting interest rates appropriate to influence the level of borrowing and lending to encourage economic development. The research was carried out between 2008 to 2012 inclusive and the research data based on secondary data that was collected from the published firm statements and publications by the CBK. The causal research design was employed to assess the nature of the relationship between financial performance of NSE listed firms and the rates of interest. The researcher utilized Regression analysis so as to assess the relationship nature. Results obtained from the study indicated a not impactful positive relationship between financial performance and the rates of interest. On disaggregation and grouping of the firms to their respective industries, it was found that linear regression model can selectively be used to forecast financial performance of firms' at given levels of interest rates for firms

where statistically significant relationship was found. However, for firms which on further 19 analysis it was found that the impact of rates of interest on the financial well-being was not significant, other factors which influence financial performance need to be considered and enhanced in order to significantly improve the financial performance of those firms.

Ngumo (2012) utilized a survey design to carry out research on a target population of all organizations registered for mortgage lending as of 31st December 2011 which were 33. The study used secondary data sources to collect data from CMA library and Central Bank of Kenya. The study established positive relationships in the five regression analysis between financial performance and the amount of mortgage loans advanced .The study concludes that the amount of mortgage advanced by mortgage firms would lead to a high financial performance (EBIT) as it raises the revenue thereof. On the other hand, interest rate would positively relate with financial performance till it starts discouraging borrowings owing to increase in the cost of mortgage. The study recommended that mortgage firms in the country charge interest rates on the mortgage appropriately as ineffective interest rate policy raises the cost of mortgage borrowing, negate its demand thus lowers financial performance.

Were and Wambua (2012) investigated the determinants of rate of interest spreads in Banking sector in Kenya that was based on the panel data analysis. The results which were empirical in nature depicted that bank-specific factors play an important role in determining the spreads in the rate of interest. These included risks of credit as measured by utilizing the loans that were not performing to total ratio, the size of the bank based on assets of the bank, operating costs, costs of operating, risk of liquidity

and average assets returns. The macroeconomic factors like the real growth of the economy and inflation are less impactful.

Wanjiru (2013) assessed the causes of commercial banks in Kenya loans which are non-performing. The research adopted the Descriptive Design and utilized secondary data and multiple regression models in determining the ties between causes of Non-Performing Loans in Commercial Banks in Kenya. The research utilized secondary data for the period 2008-2012. The independent variable was the interest rates, and independent variables used were growth in loans and Inflation. Non-performing loan was used as dependent variable. The study population of this research was 43 commercial banks in Kenya. The data collected was analysed utilizing SPSS. Through the study it was found that there is a positive correlation between inflation rate and the non-performing loans. Through the study it was also revealed that there is a negative correlation between the non-performing loans and growth rate loans and the real interest loans respectively.

Ngugi (2001) carried out an analysis on the spread of rates of interest in the country from 1970-1999 and the results were that the rate of interest spread increased as a result of high intermediation costs and efficiency yet to be gained. In the post-liberalization period there has been an increase in spread which is a result of the slack in embracing aberrant monetary approach tools and improving the legitimate framework and banks endeavours to maintaining the risky margins of profit from the rising credit risk as the proportion of non-performing assets and the failure of meeting the requirements for successful reform in finance. Distress borrowing and poor environment for business were attributed as the cause of the high non-performing

assets; this is regards to the weak legal system in enforcement of financial contracts and the lack of alternative sources of getting credit when the lending rate of banks is increased.

Ngugi (2001) results were that in Kenya, the spreads of interest rate spreads were explained by the yet to be known efficiency of banks, high costs of intermediation, rising inflation resulting from expansionary fiscal policy and tightening of monetary policy. Ongweso (2005) carried out a research on to explore the relationship between the loans that were not performing and rate of interests, and found out that there was a positive relationship as the non-performing loans were increased by rate of interest, a weak relationship between the two was however established via a significance test.

2.5 Summary of Literature

A number of studies have been done on the effect of unstable interest rates on various macroeconomic variables and its impact on the different sectors of the economy. The studies on interest rates fluctuations and their effect on Debt financing have resulted in mixed results. Existing empirical evidence is however mainly based on developed countries whereas a few empirical investigations had been undertaken in African countries like Kenya. There is therefore a gap as far as studying interest rates determinants effect on mortgage performance. It is evident that it has not been done fully especially in the emerging markets. In addition, many of the studies conducted have all been in the countries that are developing and they are not conclusive. The research hence seeks to fill the gap by examining the effects of interest rate on mortgage performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

According to (Kothari) from his research work he defines research methodology as a way to analytically solve research problem. This segment presents different methods used to collect, analyses, present and discuss the findings of the study.

3.2 Research Design

Research finding involved an expressive survey study hence utilized secondary data. Burns and Grove (2003), they state that descriptive finding is considered to present an image of circumstances as they obviously take place. It's basically meant to validate present exercise and able to formulate finding and come up with theory. Researcher analysed the balance sheet items of interest rate determinants correlating the mortgage performance for the sampled financial institutions for the past five years to identify the patterns

3.3 Population

Target population is defined as entire cluster of particular population rudiments significant to research finding. Population of target for the research comprised of forty three (43) licensed commercial banks, however 2 banks did not have complete data for the study period. The researcher hence used 41 banks (CBK, 2012) appendix 1. The study focused on the commercial banks that specialize in mortgage finance.

3.4 Data Collection

Data was gathered through secondary information. The sources include; banks financial reports, reports of Central Bank, economic journals, and statistical publications available in research firms. The data was for a period of four years i.e. 2011 to 2014, this is because the period is adequate to observe a trend, it is also reasonable in consideration of the limited research time available needed to carry a more prolonged study another reason is the period before 2010 would affect the results because of the dramatic effect of the post- election violence in 2007-2008 on the economy as a whole. This enabled the researcher to get quantified data that was helpful in drawing conclusions and giving recommendations on impact interest rates have on performance of mortgage financing in the country.

3.6 Data Analysis

Once the data was collected, it was summarized, coded, classified and tabulated. Data classification reduces data into homogeneous attributes that enabled establishment of meaningful relationships between variables. Numerical methods; relationship analysis and descriptive analysis were used in computing and determining association which exist between gathered information. Regression testing and Relationship analysis tools were applied in testing association among factors over time. Variance examination using standard deviation and spearman's coefficient of relationship was used to understand the relationships among factors of study.

3.6.1 Analytical Model

This technique aims to look at association among performances of mortgage financing with intra-bank interest rate determinants

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_{3+} E_e$

Where

Y =Log of Annual Mortgage Turnover

α = Constant

β=Coefficient of the variables

X_1= Interest Rate Spread measured by the difference among interest rate paid on interest earning liabilities(CBR) and interest rate earned from mortgage and loans issued.

X_2=Size of bank that is a control variable calculated by natural log of Total Assets. Total assets=non- current assets + current assets

X_3=is the liquidity Risk which is calculated as a percentage of current assets/current liabilities

E_e=Error Term normally distributed about the mean zero

The analytical model above shows how data on the changes in Mortgage performance for the past four years on a monthly basis was correlated with changes in interest rate, measured in terms of internal bank characteristics within the same period so as to establish a the relationship and how each of these independent variables affect Mortgage performance

3.6.2 Test of Significance

In this research finding the researcher focused on tests of significance tools such as Analysis of variance (ANOVA), Coefficient of determination (R^2), Relationship coefficient (R) and the F statistic at 95% confidence level in helping him get to know diverse associations among variables in the finding.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This section represents outcome and result obtained from field information. Inferential and expressive statistics were utilized in order to find out importance of the model hence find out relationship among mortgage performances and interest rate spread.

4.2 Descriptive Statistics of the Population

Shows uniqueness among mortgage performances and interest rate spread. Annual Growth rates in each in each of the individual study variables were analyzed over time between the period 2011 and 2014 for the 41 commercial banks. The results of the means of all variables of the financial variables were taken into consideration e.g. mortgage turnover growth rate, interest rate spread, and liquidity risk and total asset growth rates. The findings were as indicated in table 4.1

Table 4.1 Descriptive statistics

	Y	*X1*	*X2*	*X3*
Mean	23.63518771	6.750609756	23.86302408	49.61212492
Standard Error	0.127628226	0.094750343	0.127876407	0.460996328
Median	23.9171445	7	24.17208829	48.07964446
Standard Deviation	1.634438771	1.213396437	1.637617044	5.903633523
Sample Variance	2.671390096	1.472330914	2.681789583	34.85288878
Kurtosis	7.355564747	-1.002862607	7.296801379	-1.116574346
Skewness	-2.487726431	-0.443382619	-2.472843997	0.629506001
Range	8.799462042	5	8.926457094	15.47844036
Minimum	17.37403033	4	17.52901765	43.4450932
Maximum	26.17349237	9	26.45547475	58.92353356
Sum	3876.170785	1107.1	3913.535949	8136.388487
Count	164	164	164	164
Confidence Level (95.0%)	0.252017832	0.187096357	0.252507897	0.910294683

Source: Author 2016

The results in Table 4.1 shows that the mean natural logarithm of mortgage issued by the commercial banks within the period was 23.64 which is about an average of Ksh 18,481m worth of mortgages, with a standard error of 0.128 and a standard deviation of 1.63 at 95% confidence level, the data is negatively skewed with a skewness of -2.5.

Similarly, the interest rate spread had a mean of 6.75% with a standard error of 0.095. The commercial bank with the highest interest rate spread was at 9 and the minimum interest rate spread was at 4%. Liquidity risk variable was at a mean of 49.6% with a standard error of 0.46, data on liquidity risks for all the commercial banks had a positive skewness of 0.63.

4.3 Regression Results

The study conducted a linear regression model to establish the relationship between interest rate spread and mortgage performance of commercial banks in Kenya. The Coefficient of determination (R squared) explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (Mortgage performance of commercial banks in Kenya) that is explained by all the independent variables (Interest rate spread liquidity risk and asset growth).

Table 4.2: Model Summary

Model	Multiple R	R Square	Adjusted R Square	Std. Error of the Estimate	Observations
1	0.999852505	0.999705032	0.999699502	0.028332813	164

Source: Author 2016

R-Squared is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R^2, also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. 99.97% of the growth in mortgage turnover in commercial banks of Kenya is attributed to the combined effect of the predictor variables mainly the changes in the interest rate spread, liquidity risk and changes in commercial banks total assets. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions

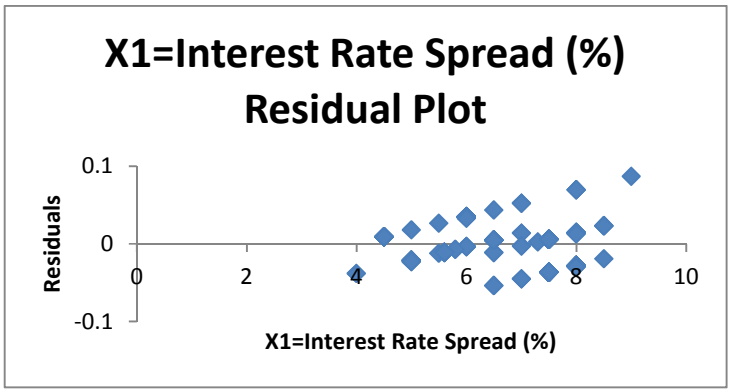
Table 4.3 Summary of One-Way ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	435.3081459	145.1027	180757.4	3.9E-282
Residual	160	0.128439728	0.000803		
Total	163	435.4365856			

Source: Author 2016

The study used One-way ANOVA to establish the significance of the regression model. The table gives an F calculated of 180757.4 while from the F distribution table, the F critical value with (3, 160) degree of freedom is 2.7. This shows that the F calculated is far much greater than F critical value. This therefore means that the model is statistically significant in predicting the variables.

Table 4.4 Line of Best Fit



Source: Author 2016

The residual plot, to show the line of best fit, clearly shows that the predictor model is linear in nature.

Table 4.5: Regression Coefficients Results

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.235001022	0.036802851	6.385403	1.77E-09	0.162319	0.307683	0.162319	0.307683
X1	-0.017217129	0.002508056	-6.86473	1.39E-10	-0.02217	-0.01226	-0.02217	-0.01226
X2	0.999773193	0.001362323	733.8739	4.2E-284	0.997083	1.002464	0.997083	1.002464
X3	-0.00687733	0.00051355	-13.3917	6.52E-28	-0.00789	-0.00586	-0.00789	-0.00586

Source: Author 2016

From the analytical model $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_{3+} E_e$

The values of $\alpha = 0.235$, while the co-efficients $\beta_{1,}$ $\beta_{2,}$ and β_3 are given by 0.017, 1, and -0.0069 respectively. The analytical model thereby becomes

$Y = 0.235 + 0.017X_1 + X_2 - 0.0069\ X_3$

Table 4.6: Correlation Matrix

	Y	*X*	*X2*	*X3*
Y	1			
X1	0.069633625	1		
X2	0.999248804	0.099163568	1	
X3	0.014884643	0.68106341	0.048347974	1

Source: Author 2016

The correlation matrix shows the nature of the relationship between study variables. In general there exist a significant positive relationship between the dependent variables and the independent variables.

4.4 Discussions of Findings

From the correlation model, the researcher found that if all other factors were held constant, there would be a unit increase in the mortgage performance if the interest rate spread is increased by 0.07%. Similarly an increase of performance of mortgage performance is expected with an increase in the size of commercial banks with a factor of 1. This implies that if all factors are held constant and the size of the bank is increased to say 1 million in asset size, it is expected to have a 1 million increase in mortgage issued.

Increase in bank liquidity risk also improves the performance of mortgage performance. This implies that an increase in liquidity position of a bank implies that

the bank is able to pay its liabilities as and when they fall due. They are thus in a position to improve the performance in issuing mortgage and loans as public confidence is enhanced.

The Standardized Beta Coefficients give a measure of the contribution of each variable to the model. A large value indicates that a unit change in this predictor variable has a large effect on the criterion variable. The t and Sig (p) values give a rough indication of the impact of each predictor variable – a big absolute t value and small p value suggests that a predictor variable is having a large impact on the criterion variable. At 5% level of significance and 95% level of confidence, interest rate spread had a 0.99 level of significance. From the above regression model, the study findings indicate a positive relationship between the mortgage performance, with its interest rate spread, liquidity and asset growth rates.

The independent variables that were studied explain 99.9% of mortgage performance in commercial banks in Kenya represented by adjusted R2 (0. 999). This therefore means that the independent variables contributes 99.9% of the mortgage performance by Commercial banks in Kenya in Nairobi while other factors and random variations not studied in this research contributes a meagre 0.1 % of the Total mortgage performance of Commercial banks in Kenya . The findings contradict Malombe (2011) who found a negative but insignificant relationship between mortgage performance and interest rate spread in Commercial banks in Kenya. Njoroge (2001) also found that there is a negative relationship between interest rate spread and performance for companies listed at the Nairobi Stock Exchange in Kenya.

The researcher attributes the positive relationship between the spread in interest rates and performance of mortgage, to the larger economic performance. When the general economy is performing well, there is a high demand for loans. The commercial banks increase the interest rates, and thereby the interest rate spread increases, in order to maximize their profits. The high interest rates do not necessarily decrease the demand for mortgage.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The section presents outline of important information findings, conclusion and finally recommendation. It brings out discussions found from research study, analysed and presented in chapter four. Conclusions and recommendations are made based on research objective.

5.2 Summary of Findings

Inferential and descriptive statistics were both utilized, using regression, ANOVA, correlation in establishing the strength of model and also find a link among performance of mortgages and the spread of rate of interest. The study also established the ties between the independent variables utilized i.e. performance of mortgage and the spread of interest rate. For this analysis Regression analysis utilized in finding out extent and nature the association within variables that are independent and also between variables that are independent variables and the dependent ones.

Research findings show that variables are statistically significant in impacting on the performance of mortgages of financial institution as shown by the Regression analysis relationship coefficients. This signifies that the spread of interest rate is considered in coming up with conclusions about the performance of the mortgage of financial institutions as shown by their relationship that is inverse. From the above regression model, the study findings indicate a high and strong relationship between the mortgage performance, with its interest rate spread growth rates and asset growth rates. The independent variables that were studied explain 99.9% of mortgage performance in commercial banks in Kenya represented by adjusted R2 (0.999).

This hence signifies that the variables that are independent contribute 86% of the mortgage performance by Commercial banks in Kenya in Nairobi while other factors and random variations not studied in this research contributes a meagre 14.% of the Total mortgage performance of Commercial banks in Kenya . The findings are in line with Malombe (2011) who found a negative but insignificant relationship between mortgage performance and interest rate spread in financial institutions in Kenya. Njoroge (2001) also established that there is a negative relationship between interest rate spread and performance for organizations trading at NSE.

5.3 Conclusions

The results showed tests on the differences in means of all variables of the mortgage performance model considered. Regression implied that variables under the model are very important in finding out mortgage performance of commercial banks. Research findings reveal relationship among independent variables applied in regressions: interest rate spread, liquidity risk and asset growth rates are used to calculate mortgage performance of commercial banks. Regression analysis was applied in getting quantity and nature of connection within independent and dependent variables.

This therefore means that when interest rate spread increases mortgage uptake reduces and when liquidity risks increases commercial tend to increase its lending and mortgage uptake tends to increase this is attributed to the fact that banks tend to have cheaper deposits and can therefore lend cheaply. The study therefore concludes that interest rate spread have an inverse relationship with performance of mortgage. The higher the interest rate spread the lower the mortgage performance

5.4 Recommendations

Rate of interest rate spread was found to be the significant factor that influences the performance of mortgage of financial institutions in the country. The researcher hence recommends that the CBK should come up with measures of tracking the spread like the efficiency in operating, saving deposit rate regulations, risk of liquidity, growth of GDP, market power and provision for losses in loans so as to boost performance of mortgage of the Kenyan financial institutions. The study recommends that there is need to tighten some loose ends so as the economy can experience positive impact on the performance of mortgages.

Through the study it was discovered that the spread of interest rates affected the performance of financial institutions as it lead to the increase of costs of loans borrowers are charged. There is a far reaching effect on performance due to the regulations on interest rates. The central banks are recommended to thus come up with the same stringent measures to determine the spread of rate of interest in financial institutions and also help in curbing moral risks to performances of mortgages in the financial institutions. It's because in regimes that have command policy, credit policies that are selective entail cost related to administrative that are substantial and interest rates that have ceiling always reflect real cost of funds. With such regimes growth in the financial sector is constrained as there are hindrances in diversity of the organizations and financial assets and it encourages a competition that is non-price which the financial institutions should address in collaboration with the central bank thus controlling the spread of interest rates is a delicate method and it usually takes into consideration a number of factors.

5.5 Limitations of the Study

Since it was a survey study involving a large sample size and collection data was extremely tedious and time consuming. The duration that the study was to be conducted was limited hence exhaustive and extremely comprehensive research could not be carried out. The study, however, minimized these by conducting in-depth analysis that significantly covers the shortcomings of the study. Further, the data was tedious to collect and compute as it was in very raw form. Further the presentation of the data in the different banks was varied which made the data computation even harder. The limitation of this study was time constraints, limited financial resources and geographic distance between banks in Kenya.

Time and geographical constraints were overcome by the utilization of professionally trained research assistants without compromising the validity and reliability of the research findings, while the limited financial resources available were spent on research activities that could not be undertaken solely by the researcher. In addition, the researcher did not overlook the major limitation of descriptive research design which is that the design makes it difficult to explain phenomena that occur over time, hence the study's findings are only applicable to the study's time frame. This makes it difficult to explain phenomena that occur over time, hence the study's findings are only applicable to the study's time frame.

It was difficult to access secondary data due to strict confidentiality exhibited by most banks. The annual financial statements are also prepared under the fundamental assumptions and concepts which are subjective and therefore not be uniformly applied especially in terms of provisions and estimates.

This study was carried out within a limited time frame and resources which constrained the depth of the study. This necessitated the adoption of a simple design hence these findings cannot be used to make generalizations on the effects of the level of diversification in banks. The study utilized secondary data, which had already been obtained and in the public domain. Unlike the primary data which is first-hand information, despite that the secondary data was tested for precision and remained relevant since it reflected current macroeconomic conditions and financial soundness in the republic of Kenya.

Lastly, most of the financial statements are reaffirmed in the preceding years meaning that material misstatements of firms' performance can create a window of opportunity for prior year's adjustments and this may not be brought to the attention of the public. This means the pattern depicted may affect the relationship establishedSince the main reason for carrying out this research was to determine the effect of interest rate spread on mortgage performance of commercial banks in Kenya, CBK had reservations on collection of some data as they treated them as confidential and sensitive. The researcher had a hard time in convincing them that the data was only for academic purposes.

The study findings of this research may not be generalized to other or all financial institutions but can only be used as a reference by financial institutions in the developing world as they face almost similar issues due to the economic conditions and the central bank demands. These findings hence may not give the real picture of the real impact of interest rate spread on the performance of mortgage of financial institutions.

5.6 Suggestions for Further Study

Similar studies should be conducted for a longer period of time and also studies should be conducted on the impact of interest rate spread on mortgage performance of Kenyan financial institutions taking into account the current macroeconomic situation in the country as opposed to this study that only took into account only three variables.

The study also suggests that further the relationship between dividend decisions and management perception on performance and effects of external sources of funds to profitability of banks and performance. Other studies on the effect of management practices on of banks and other financial institutions companies should be undertaken in order to establish management practices that lead to better organizational performance. Such studies should be targeted to benefit the organizations by formulating strategies to take advantage of the tax provisions in the income tax act that enhance the organizational performance and counter the ever changing fiscal policy environment to ensure banking business performance is continually enhanced.

Other studies on the effect of government policy environment should be undertaken to get insight on the effect of fiscal and monetary policy adjustments on the performance of financial institutions in Kenya. This is in light to fiscal and monetary policy instability witnessed recently in Kenya that has seen the shilling depreciate fast against the dollar and rising interest rates .This greatly inform the process of formulating policies that that would lead to better policy improvements and management of the banking industry in Kenya s and eventual economic condition improvement and enhancement of business competitiveness

Due to the turbulent nature of the business environment for example technology, risks and uncertainties, it be appropriate to replicate this study after duration of ten years and establish the relationship between interest rate decisions sand business performance as at that time then determine whether there are areas of commonalities or unique factors. The fact that this study limited itself to commercial banks in Kenya, I suggest that comparative study should be conducted in Savings and Credit Society in order to assess whether there are any similarities or differences from the results of this study. These results be useful in to the in benchmarking themselves with other organizations in the finance sector.

Although this study has been done carried out for banks, companies with different ownership structure might use different might evaluate the impacts of their borrowing decisions on the qualitative and quantitative measures of organization performance. A study may thus be carried out on companies with highly concentrated and dispersed ownership to determine the effect of borrowing decisions on profitability.

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APPENDICES

APPENDIX 1: LIST OF COMMERCIAL BANKS IN KENYA AS AT DECEMBER 2012

1. African Banking Corporation Ltd
2. Bank of India
3. Bank of Africa Kenya Ltd
4. Bank of Baroda (Kenya) Ltd.
5. Barclays bank of Kenya Ltd
6. CFC Stanbic Bank Limited
7. Chase Bank Kenya Ltd
8. Charterhouse Bank Ltd
9. Citibank N A Kenya
10. Co-operative Bank of Kenya Ltd
11. Commercial Bank of Africa
12. Consolidated Bank
13. Credit Bank Ltd
14. Development Bank of Kenya Ltd
15. Diamond Trust Bank
16. Dubai Bank Kenya Ltd
17. Ecobank Kenya Ltd
18. Equatorial Commercial Bank Limited
19. Equity Bank
20. Family Bank Ltd
21. Fidelity Commercial Bank Ltd
22. Fina Bank

23. First community Bank Ltd

24. Giro Commercial Bank Ltd

25. Guardian Bank Ltd.

26. Gulf African Bank Ltd

27. Habib Bank A.G Zurich

28. Habib Bank Ltd

29. Imperial Bank Ltd

30. Investments & Mortgages Bank Limited – I&M Bank

31. Jamii Bora Bank Ltd

32. K-Rep Bank

33. KCB Bank

34. Middle East Bank (K) Ltd

35. National Bank

36. NIC Bank

37. Oriental Commercial Bank Ltd.

38. Paramount Universal Bank Ltd

39. Prime Bank

40. Standard Chartered Bank Kenya Ltd

41. Trans-National Bank (K) Ltd

42. UBA Kenya Bank Ltd

43. Victoria commercial Bank Ltd

APPENDIX 2: RAW DATA

Total Assets

Appendix III: REVENUES	2011	2012	2013	2014
KCB	292,308,165,740.05	331,571,322,323.55	355,001,415,763.97	373,106,487,967.93
Equity Bank Limited	132,217,301,162.81	149,976,875,499.22	160,574,813,168.33	168,764,128,639.92
Co-op Bank	117,702,760,682.46	133,512,725,865.22	142,947,243,967.04	150,237,553,409.36
Standard Chartered Bank Ltd	91,477,104,814.17	103,764,410,853.10	111,096,799,628.58	116,762,736,409.64
Barclays Bank	86,779,316,871.89	98,435,610,831.12	105,391,446,286.00	110,766,410,046.58
Imperial Bank Limited	84,942,104,719.70	96,351,622,307.75	103,160,195,190.31	108,421,365,145.01
Bank of Africa	76,447,559,390.83	86,716,080,241.72	92,843,768,995.42	97,578,801,214.18
Giro Commercial Bank	73,015,489,161.65	82,823,010,537.99	88,675,600,147.74	93,198,055,755.28
Family Bank	68,636,909,594.07	77,856,295,313.17	83,357,917,894.18	87,609,171,706.79
CFC Stanbic Bank	66,693,271,503.85	75,651,585,601.89	80,997,414,991.32	85,128,283,155.88
Citibank, N.A.	64,888,388,922.39	73,604,269,192.99	78,805,427,401.49	82,824,504,198.97
Housing finance	56,254,165,969.83	63,810,287,850.16	68,319,366,006.60	71,803,653,672.93
African Banking Corporation	52,676,564,650.16	59,752,139,158.68	63,974,453,060.68	67,237,150,166.78

NIC Bank Ltd	51,655,699,764.15	58,594,150,570.46	62,734,636,585.08	65,934,103,050.92
Consolidated Bank of Kenya	48,011,989,671.01	54,461,013,301.82	58,309,436,083.32	61,283,217,323.57
Ecobank Kenya Ltd	47,018,767,621.50	53,334,380,566.54	57,103,191,184.73	60,015,453,935.15
Chase Bank Limited	45,668,263,599.42	51,802,475,348.38	55,463,035,704.91	58,291,650,525.86
Development Bank of Kenya	42,709,112,452.56	48,445,847,741.91	51,869,215,997.77	54,514,546,013.65
National Bank(NBK)	37,777,917,040.41	42,852,288,700.20	45,880,394,753.96	48,220,294,886.41
Oriental Comm. Bank	35,515,511,163.10	40,285,993,959.60	43,132,755,845.40	45,332,526,393.51
Commercial Bank of Africa	32,119,795,171.91	36,434,161,635.37	39,008,738,367.63	40,998,184,024.38
Fina Bank Limited	31,507,191,559.11	35,739,272,426.77	38,264,745,638.94	40,216,247,666.53
Paramount-Universal Bank	31,406,679,669.82	35,625,259,669.19	38,142,676,305.35	40,087,952,796.92
Guardian Bank	29,841,524,930.94	33,849,871,612.21	36,241,832,561.26	38,090,166,021.88
Transnational Bank Limited	24,482,680,547.77	27,771,221,316.03	29,733,641,665.99	31,250,057,390.95
Prime Bank Limited	24,471,762,148.57	27,758,836,345.36	29,720,381,526.08	31,236,120,983.91

Habib bank	24,223,848,190.12	27,477,622,309.42	29,419,295,834.50	30,919,679,922.06
Gulf African Bank	24,095,507,471.20	27,332,042,722.98	29,263,429,039.60	30,755,863,920.62
Bank of Baroda (K) Ltd	23,923,622,743.64	27,137,070,248.43	29,054,679,066.85	30,536,467,699.25
K-Rep Bank Ltd	18,116,327,273.76	20,549,732,418.86	22,001,854,838.18	23,123,949,434.93
Habib AG Zurich	15,883,697,376.65	18,017,213,201.11	19,290,378,159.64	20,274,187,445.79
Victoria Comm. Bank Ltd	15,821,249,741.89	17,946,377,530.88	19,214,536,970.96	20,194,478,356.48
Fidelity Commercial Bank	14,506,376,168.24	16,454,888,682.46	17,617,653,835.61	18,516,154,181.23
First community Bank	12,107,948,576.82	13,734,301,640.46	14,704,819,743.53	15,454,765,550.45
Equitorial Commercial Bank	11,912,041,843.47	13,512,080,497.69	14,466,895,607.81	15,204,707,283.81
I & M Bank	11,494,615,189.14	13,038,584,632.81	13,959,940,720.35	14,671,897,697.09
Bank of India	10,533,301,838.92	11,948,146,608.64	12,792,448,189.12	13,444,863,046.76
Diamond Trust Bank Kenya	5,866,810,562.04	6,654,847,054.83	7,125,103,913.10	7,488,484,212.66
Credit Bank Ltd	4,039,599,488.27	4,582,202,965.81	4,905,998,892.73	5,156,204,836.26
Jamii Bora Bank	56,336,190.12	63,903,329.58	68,418,982.42	71,908,350.52
Dubai Bank	52,936,114.73	60,046,552.29	64,289,670.55	67,568,443.75

Limited				

Total Loans

Appendix III: Total loans	2011	2012	2013	2014
KCB	193,937,013,559.59	211,449,720,469.65	216,206,258,148.92	232,810,898,774.76
Equity Bank Limited	87,721,902,888.02	95,643,278,734.09	97,794,763,531.79	105,305,401,371.03
Co-op Bank	78,091,974,737.29	85,143,758,409.22	87,059,057,678.14	93,745,193,307.82
Standard Chartered Bank Ltd	60,692,100,310.72	66,172,657,863.86	67,661,204,359.78	72,857,584,854.61
Barclays Bank	57,575,269,956.17	62,774,374,601.04	64,186,477,097.18	69,115,998,538.24
Imperial Bank Limited	56,356,339,115.94	61,445,373,082.93	62,827,579,839.39	67,652,737,971.06
Bank of Africa	50,720,483,037.62	55,300,593,546.03	56,544,574,177.95	60,887,197,474.82
Giro Commercial Bank	48,443,415,447.37	52,817,904,467.70	54,006,037,288.03	58,153,700,951.76
Family Bank	45,538,369,524.96	49,650,529,983.73	50,767,413,071.30	54,666,350,395.18
CFC Stanbic Bank	44,248,828,517.09	48,244,542,129.00	49,329,797,677.91	53,118,326,139.58
Citibank, N.A.	43,051,347,301.37	46,938,927,158.01	47,994,813,045.00	51,680,814,686.86
Housing finance	37,322,819,637.47	40,693,107,698.37	41,608,494,579.11	44,804,026,962.79
African Banking Corporation	34,949,196,875.73	38,105,144,419.69	38,962,315,357.55	41,954,621,177.01
NIC Bank Ltd	34,271,886,042.69	37,366,671,738.85	38,207,230,816.82	41,141,546,143.55
Consolidated Bank	31,854,402,247.97	34,730,886,731.90	35,512,154,122.59	38,239,487,559.21

of Kenya				
Ecobank Kenya Ltd	31,195,431,542.87	34,012,410,310.96	34,777,515,655.38	37,448,428,857.71
Chase Bank Limited	30,299,415,804.89	33,035,483,452.83	33,778,612,937.45	36,372,810,411.05
Development Bank of Kenya	28,336,114,729.67	30,894,894,320.65	31,589,871,493.50	34,015,973,624.20
National Bank(NBK)	25,064,426,068.19	27,327,768,890.40	27,942,503,977.91	30,088,488,283.42
Oriental Comm. Bank	23,563,392,943.80	25,691,190,968.83	26,269,111,420.07	28,286,579,177.13
Commercial Bank of Africa	21,310,445,214.61	23,234,799,799.20	23,757,464,007.36	25,582,037,243.13
Fina Bank Limited	20,904,002,531.55	22,791,654,934.07	23,304,350,648.33	25,094,124,778.12
Paramount-Universal Bank	20,837,316,143.97	22,718,946,698.77	23,230,006,849.46	25,014,071,375.50
Guardian Bank	19,798,886,598.05	21,586,745,922.95	22,072,337,344.53	23,767,492,852.59
Transnational Bank Limited	16,243,466,676.16	17,710,268,014.81	18,108,658,501.85	19,499,403,474.80
Prime Bank Limited	16,236,222,671.44	17,702,369,869.19	18,100,582,688.34	19,490,707,438.80
Habib bank	16,071,739,778.53	17,523,034,006.02	17,917,212,685.09	19,293,254,619.31
Gulf African Bank	15,986,589,862.58	17,430,194,967.22	17,822,285,242.56	19,191,036,749.19
Bank of Baroda (K) Ltd	15,872,549,905.27	17,305,857,087.35	17,695,150,396.07	19,054,137,946.49
K-Rep Bank Ltd	12,019,597,192.04	13,104,978,878.28	13,399,773,904.17	14,428,876,540.02
Habib AG Zurich	10,538,319,467.45	11,489,940,288.92	11,748,405,203.40	12,650,682,723.02

Victoria Comm. Bank Ltd	10,496,887,481.59	11,444,766,953.17	11,702,215,698.54	12,600,945,864.18
Fidelity Commercial Bank	9,624,511,393.71	10,493,614,429.27	10,729,667,105.59	11,553,705,539.30
First community Bank	8,033,232,261.50	8,758,641,194.81	8,955,665,843.36	9,643,460,980.13
Equitorial Commercial Bank	7,903,254,480.32	8,616,926,289.58	8,810,763,077.28	9,487,429,681.62
I & M Bank	7,626,305,396.41	8,314,968,425.52	8,502,012,705.03	9,154,967,280.77
Bank of India	6,988,505,081.24	7,619,574,101.95	7,790,975,564.37	8,389,322,487.71
Diamond Trust Bank Kenya	3,892,439,051.92	4,243,930,203.77	4,339,396,936.37	4,672,662,621.08
Credit Bank Ltd	2,680,143,603.75	2,922,163,260.28	2,987,896,994.15	3,217,367,483.30
Jamii Bora Bank	37,376,707.41	40,751,861.59	41,668,570.13	44,868,716.32
Dubai Bank Limited	35,111,185.95	38,281,761.27	39,142,905.18	42,149,080.30

INTEREST BEARING LIABLITIES

Appendix III: Interest bearing liablities	2011	2012	2013	2014
KCB	278,950,185,929.22	304,139,667,601.76	259,299,235,526.87	334,864,615,617.15
Equity Bank Limited	126,175,198,181.85	137,568,945,174.86	117,286,648,589.32	151,466,503,235.47
Co-op Bank	112,323,947,206.98	122,466,912,339.39	104,411,164,112.01	134,838,825,365.08
Standard Chartered	87,296,758,650.50	95,179,743,545.36	81,147,043,177.78	104,795,038,701.07

Bank Ltd				
Barclays Bank	82,813,651,527.45	90,291,807,351.00	76,979,753,430.62	99,413,310,997.50
Imperial Bank Limited	81,060,396,806.88	88,380,231,970.04	75,350,008,653.02	97,308,623,502.39
Bank of Africa	72,954,037,571.67	79,541,860,362.43	67,814,710,744.57	87,577,377,544.23
Giro Commercial Bank	69,678,807,041.84	75,970,873,229.57	64,770,207,405.27	83,645,640,382.00
Family Bank	65,500,321,020.45	71,415,065,727.99	60,886,079,393.68	78,629,593,840.38
CFC Stanbic Bank	63,645,503,843.96	69,392,756,699.43	59,161,926,838.25	76,402,986,108.33
Citibank, N.A.	61,923,101,288.40	67,514,819,464.95	57,560,860,811.22	74,335,334,969.18
Housing finance	53,683,447,456.38	58,531,116,624.68	49,901,658,389.35	64,444,076,054.66
African Banking Corporation	50,269,336,356.29	54,808,707,866.72	46,728,058,073.19	60,345,620,276.98
NIC Bank Ltd	49,295,123,237.61	53,746,522,325.95	45,822,474,461.29	59,176,130,102.85
Consolidated Bank of Kenya	45,817,924,421.14	49,955,328,967.53	42,590,230,711.81	55,001,940,932.75
Ecobank Kenya Ltd	44,870,090,908.94	48,921,905,138.17	41,709,168,366.22	53,864,118,049.88
Chase Bank Limited	43,581,302,595.06	47,516,737,946.45	40,511,170,152.19	52,316,997,362.72
Development Bank of Kenya	40,757,379,559.86	44,437,811,827.81	37,886,181,458.33	48,927,030,445.99
National Bank(NBK)	36,051,531,286.38	39,307,020,733.64	33,511,841,804.27	43,277,914,034.75
Oriental Comm. Bank	33,892,513,461.73	36,953,041,433.19	31,504,918,347.47	40,686,129,872.45
Commercial Bank of	30,651,975,843.81	33,419,880,016.99	28,492,663,940.02	36,796,039,675.15

Africa				
Fina Bank Limited	30,067,367,161.19	32,782,480,583.77	27,949,238,654.32	36,094,248,560.95
Paramount-Universal Bank	29,971,448,492.16	32,677,900,362.69	27,860,077,080.65	35,979,103,385.02
Guardian Bank	28,477,818,629.60	31,049,394,224.92	26,471,667,604.49	34,186,081,494.27
Transnational Bank Limited	23,363,864,206.66	25,473,644,586.52	21,717,971,284.22	28,047,055,716.53
Prime Bank Limited	23,353,444,759.50	25,462,284,252.83	21,708,285,846.40	28,034,547,733.59
Habib bank	23,116,860,042.03	25,204,335,698.00	21,488,367,597.65	27,750,540,572.20
Gulf African Bank	22,994,384,272.96	25,070,800,244.10	21,374,519,767.85	27,603,515,033.58
Bank of Baroda (K) Ltd	22,830,354,381.46	24,891,958,288.81	21,222,045,141.14	27,406,606,017.78
K-Rep Bank Ltd	17,288,442,314.21	18,849,606,001.45	16,070,539,120.07	20,753,840,227.36
Habib AG Zurich	15,157,839,758.74	16,526,607,897.49	14,090,029,187.79	18,196,167,059.33
Victoria Comm. Bank Ltd	15,098,245,873.35	16,461,632,624.46	14,034,633,458.72	18,124,627,822.11
Fidelity Commercial Bank	13,843,459,757.77	15,093,538,063.66	12,868,242,121.01	16,618,324,935.53
First community Bank	11,554,636,177.11	12,598,031,417.19	10,740,657,216.40	13,870,715,981.62
Equitorial Commercial Bank	11,367,682,044.12	12,394,195,138.40	10,566,873,271.42	13,646,287,653.41
I & M Bank	10,969,331,069.07	11,959,872,670.62	10,196,584,565.72	13,168,088,846.34
Bank of India	10,051,948,083.55	10,959,649,081.06	9,343,827,626.20	12,066,820,174.32

Diamond Trust Bank Kenya	5,598,707,422.18	6,104,276,319.84	5,204,300,365.22	6,720,945,543.15
Credit Bank Ltd	3,854,996,747.97	4,203,106,822.20	3,583,427,293.22	4,627,715,159.66
Jamii Bora Bank	53,760,957.17	58,615,625.55	49,973,707.85	64,537,122.28
Dubai Bank Limited	50,502,334.08	55,062,745.52	46,944,642.02	60,625,321.45

INTEREST RECEIVED

Appendix III: Interest received	2011	2012	2013	2014
KCB	44,605,513,118.70	48,633,435,708.02	49,727,439,374.25	53,546,506,718.20
Equity Bank Limited	20,176,037,664.24	21,997,954,108.84	22,492,795,612.31	24,220,242,315.34
Co-op Bank	17,961,154,189.58	19,583,064,434.12	20,023,583,265.97	21,561,394,460.80
Standard Chartered Bank Ltd	13,959,183,071.47	15,219,711,308.69	15,562,077,002.75	16,757,244,516.56
Barclays Bank	13,242,312,089.92	14,438,106,158.24	14,762,889,732.35	15,896,679,663.80
Imperial Bank Limited	12,961,957,996.67	14,132,435,809.07	14,450,343,363.06	15,560,129,733.34
Bank of Africa	11,665,711,098.65	12,719,136,515.59	13,005,252,060.93	14,004,055,419.21
Giro Commercial Bank	11,141,985,552.89	12,148,118,027.57	12,421,388,576.25	13,375,351,218.90
Family Bank	10,473,824,990.74	11,419,621,896.26	11,676,505,006.40	12,573,260,590.89
CFC Stanbic Bank	10,177,230,558.93	11,096,244,689.67	11,345,853,465.92	12,217,215,012.10
Citibank, N.A.	9,901,809,879.31	10,795,953,246.34	11,038,807,000.35	11,886,587,377.98
Housing finance	8,584,248,516.62	9,359,414,770.63	9,569,953,753.20	10,304,926,201.44

African Banking Corporation	8,038,315,281.42	8,764,183,216.53	8,961,332,532.24	9,649,562,870.71
NIC Bank Ltd	7,882,533,789.82	8,594,334,499.94	8,787,663,087.87	9,462,555,613.02
Consolidated Bank of Kenya	7,326,512,517.03	7,988,103,948.34	8,167,795,448.20	8,795,082,138.62
Ecobank Kenya Ltd	7,174,949,254.86	7,822,854,371.52	7,998,828,600.74	8,613,138,637.27
Chase Bank Limited	6,968,865,635.13	7,598,161,194.15	7,769,080,975.61	8,365,746,394.54
Development Bank of Kenya	6,517,306,387.82	7,105,825,693.75	7,265,670,443.51	7,823,673,933.57
National Bank(NBK)	5,764,817,995.68	6,285,386,844.79	6,426,775,914.92	6,920,352,305.19
Oriental Comm. Bank	5,419,580,377.07	5,908,973,922.83	6,041,895,626.62	6,505,913,210.74
Commercial Bank of Africa	4,901,402,399.36	5,344,003,953.82	5,464,216,721.69	5,883,868,565.92
Fina Bank Limited	4,807,920,582.26	5,242,080,634.83	5,360,000,649.12	5,771,648,698.97
Paramount-Universal Bank	4,792,582,713.11	5,225,357,740.72	5,342,901,575.38	5,753,236,416.36
Guardian Bank	4,553,743,917.55	4,964,951,562.28	5,076,637,589.24	5,466,523,356.10
Transnational Bank Limited	3,735,997,335.52	4,073,361,643.41	4,164,991,455.43	4,484,862,799.20
Prime Bank Limited	3,734,331,214.43	4,071,545,069.91	4,163,134,018.32	4,482,862,710.92
Habib bank	3,696,500,149.06	4,030,297,821.39	4,120,958,917.57	4,437,448,562.44
Gulf African Bank	3,676,915,668.39	4,008,944,842.46	4,099,125,605.79	4,413,938,452.31
Bank of Baroda (K)	3,650,686,478.21	3,980,347,130.09	4,069,884,591.10	4,382,451,727.69

Ltd				
K-Rep Bank Ltd	2,764,507,354.17	3,014,145,142.01	3,081,947,997.96	3,318,641,604.20
Habib AG Zurich	2,423,813,477.51	2,642,686,266.45	2,702,133,196.78	2,909,657,026.29
Victoria Comm. Bank Ltd	2,414,284,120.76	2,632,296,399.23	2,691,509,610.66	2,898,217,548.76
Fidelity Commercial Bank	2,213,637,620.55	2,413,531,318.73	2,467,823,434.29	2,657,352,274.04
First community Bank	1,847,643,420.14	2,014,487,474.81	2,059,803,143.97	2,217,996,025.43
Equitorial Commercial Bank	1,817,748,530.47	1,981,893,046.60	2,026,475,507.77	2,182,108,826.77
I & M Bank	1,754,050,241.17	1,912,442,737.87	1,955,462,922.16	2,105,642,474.58
Bank of India	1,607,356,168.68	1,752,502,043.45	1,791,924,379.80	1,929,544,172.17
Diamond Trust Bank Kenya	895,260,981.94	976,103,946.87	998,061,295.36	1,074,712,402.85
Credit Bank Ltd	616,433,028.86	672,097,549.86	687,216,308.65	739,994,521.16
Jamii Bora Bank	8,596,642.70	9,372,928.16	9,583,771.13	10,319,804.75
Dubai Bank Limited	8,075,572.77	8,804,805.09	9,002,868.19	9,694,288.47

INTEREST PAID

Appendix III: Interest paid	2011	2012	2013	2014
KCB	12,106,438,069.33	13,199,661,573.92	11,253,586,821.87	14,533,124,317.78
Equity Bank Limited	5,476,003,601.09	5,970,492,220.59	5,090,240,548.78	6,573,646,240.42

Co-op Bank	4,874,859,308.78	5,315,063,995.53	4,531,444,522.46	5,852,005,020.84
Standard Chartered Bank Ltd	3,788,679,325.43	4,130,800,869.87	3,521,781,673.92	4,548,104,679.63
Barclays Bank	3,594,112,476.29	3,918,664,439.03	3,340,921,298.89	4,314,537,697.29
Imperial Bank Limited	3,518,021,221.42	3,835,702,067.50	3,270,190,375.54	4,223,194,260.00
Bank of Africa	3,166,205,230.61	3,452,116,739.73	2,943,158,446.31	3,800,858,185.42
Giro Commercial Bank	3,024,060,225.62	3,297,135,898.16	2,811,027,001.39	3,630,220,792.58
Family Bank	2,842,713,932.29	3,099,413,852.59	2,642,455,845.69	3,412,524,372.67
CFC Stanbic Bank	2,762,214,866.83	3,011,645,640.76	2,567,627,624.78	3,315,889,597.10
Citibank, N.A.	2,687,462,595.92	2,930,143,164.78	2,498,141,359.21	3,226,153,537.66
Housing finance	2,329,861,619.61	2,540,250,461.51	2,165,731,974.10	2,796,872,900.77
African Banking Corporation	2,181,689,197.86	2,378,697,921.42	2,027,997,720.38	2,618,999,920.02
NIC Bank Ltd	2,139,408,348.51	2,332,599,068.95	1,988,695,391.62	2,568,244,046.46
Consolidated Bank of Kenya	1,988,497,919.88	2,168,061,277.19	1,848,416,012.89	2,387,084,236.48
Ecobank Kenya Ltd	1,947,361,945.45	2,123,210,683.00	1,810,177,907.09	2,337,702,723.36
Chase Bank Limited	1,891,428,532.63	2,062,226,426.88	1,758,184,784.60	2,270,557,685.54
Development Bank of Kenya	1,768,870,272.90	1,928,601,033.33	1,644,260,275.29	2,123,433,121.36
National Bank(NBK)	1,564,636,457.83	1,705,924,699.84	1,454,413,934.31	1,878,261,469.11
Oriental Comm.	1,470,935,084.24	1,603,761,998.20	1,367,313,456.28	1,765,778,036.46

Bank				
Commercial Bank of Africa	1,330,295,751.62	1,450,422,792.74	1,236,581,615.00	1,596,948,121.90
Fina Bank Limited	1,304,923,734.80	1,422,759,657.34	1,212,996,957.60	1,566,490,387.55
Paramount-Universal Bank	1,300,760,864.56	1,418,220,875.74	1,209,127,345.30	1,561,493,086.91
Guardian Bank	1,235,937,328.52	1,347,543,709.36	1,148,870,374.03	1,483,675,936.85
Transnational Bank Limited	1,013,991,706.57	1,105,556,175.06	942,559,953.74	1,217,242,218.10
Prime Bank Limited	1,013,539,502.56	1,105,063,136.57	942,139,605.73	1,216,699,371.64
Habib bank	1,003,271,725.82	1,093,868,169.29	932,595,153.74	1,204,373,460.83
Gulf African Bank	997,956,277.45	1,088,072,730.59	927,654,157.92	1,197,992,552.46
Bank of Baroda (K) Ltd	990,837,380.16	1,080,310,989.73	921,036,759.13	1,189,446,701.17
K-Rep Bank Ltd	750,318,396.44	818,072,900.46	697,461,397.81	900,716,665.87
Habib AG Zurich	657,850,245.53	717,254,782.75	611,507,266.75	789,713,650.37
Victoria Comm. Bank Ltd	655,263,870.90	714,434,855.90	609,103,092.11	786,608,847.48
Fidelity Commercial Bank	600,806,153.49	655,059,551.96	558,481,708.05	721,235,302.20
First community Bank	501,471,210.09	546,754,563.51	466,144,523.19	601,989,073.60
Equitorial Commercial Bank	493,357,400.71	537,908,069.01	458,602,299.98	592,248,884.16

I & M Bank	476,068,968.40	519,058,473.90	442,531,770.15	571,495,055.93
Bank of India	436,254,546.83	475,648,770.12	405,522,118.98	523,699,995.57
Diamond Trust Bank Kenya	242,983,902.12	264,925,592.28	225,866,635.85	291,689,036.57
Credit Bank Ltd	167,306,858.86	182,414,836.08	155,520,744.53	200,842,837.93
Jamii Bora Bank	2,333,225.54	2,543,918.15	2,168,858.92	2,800,911.11
Dubai Bank Limited	2,191,801.30	2,389,723.16	2,037,397.46	2,631,138.95

NON-CURRENT ASSETS

Appendix III: Non-Current Assets	2011	2012	2013	2014
KCB	98,371,152,180.46	120,121,601,853.90	138,795,157,615.04	140,295,589,193.17
Equity Bank Limited	44,495,398,274.79	54,333,596,765.13	62,780,049,636.54	63,458,727,268.89
Co-op Bank	39,610,785,945.17	48,368,967,456.00	55,888,186,288.91	56,492,360,101.54
Standard Chartered Bank Ltd	30,785,004,503.45	37,591,752,989.23	43,435,595,268.80	43,905,151,555.03
Barclays Bank	29,204,046,915.72	35,661,236,230.08	41,204,969,188.82	41,650,411,508.34
Imperial Bank Limited	28,585,765,603.76	34,906,249,224.82	40,332,615,350.91	40,768,627,173.95
Bank of Africa	25,727,076,353.21	31,415,486,695.69	36,299,194,817.47	36,691,603,739.37
Giro Commercial Bank	24,572,073,714.28	30,005,106,070.29	34,669,562,859.71	35,044,354,803.52
Family Bank	23,098,540,069.11	28,205,765,329.43	32,590,504,822.88	32,942,821,311.61
CFC Stanbic Bank	22,444,442,986.77	27,407,043,472.90	31,667,617,313.41	32,009,957,016.30
Citibank, N.A.	21,837,041,621.02	26,665,342,034.98	30,810,614,356.49	31,143,689,512.11
Housing finance	18,931,346,332.37	23,117,180,151.79	26,710,871,427.48	26,999,626,710.14

African Banking Corporation	17,727,367,774.44	21,646,994,738.99	25,012,137,703.13	25,282,528,989.76
NIC Bank Ltd	17,383,813,721.46	21,227,478,831.61	24,527,405,768.26	24,792,556,907.36
Consolidated Bank of Kenya	16,157,587,423.04	19,730,126,569.93	22,797,281,960.73	23,043,729,764.36
Ecobank Kenya Ltd	15,823,336,078.63	19,321,970,255.58	22,325,675,529.35	22,567,025,077.44
Chase Bank Limited	15,368,847,794.53	18,766,991,895.56	21,684,422,767.46	21,918,840,114.81
Development Bank of Kenya	14,372,997,722.89	17,550,953,421.27	20,279,344,504.26	20,498,572,389.45
National Bank(NBK)	12,713,490,972.22	15,524,519,809.80	17,937,890,776.05	18,131,806,603.00
Oriental Comm. Bank	11,952,118,219.30	14,594,802,990.78	16,863,644,425.33	17,045,947,216.39
Commercial Bank of Africa	10,809,349,957.30	13,199,361,836.16	15,251,274,360.27	15,416,146,781.25
Fina Bank Limited	10,603,189,027.56	12,947,617,492.71	14,960,394,990.62	15,122,122,888.41
Paramount-Universal Bank	10,569,363,525.86	12,906,312,970.42	14,912,669,455.89	15,073,881,421.42
Guardian Bank	10,042,638,332.89	12,263,125,689.26	14,169,495,216.72	14,322,673,169.29
Transnational Bank Limited	8,239,213,871.61	10,060,953,301.22	11,624,983,164.13	11,750,653,916.16
Prime Bank Limited	8,235,539,477.14	10,056,466,476.17	11,619,798,837.74	11,745,413,545.11
Habib bank	8,152,108,411.59	9,954,588,303.40	11,502,083,149.40	11,626,425,302.75
Gulf African Bank	8,108,917,608.63	9,901,847,755.76	11,441,143,797.04	11,564,827,171.43
Bank of Baroda (K) Ltd	8,051,072,838.37	9,831,213,161.08	11,359,528,670.78	11,482,329,752.77
K-Rep Bank Ltd	6,096,730,081.71	7,444,753,540.58	8,602,080,934.01	8,695,072,894.91

Habib AG Zurich	5,345,377,909.20	6,527,272,912.19	7,541,972,956.25	7,623,504,722.77
Victoria Comm. Bank Ltd	5,324,362,260.30	6,501,610,577.71	7,512,321,272.42	7,593,532,492.30
Fidelity Commercial Bank	4,881,864,774.53	5,961,274,253.19	6,887,986,730.02	6,962,448,641.93
First community Bank	4,074,716,315.33	4,975,660,445.65	5,749,153,900.17	5,811,304,570.32
Equitorial Commercial Bank	4,008,787,363.15	4,895,154,208.11	5,656,132,530.53	5,717,277,602.19
I & M Bank	3,868,309,792.73	4,723,616,207.29	5,457,928,015.32	5,516,930,416.32
Bank of India	3,544,796,757.68	4,328,572,506.68	5,001,472,624.75	5,055,540,559.05
Diamond Trust Bank Kenya	1,974,371,510.12	2,410,916,851.06	2,785,706,976.73	2,815,821,591.58
Credit Bank Ltd	1,359,455,884.52	1,660,039,705.53	1,918,101,898.58	1,938,837,352.96
Jamii Bora Bank	18,959,482.72	23,151,467.99	26,750,412.29	27,039,634.21
Dubai Bank Limited	17,824,928.78	21,764,791.02	25,146,765.36	25,419,363.44