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

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DECLARATION

This research project is my original work and has not been presented for examination in any other university.

Signed …… Date……

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This research project has been submitted for examination with my approval as the candidate's university supervisor.

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DEDICATION

To Professor Ruth Nduati of Department of Pediatrics, College of Health Sciences, University of Nairobi for giving me motivation, inspiration and exposure to the world of academics and research.

ABSTRACT

The last decade has been a period of dramatic changes for the banking sector in Kenya. Interest charged to borrowers rose to thirty percent and above in 2012 while interest earned by the savers remains relatively low. This resulted debate by members of parliament to control banks interest rate due to their skewed way of increasing interest rate, argument was bank only increase interest rate charged to customers only, on the other side banks argues if interest rate is controlled many banks will collapse. Banks as other business sought to maximize profit one way of achieving this is enlarging spread. The study sought to determine the effect of interest spread on Kenya commercial banks financial performance.

The target population in this study is all 43 commercial banks in Kenya. Data is collected from central banks supervision report.The data collected was analysed using SPSS (Statistical Package for Social Scientists). Regression analysis was used to analyze the data and find out whether exists a relationship between interest rate spread and the performance of commercial banks in Kenya.

The study found that there is strong positive relationship between financial performance of commercial banks with interest rate spread. Study found variables are significance to influencing financial performance of Kenya banks. The study found that interest rate spread affect performance assets in banks as it increases the cost of loans charged on the borrowers, regulation on interest rates have far reaching effects on assets non-performance. The study recommends there is need for government to regulate interest rates as this would help to safeguard borrowers from exploitation by commercial banks.

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ACRONYMS AND ABBREVIATIONS

ANOVA	-	Analysis of Variance
CBK	-	Central Bank of Kenya
ECCU	-	Eastern Caribbean Currency Union
IFS	-	Interest rate spread
KNBs	-	Kenya National Bureaus of statistics
NPA	-	Non performance Asset
SPSS	-	Statistics Package for Social Science

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

There is no doubt a theoretical link exists between interest rates and the financial structure of firms. Interest rates operate through their influence on the cost of capital to the investor, as well as on returns to various groups of savers. A change in the interest rates affects the debt-equity choice of a firm, the overall cost of capital and real interest rates, and thereby sets in motion a chain of responses influencing the desired level of the capital stock and its productivity as well as the availability of savings and consequent speed of adjustment of the actual capital stock to its desired level.Hualan (1992) found that interest rate is one of the most important factor that affect the bank financial performance.

Interest rates are major economic factors that influence the economic growth in an economy.Corb (2012) argued that interest rates is economic tool used by CBK to control inflation and to boost economic development . Control of the inflation or deflation in the economy is a major role entrusted to the CBK by the government. The rationale behind the need to control the interest charged on credit or any other financial instrument is based on the need to control economic patterns that has great effects to the society. Holding all factors constant, controlling and setting of rates has big economic implication to the economic growth hence creating for a need of a rational decision making process within the industry.

Poor decisions on the rates can directly affect the economic performance in all industry but greatly on the financial sectors. Interest rate is a monetary tool used by CBK, if CBK

increases its lending rate to financial institution it signal the same to financial institution, therefore financial institution do the same. Giovanni (2006) argued that high interest set by central bank means that other financial institution will have to charge also high because they are all profit motivated.

The difference between the borrowed rate and the lending rate is called the spread. Spread is different from the rates because they are determined by the individual financial institution (Mlachila, 2002). Low rate or small spread helps the financial institution to remain competitive hence encouraged. In the Kenyan economy, it is free market central bank try to signal interest rate to be charged but it do note dictates to financial institution on what to charge. The difference is brought forth by the stakeholders customers interests and other factors hence been used as a tool to control and influence the market competition. As a market that operates freely, central bank does not have the right to determine the spread initiated on the loans given by the stakeholders. The study therefore aims at determining the effects of the interest rate spread on the financial performance of Kenya commercial banks.

Ngugi (2004) explained that low rates and small spread promote the economic growth in big ways hence encouraged. The Kenyan parliament has tried to control the loan sector but the economic factors can not allow a legislative that determines rates and spread given to the prospective customers. This is because legislatives will limit competition and efficiency hence interfering with the financial industry growth.

1.1.1 Interest Rate Spread

Crowley (2007) defined interest rate as money borrower pays for the use of money they borrow from a lender/financial institutions or fee paid on borrowed assets. Interest rate is the price of money, almost everyone would prefer to have one shilling in their pocket today than have it a year from now, even if their intention is to save it or not, if someone is going to defer getting paid a shilling today and instead get paid one year from now ,then this person would expect some additional reward this extra is the interest rate.

Interest rate is also defined as fee charged by a lender to a borrower for the use of borrowed money, usually expressed as an annual percentage of the principal, the rate is dependent upon the time value of money, the credit risk of the borrower ,inflation rate among others Brock & Rojas (2000) defined interest rate spread as margin between interest income and interest expense as a percentage of total earning assets. Spread is defined by market microstructure characteristics of the banking sector and the policy environment. Risk-averse banks operate with smaller spread than risk-neutral banks since risk aversion raises the bank's optimal interest rate and reduces the amount of credit supplied. Emmanuelle (2003) argued actual spread, is influenced by monetary and fiscal policy.

Spreads are set with the interest of the targeted customers and with total understanding of competitive environment. It is noted that out of the current financial business environment, competition is helping the reduction of spread.Frenkel (2010) noted that Micro finance institutions have their own targeted customers where they value their ability and willingness to continue doing business with the said stakeholders. It is noted

that the pricing strategy adopted by the institutions affects their performance greatly hence making it necessary for them to set competitive spread on the borrowed money.

Money borrowed from the central bank is expected to be repaid on profit. This help the government generate more profit as it serves the interest of the people. It is out of this concept that makes the interest rate a tool of business both to the government and other stakeholders in the business. Potential exercise of monopoly power by commercial banks and hence to the widening of the interest rate spreads Chirwa (2002) covered Malawi commercial banks and found that if interest rate is note controlled big banks having major control may exploit customers by increasing interest rate while maintaining low interest rate earned by customers.

Interest rate spreads (IRS) in an economy has important implications for the growth and development of such economy, as numerous authors suggest, a critical link between the efficiency of bank intermediation and economic growth. Quaden (2004) argued that more efficient banking system benefits the real economy by allowing 'higher expected returns for savers with a financial surplus, and lower borrowing costs for investing in new projects that need external finance.' Therefore, if the banking sector's interest rate spread is large it discourages potential savers due to low returns on deposits and thus limits financing for potential borrowers.Valverde (2004) elucidate by noting that because of the costs of intermediating between savers and borrowers, only a fraction of the savings mobilized by banks can be finally channeled into investments. An increase in the inefficiency of banks increases these intermediation costs, and thereby increases the fraction of savings that is 'lost' in the process of intermediation. This ultimately reduces lending, investment and economic growth.

Interest rate spread can be grouped in different ways narrow definition:

SPN0=(interest received on loans only/loans)-(interest paid on deposits only/deposits);

SPN1=(interest received/loans)-(interest paid/deposits);

SPN2= (interest plus commission received/loans)-(interest plus commission paid/deposits).

Wide definition:

SPW0=(interest received-interest paid)/total assets;

SPW1=(interest received/all interest bearing assets)-(interest paid/interest earning liabilities);

SPW2= (interest plus commission received/all interest bearing assets)-(interest plus commission paid/interest earning liabilities).For the purpose of this study SPW 1 is used (Mlachila, 2002).

1.1.2. Financial Performance

Any of many different mathematical measures to evaluate how well a company is using its resources to make a profit. Common examples of financial performance include operating income, earnings before interest and taxes, and net asset value. It is important to note that no one measure of financial performance should be taken on its own. Rather, a thorough assessment of a company's performance should take into account many different measures.

Financial performance analysis is the process of identifying the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of balance sheet and profit and loss account. Quarden (2004) argued financial performance

analysis helps in short-term and long term forecasting and growth can be identified with the help of financial performance analysis. The dictionary meaning of 'analysis' is to resolve or separate a thing in to its element or components parts for tracing their relation to the things as whole and to each other. To establish financial performance analyst need to consider to analyze financial statement of the organization.

The analysis of financial performance is a process of evaluating the relationship between the component parts of financial statement to obtain a better understanding of the firm's position and performance. This analysis can be undertaken by management of the firm or by parties outside the namely, owners, creditors, investors illustrated by Chenn (2011). financial performance measurement ratios such as asset utilization/efficiency ratios, deposit mobilization, loan performance, liquidity ratio, leverage/financial efficiency ratios, profitability ratios, solvency ratios and coverage ratios to evaluate the bank's financial performance (Bekana, 2011).

1.1.3 Effect of Interest Rate on Financial Performance

Financial performance is an indicator of how profitable a company is relative to its total assets. It is measured by return on asset. ROA gives an idea as to how efficient management is at using its assets to generate earnings. The return on asset is company's net income divided by its average total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment".

The formula for return on assets is $= \frac{Net\ income}{Total\ \ Average\ Asset}$

Return on asset formula looks at the ability of a company to utilize its assets to gain a net profit Kiarie (2011) observed.Net income in the numerator of the of the ROA formula

can be found on an income statement. Average total asset on the denominator of the ROA formula is found on a company's balance sheet. The average of total assets should be used based on the period being evaluated. Interest rate affect financial performance direct and indirect, when interest rate is high borrowers are discourage to borrow Were and Wambua (2013) noted interest rate earned by banks drops, this have direct impact on bank profitability. Low interest rate period has opposite impact many people will borrow and if spread remains the same banks will benefit from increased interest earning.

Interest has indirect impact on financial performance through impacting economy, high interest rate to borrowers discourages borrowing this result to shrinked investment through multiplier effects savings are reduced and this will have negative impact on banks performance argued by Ngugi (2004). The opposite is true during period of low interest rate. In conclusion interest rate affect financial performance positively and negatively depending on interest rate movement.

1.1.4. Commercial Bank in Kenya

Kenya banking industry can be characterized as growing and liberalized industry with the support of the technology. The presence of the technology in the Kenyan banking sector has created deference as well as accommodating creativity and innovativeness in the industry. Historically, the sector was dominated by major international banks such as Barclays and standard chattered whom they had located their business in major towns and their main customer was the government and corporate institutions. This made it difficult for other stakeholders to be able to access banking services and mostly small scale business holders and employed citizens (Ngugi, 2012).

The introduction of new interest policies by the NARC government in the year 2003 changed the whole strategy of doing business in the banks sector. The government reduced the interests given to the banks on the amount given to it as loan. This subjected the main banks into crises where they were expected to make new strategies on how to reach out to other interested stakeholders. At this time, small banks or micro finance institution expanded due to the good business environment that was prevailing. They extended their interest all over the country and outside the country making it difficult for the main banks to continue operating with strict banking structures (Ndung`u, 2000).

Equity and family bank are among the institutions that were able to take advantage of the new environment where they targeted small scale stakeholders. They operated with customer friendly terms hence extending their market share and their profitability. Currently, equity bank and family bank holds a substantial market share in the Kenyan banking sector (Ngetich, 2011).

Chenn (2011) argued due to the globalization, Kenyans economy has been experiencing inflation and other internal pressure. This has resulted to constant interest rate change hence influencing the banking business in the economy. Interest rate change shifts the spread given by the financial institution to their clients. This means that the banks have been revising the rates given to their customers hence making rending process unstable. Out of the competition, financial institutions have been introducing different spreads based on their policy strategy to meet their goals and objectives.

It is important to note that Kenyan government through the ministry of finance and central bank have constantly been making policies on how to bridge the gap between the stakeholders interests. As profit motivated institutions, banks would prefer to offer loans on small spreads and at the same time get loans from central banks cheaply. This objective has remain an obstacle to the industry where the government and other socially motivated stakeholders wish to have banks facilities that offer cheep loans while the institution wish the same but the business interest concept dictate otherwise. It is out of this conflicting interest that competition in the sector has increase each stakeholder introducing new brands with new spread and at the same time offer general services.

In Kenya, the Banking Sector is composed of the CBK,as the regulatory authority and the regulated; Commercial Banks, on-Bank Financial Institutions and Forex Bureaus CBK (2009) As at 31 st December 2012 the banking sector comprised 44 institutions,43 of which were commercial banks and 1 mortgage finance companies,120 Foreign Exchange Bureaus.

Commercial banks and mortgage finance companies are licensed and regulated under the Banking Act, Cap 488 and prudential Regulation issued there under. Foreign Exchange Bureaus are licensed and regulated under the Central Bank of Kenya (CBK) Act ,Cap 491 and Foreign Exchange Bureaus Guidelines issued there under. Out of the 43 commercial banks institutuion,31 were locally owned and 13 were foreign owned. The locally owned financial institutions comprised 3 banks with significant government shareholding and 28 privately owned commercial banks. The foreign owned financial institution comprised of

9 locally incorporated foreign banks and 4 branches of foreign incorporated banks. (CBK, 2012).

1.2 Research Problem

Boldbaatar (2006) argued interest rate spread remain a controversial area while some link it to market or individual banks inefficiency.Ng`etich (2011) argued banks which perform well manages to keep interest spread wide. Most of the studies conclude the spread is as the result of inefficiency in the banking sector. The argument in most of the studies large bank is more efficient than smaller and growing banks. It is expected large bank to have narrow spread while smaller bank to have wider spread deduced by Boldbaatar (2006).Conflicting argument that spread is core to bank performance and those banks which manage to keep wider spread perform better than other banks holding other factors constant argued by Ngugi (2000).This also conflict Omole (1999) study on interest spread found that smaller banks have narrow spread than big banks, his argument was for smaller and growing banks they lower interest charged and also compensate savers fairly. Narrow spread is indicated to motivate savings and hence boost economic performance while wide spread is said to discourage savings this will result to less savings which will result to less investment.

In the past one year interest charged was fairly high in some banks 30% while interest earned by savers remains low, while interest rate charged was increasing interest rate earned remained static this resulted to a very wide spread over 20% does this mean when interest rate increases bank are ultimate beneficiary. This provoked members of parliament, who threatened to have legislation to control interest rate .Members of

parliament intended to control spread to ensure banks are not ultimate beneficiary their argument was banks were exploiting its customers, on the other side banks argued Kenya is a free market and such intention would cripple banks.

Many studies has been carried out on interest spread and its impact on financial performance ,most studies conclude interest rate spread is as result of inefficiency concluded by Boldbaatar (2006).Ngugi (2001) study concluded interest rate spread impact bank financial performance his study did not involve all banks in Kenya .Most studies carried involved less variables which affect banks financial performance . Were et al (2013) concluded interest rate spread impact on banks financial performance. Most of the studies do not indicate the extent of the impact, that is does interest rate spread have strong or weak relationship to banks financial performance. If impact of interest rate spread to banks financial performance is established policy makes will have a clear picture of what will happen if spread is regulated. Most of conclusions are drawn when considering determinant of interest rate spread. This study answer the following question: Does interest rate spread impact banks financial performance?

1.3 Objective of the Study

This study investigated the effect of interest rate spread on financial performance of commercial banks in Kenya.

1.4 Value of the Study

With the current economic situation and the social interest in Kenya, there is big desire from the public to have a financial market that is controlled by the government to meet the social interests but on the other hand we need to have free economy with minimum

control. In past there has been debate by members of parliament to control banks interest rate due to their skewed way of increasing interest rate, argument was bank only increase interest rate charged to customers only, on the other side banks argues if interest rate is controlled many banks will collapse.

The study helps understanding the impact of interest rate spread on financial performance of the commercial banks it aid the Kenyan policy makers to carefully plan and forecast the impact of the policies with a view to ensure banks thrive to serve its purpose and at the same time customers are no exploited. The study also help the law makers to make policy with full understanding of the impact of the interest rate spread. If policies made are effective, there will be healthier economic growth and this will be reflected in an active economy. Kenya interest rate is not controlled by CBK, banks are allowed to set their interest rate both for saving and loan, but interest earned by savers has remained very low giving bank an advantage to exploit its customers, if policy makers understand the effect of interest spread to financial performance they can formulate policies to have floors and caps which will not affect performance of the banks and at the same time motivate savings and lending. This will ensure the growth of the economy.

Study benefit the academic community by providing a body of knowledge on the interest rate spread .This serve as a basis for further research into effect of interest rate to savers and the attitude to banks that is, do their feel exploited. It is hoped that study stimulate further study on optimal interest rate spread.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter gives the literature on theories relating to interest rate and interest spread and their implication to the study. This chapter also summarizes the information from other researchers that have carried out their research in the same field of the study. It specifies objective, methodology and findings of other researchers. At the end of the chapter it summarizes theoretical and empirical relationship and the gap to be researched on.

2.2. Theoretical Framework

There are many theories explaining effect of interest rate but for the purpose of this study only three theories will be highlighted.

2.2.1 The Classical Theory of Interest

Interest, in real terms, is the reward for the productive use of capital, which is equal to the marginal productivity of physical capital. In a money economy, however, as physical capital is purchased with monetary funds, the rate of interest is taken to be the annual rate of return over money capital invested in physical capital assets.

According to Keynes, true classical theory of interest rate is the savings investment theory. Basically, the theory holds the proposition based on the general equilibrium theory that the rate of interest is determined by the intersection of the demand for and

supply of capital. Caplan (2000) argued that an equilibrium rate of interest is determined at a point at which the demand for capital equals its supply.

Demand for capital stems from investment decisions of the entrepreneur class. Investment demand schedule, thus, reflects the demand for capital, while the supply of capital results from savings in the community. Savings schedule, thus, represents the supply of capital. It follows that savings and investment are the two real factors determining the rate of interest (Fredman, 1991).

The implication of the theory, different banks have different liquidate, if what stated in the theory is true high liquid bank should charge low interest rate on funds lend in order to attract more borrowers and interest rate on savings should be low in order to discourage savings or if it charges the same rate as other banks on money borrowed then interest rate on saving should remain very low . If that is true interest rate spread on highly liquid banks should be comparatively more than low liquid banks. Financial performance on comparatively high liquid bank should be better than low liquid bank (Rochon and Vernengo, 2001)

2.2.2 Loanable Funds Theory

Assumes that interest rates are determined by supply of loanable funds and demand for credit. The loanable funds theory is an attempt to improve upon the classical theory of interest. It recognizes that money can play a disturbing role in the saving and investment processes and thereby causes variations in the level of income. Thus, it is a monetary approach to the theory of interest, as distinguished from that of the classical economists.

In fact, the loanable funds theory synthesizes both the monetary and non-monetary aspects of the problem (Wensheng,Wung and Shu, 2002).

According to the loanable funds theory, the rate of interest is the price that equates the demand for and supply of loanable funds. At the equilibrium level where demand =supply of loanable funds savers and investors are the happiest possible. Fluctuations in the rate of interest arise from variations either in the demand for loans or in the supply of loans or credit funds available for lending.Ngugi (2001) argud that interest is the price that equates the demand for loanable funds with the supply of loanable funds.

Loanable funds are "the sums of money supplied and demanded at any time in the money market."The supply of 'credit' or funds available for lending would be influenced by the savings of the people and the additions to the money supply (usually through credit creation by banks) during that period. The demand side of the loanable funds, on the other hand, would be determined by the demand for investment plus the demand for hoarding money (Turnovsky, 1985).

Loanable fund theory has implication on banks savers and borrowers according to this theory this two group should well compensated at equilibrium. According to this theory interest rate spread should not be very wide where one party feel exploited.Interest rate should be structured in a way every party feel comfortable Emmanuelle (2003) argued.

2.2.3 The Rational Expectations Theory of Interest Rates

This is based on the idea that people formulate expectations based on all the information that is available in the market. Rational expectation theory holds that the best estimation

for future interest rates is the current spot rate and that changes in interest rates are primarily due to unexpected information or changes in economic factors. The rational expectations theory can be incorporated with the loanable funds theory in order to better consider the available information within the economy. The limiting factors of rational expectation theory are mostly related to the difficulty in gathering information and understanding how the public uses its information to form its expectations Caplan (2000) argued.

If expectation of the people is that interest will rise many people will avoid borrowing this in return will affect bank performance due to reduced earning on interest rate, but people expect interest rate to drop people would be willing to borrow and this will improve banks performance due to increase in interest rate earning (Bekaert, 1998).

2.3 Empirical Literature

Gavin (2010) carried study on the factors affecting banking sector interest rate spread in Kenya. This study sought to establish the factors that influence interest rate spreads in commercial banks in Kenya. The study adopted a descriptive and quantitative research design on a sample of 15 commercial banks in Kenya which accounted for 85% of all the loans disbursed between 2002 and 2009. The study used secondary data obtained from the Banking Survey publication, Africa Development indicators and the Central Bank of Kenya reports . Study found that intermediary efficiency is affected by bank market share of assets, overheads, and return on assets, liquidity, and market share of loans and proportion of non interest income to total income. There is evidence of capital adequacy ratio, treasury bills rate and the discount rate also having a significant impact on interest

rate spreads. The study could not find evidence to support the impact of market share of deposits, inflation and cash reserve ratios on banking interest rate spreads. The study concludes that the bank-specific factors are the most significant factors influencing interest rate spreads of commercial banks in Kenya than macroeconomic factors. It reveals that there are two types of spread; one influenced by commercial bank ability to mobilize funds at a lower cost and one influenced by high non operational costs (overheads). Interest rate spreads influenced by ability to mobilize funds at a low cost are usually associated with large banks by market share of assets.

Ngugi and Kabubo (1998) carried study on financial sector reforms and interest rate liberalization. Study intended to explore the sequencing and actions so far taken in the liberalization process in Kenya. Study also examined the interest rate levels, spreads and determining factors, as an indicator of financial sector response to the reform process.

They took a sample of 20 banks in Kenya. Data was collected from relevant sources such as central bank and reports from various institutions. The study found that although much had been accomplished, the financial system was characterized by repression factors including negative real interest rates, inefficiency in financial intermediation and underdeveloped financial markets. This may indicate that the economy is facing secondary financial repression. Interest rates were more responsive to the policy activities during the period than to the fundamentals. Interest rates were monetary phenomenon with an adjustment speed of 77% to disequilibrium in the monetary sector. The study concluded that there are several loose knots that need to be tightened for the economy to experience significant positive effects of financial liberalization.

Ngetich and Wanjau (2011) carried study on the effects of interest rate spread on the level of non-performing assets in Kenya commercial banks. Study sought to establish the effects of interest rate spread on the level of non performing Assets in commercial banks in Kenya. The study adopted a descriptive research design on a sample of all commercial banks in Kenya operating by 2008 which were 43 in number. The study used questionnaires to collect data from primary source data sources and secondary data, collected from Bank supervision report, to augment the primary data findings. Study used both quantitative and qualitative techniques in data analysis to establish relationship between the interest rate and loan non-performance. The study found that interest rate spread affect performance assets in banks as it increases the cost of loans charged on the borrowers, regulation on interest rates have far reaching effects on assets non-performance, for such regulations determine the interest rate spread in banks and also help mitigate moral hazards incidental to NPAs.

Ngugi (2013) from African Economic Research Consortium carried research on interest rate spread in Kenya. Study investigated impact financial intermediaries' inefficiency. Data was collected from 43 financial institutions operating in Kenya economy and analyzed using various methods.

The study found that the wedge between the lending and deposit rates also proxy's efficiency of the intermediation process. For example, under perfect competition the wedge is narrower, composed only of the transaction cost, while in an imperfect market, the wedge is wider, reflecting inefficiency in market operation. Inefficiency in the intermediation process is a characteristic of a repressed financial system. This is because

in a control policy regime selective credit policies involve substantial administrative costs, and interest rates with set ceilings fail to reflect the true cost of capital. Such a policy regime constrains the growth of the financial system in terms of diversity of institutions and financial assets and encourages non-price competition.

Were and Wambua (2013) from Research Centre, Kenya School of Monetary Studies, Central carried study to establish determinants of interest rate spread of Kenya commercial banks. Study intended to investigates the determinants of interest rate spreads in Kenya's banking sector .Study collected data from all 44 commercial banks. The empirical results showed that bank-specific factors play a significant role in the determination of interest rate spreads. These include 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. The impact of macroeconomic factors such as real economic growth and inflation is not significant. Similarly, the impact of policy rate as an indicator of monetary policy is found to be positive but weak. On average, big banks have higher spreads compared to small banks.

Chirwa and Mlachila (2002) carried study on financial reforms and interest rate spread in the commercial banks in Malawi. The study investigated the impact of financial sector reforms on interest rate spreads in the commercial banking system in Malawi. The study used 7 commercial bank in Malawi and 6 deposit taking institutions. Using alternative definitions of spreads, their analysis showed that spreads increased significantly following liberalization, and panel regression results suggested that the observed high

spreads can be attributed to high monopoly power, high reserve requirements, high central bank discount rate and high inflation.

Wensheng (2002) carried study on the Impact of Interest Rate Shocks on the Performance of the Banking Sector. The study intended to establish the impact of interest variation on the bank performance. Study sampled two banks and analyzed data from 1992 to 2002 a period of ten years. The study found out rise in the Hong Kong dollar risk premium, signified by a widening of the spread between Hong Kong dollar and US dollar interest rates, would influence banks' profitability mainly through its impact on (i) asset quality that affects provisioning charges and (ii) net interest margin. Empirical estimates on data from 1992-2002 show the net interest margin declined in response to increases in the risk premium, because deposit interest rates were more sensitive to changes in the risk premium than the lending rate. A change in the domestic interest rate along with the US interest rate had little impact on the margin in the period under study.

Grenade (2007) carried study on determinants of commercial Banks interest rate spreads in Eastern Caribbean Currency Union. A trend analysis of commercial banks' interest rate spreads in the Eastern Caribbean Currency Union (ECCU) over the period 1993 to 2003 .The study sampled 8 foreign banks and 8 indigenous banks. Study employed panel data techniques to measure the relevance of micro and macro factors in determining commercial banks interest rate spread over the period. Study found that, first, spreads have been strong and persistently showing little signs of narrowing and second, foreign owned banks have been operating with larger spreads compared to their indigenous counterparts. The results also indicated that the observed spreads can be attributed to the

high level of market concentration, high operating costs and non- performing loans and the central bank's regulated savings deposit rate.

Boldbaatar (2006) carried study to examine commercial banks' interest rate spreads between lending and deposit rates. The study intended to examine factors that affect interest rate spread in SEACEN countries banks. Study sampled 40 banks from 6 different countries covering the period from 4th quarter of 1998 until 4th quarter of 2004.Data was obtained from financial statements which were distributed to member central bank. The study revealed that banks' spreads are influenced by bank specifics, market forces and the regulatory environment. The findings of the study indicate that the factors that increase the spread in the selected SEACEN countries include market concentration and credit risks. However, bigger banks tend to operate with lower spreads due to better managerial efficiency. Reserve requirements are also costly for customers but statutory reserve remuneration appears to mitigate this burden effectively, at least in some countries. Consolidation through mergers and acquisitions can give banks the market power to operate with higher spreads, contributing to long term stability and profitability of banks.

2.4 Summary

Interest rate is determined by demand and supply of funds also expectation of both saver and borrower plays an important role. Savers expect to be compensated at the same time banks has profit motive and also need to be compensated according to the above theories saver and borrowers should be happy no one should feel exploited**.**

Interest rates influences all other sectors in the economy hence turning to be a pivotal point to the economic growth or otherwise. Interest rate and the spread are determined by various factors including market and central bank rates. This means that interest rate is factors to be considered by the government institutions while making decisions hence relevant. Interest rate as indicated in all theory very important to the performance of all sector including financial performance.

The empirical studies also indicated importance of interest rate and interest rate spread to the economy. Most of the studies conclude the spread is as the result of inefficiency in the banking sector. The argument in most of the studies large bank is more efficient than smaller and growing banks. It is expected large bank to have narrow spread while smaller bank to have wider spread concluded by Boldbaatar(2006).Conflicting argument that spread is core to bank performance and those banks which manage to keep wider spread perform better than other banks holding other factors constant argued by Ngugi(2001). Narrow spread is indicated to motivate savings and hence boost economic performance while wide spread is said to discourage savings this will result to less savings which will result to less investment.

Most of the studies concentrated on the determinant of the interest rate spread with less emphasis to the effect of interest rate to financial performance. Study carried on the impact of interest rate spread on financial performance was carried before 2008,also the study was carried when interest rate was fairly stable. The study establishes in the impact of interest variation on the financial performance of commercial banks in Kenya.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was employed in the study. It is comprised of research design, target population, data collection. It covers the research methodology, design, target population, data collection techniques, source of data, selection procedures and data analysis. This section aims at establishing the process and means at which the data will be collected and presented.

3.2 Research Design

Design involves planning, organization, collection and analysis of data to provide information and also solutions to the existing problem of the study . Analytical design approach was used in an attempt to answer the research question under the study. This study applied descriptive research, descriptive research describes data and characteristics about the population or phenomenon being studied. According to Coopers and Schindler (2004) descriptive studies are more formalized and typically structured with clearly stated hypotheses or investigative questions.

3.3 Population of the Study

In this case all 43 commercial banks in Kenya were targeted (CBK, 2012).

3.4 Data Collection Techniques

The study used secondary data sources to gather information relevant in reaching at the research objective. Study will cover data for two years 2011 and 2012. The secondary

data collected from the CBK offices or website on their annual reports on the commercial banks and Kenya Bureau of statistics (KNBS) offices or website. The study's data collection source was justified by the fact that data on interest rate spread and commercial bank performance is available in CBK`s bank supervision report while the same works hand in hand with KNBS in making such statistics and estimation.

3.5 Data Analysis and Preparation

Data obtained from secondary data was analyzed using statistical package for social sciences (SPSS).Both quantities analysis and regression analysis was used as data analysis technique. anal data analysis was done on the data, ANOVA was used to establish the significance /fitness of the model. The results obtained from the model are represented in tables to aid in analysis and ease with which the inferential statistics was drawn.

The focus of this study was to establish the link between financial performance with interest rate spread. Study model:

$y = a + \beta 1x_1 + \beta 2x_2 + \beta 3x_3 + \beta 4x_4 + \beta 5x_5 + \beta 6x_{6+} \beta 6x_7$

Where i) y is banks financial performance measured by return on asset (ROA)

ROA=Net income/average total assets.

ROA is an indicator of how profitable a company is relative to its total assets.

ii)x_1 is interest rate spread = interest received/all interest bearing assets)-(interest paid/interest earning liabilities);

iii) x_2 Regulated saving deposit rate =saving deposit/Total deposit

iv) x_3 operating efficiency =operating costs/total operating income

v) x_4 liquidity risk =Liquid assets/total assets

vi) x_5 provision for loans losses=provision for loan losses/total earning assets

vii) x_6 market power measured by market share. for the purpose of this study market share indicated by central bank.

viii) x_7 Gross domestic growth rate

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION9

4.1 Introduction

This chapter is a presentation of results and findings obtained from field data, both descriptive and inferential statistics have been employed specifically using regression and ANOVA to establish the significance /fitness of the model and also to establish the link between financial performance with interest rate spread.

4.2 Descriptive Statistics of the Population

This summarizes the population characteristics between financial performance with interest rate spread. The results of tests on the differences in means of all variables of the financial variables were considered i.e. interest rate spread, regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate. Their means, median, maximum, minimum, skewness and kurtosis were considered. The findings were as indicated in table 4.1 next page.

Table 4.1 Descriptive statistics of interest rate spread variables and financial performance indicators of commercial banks (ROA)

	Interest rate spread	Regulated savings	Operating efficiency	Liquidity risk	Provision for loans losses	Market power	Gross domestic growth	ROA
Mean	0.42	0.312	0.313	0.533	0.371	2.241	0.0721	0.3251
Median	0.32	0.402	0.243	0.211	0.431	2.921	0.401	0.2233
Maximum	0.91	0.816	0.811	0.551	0.412	4.210	0.922	0.6621
Minimum	0.11	0.141	0.281	0.262	0.132	0.314	0.262	0.1621
Std. Dev	0.052	0.032	0.248	0.094	0.042	0.053	0.051	0.0310
Skewness	0.238	0.453	-0.019	0.271	-0.038	0.234	0.0052	0.1151
Kurtosis	0.175	0.412	0.442	0.102	0.331	0.831	0.411	0.1213
Observations	43	43	43	43	43	43	43	43

Source: Researcher.

The results in Table 4.1 shows tests on the differences in means of all variables of the financial performance model considered i.e. interest rate spread showed an average percentage mean of 42.03 and standard deviation of 0.052, regulated savings showed a mean of 31.2 percent and standard deviation of 0.032 , operating efficiency showed a percentage mean of 31.3 and standard deviation of 0.248, liquidity risk showed a percentage mean of 53.3 with standard deviation of 0.094 and gross domestic growth showed a percentage mean of 7.21 with a standard deviation of 0.0052. The positive values imply that the variables under the model are significant in determining the financial performance of commercial banks in Kenya. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed.

4.3 Correlation coefficients of financial performance and interest rate spread

The study further determined the correlation between the independent variables used in the study i.e. financial performance and interest rate spread. For this analysis Pearson correlation was used to determine the degree of association within the independent variables and also between independent variables and the dependent variable. The analysis of these correlations seems to support the hypothesis that each independent variable in interest rate spread has its own particular informative value in the ability to explain the financial performance of commercial banks in Kenya, see Table 4.2 below.

Table 4.2 Correlation coefficients of the interest rate spread variables and financial performance indicator

VARIABLE	Interest rate spread	Regulated savings	Operating efficiency	Liquidity risk	Provision for loans losses	Market power	**Gross domestic growth**	ROA
Interest rate spread	1							
Regulated savings	0.3707	1						
Operating efficiency	0.5193	0.2755	1					
Liquidity risk	0.0582	-0.0693	0.1228	1				
Provision for loans losses	0.0157	-0.0074	-0.0133	-0.0078	1			
Market power	0.0005	0.0321	-0.0514	0.0346	0.0143	1		
Gross domestic growth	0.0321	0.0241	0.2221	0.2612	0.2120	0.2341	1	
ROA	0.7231	0.7881	0.8002	0.7822	0.7883	0.7219	0.7432	1

Source: Researcher.

Table 4.2 shows the correlations between the independent variables considered in the regressions: interest rate spread, regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate as independent variables in the model and ROA as a measure of financial performance of commercial banks in Kenya. The significance of the coefficients was calculated at the level of 95%. The study findings indicate that the variables are statistically significance to influencing financial performance of banks as indicated by the positive and strong Pearson correlation coefficients. This implies that the interest rate spread are relied upon to make conclusions about the financial performance of commercial banks as shown by their strong and positive correlation coefficients, see table 4.3 below.

Table 4.3: interest rate spread variables Vs Financial performance of commercial banks in Kenya

	Financial performance of commercial banks in Kenya
Interest rate spread variables Pearson Correlation	0.740
Sig. (2-tailed)	0.000
N	43

Source: Researcher.

A Pearson coefficient of 0.740 and p-value of 0.000 shows a strong, significant, positive relationship between interest rate spread variables and financial performance of commercial banks in Kenya. Therefore basing on these findings the study rejects the null hypothesis that there is no relationship between interest spread variables and financial performance of commercial banks in Kenya and accepts the alternative hypothesis that there exists a relationship between interest spread variables and financial performance of commercial banks in Kenya.

All variable considered affect banks financial performance positively, see table 4.4 below.

Table 4.4: Regression coefficients of the interest rate spread variables and financial performance indicator of commercial banks in Kenya

	Unstandardized Coefficients		**Standardized Coefficients**		
	B	Std. Error	Beta	T	Sig.
(Constant)	12.122	0.342		2.312	0.024
Interest rate spread	0.132	0.055	0.003	0.532	0.082
Regulated savings	0.44	0.322	0.078	0.256	0.023
Operating efficiency	0.654	0.173	0.062	1.599	0.054
Liquidity risk	0.836	0.181	0.0243	2.145	0.014
Provision for loans losses	0.838	0.163	0.032	1.412	0.032
Market power	0.562	0.171	0.028	1.223	0.021
Gross domestic growth	0.523	0.139	0.021	0.302	0.041

Source: Researcher.

As per the R generated table above, the equation $y = a + \beta 1x_1 + \beta 2x_2 + \beta 3x_3 + \beta 4x_4 + \beta 5x_5 + \beta 6x_{6+} \beta 6x_7$

becomes:

$y = 12.122 + 0.132x_1 + 0.44x_2 + 0.654x_3 + 0.836x_4 + 0.838x_5 + 0.562x_{6+} 0.523x_7$

4.4 Discussions of findings

According to the regression equation established, taking all factors into account (interest rate spread, regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate financial performance

measured by ROA will be 12.122. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in the interest rate spread will lead to a 0.132 increase in the return on asset; a unit increase in the regulated savings will lead to a 0.044 increase in the return on asset in financial performance; a unit increase in the operating efficiency will lead to a 0.654 increase in the return on asset in financial performance.

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 0.082 level of significance, regulated saving had a 0.023 level of significance, operating efficiency had a 0.054 level of significance and liquidity risk had a 0.014 level of significance.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter is a synthesis of the entire study, and contains summary of research findings, exposition of the findings, commensurate with the objectives, conclusions and recommendations based thereon.

5.2 Summary of findings

In data analysis and presentation of results both descriptive and inferential statistics were employed specifically using correlation, regression and ANOVA to establish the significance /fitness of the model and also to establish the link between financial performance with interest rate spread. The results of tests on the differences in means of all variables of the financial variables were considered i.e. interest rate spread, regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate.

Their means, median, maximum, minimum, skewness and kurtosis were considered. The results showed tests on the differences in means of all variables of the financial performance model considered i.e. interest rate spread showed an average percentage mean of 42.03 and standard deviation of 0.052, regulated savings showed a mean of 31.2 percent and standard deviation of 0.032 , operating efficiency showed a percentage mean of 31.3 and standard deviation of 0.248, liquidity risk showed a percentage mean of 53.3 with standard deviation of 0.094 and gross domestic growth showed a percentage mean of 7.21 with a standard deviation of 0.0052.

The positive values imply that the variables under the model are significant in determining the financial performance of commercial banks in Kenya. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed.

The study further determined the correlation between the independent variables used in the study i.e. financial performance and interest rate spread. For this analysis Pearson correlation was used to determine the degree of association within the independent variables and also between independent variables and the dependent variable. The analysis of these correlations seems to support the hypothesis that each independent variable in interest rate spread has its own particular informative value in the ability to explain the financial performance of commercial banks in Kenya.

The findings showed the correlations between the independent variables considered in the regressions: interest rate spread, regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate as independent variables in the model and ROA as a measure of financial performance of commercial banks in Kenya. The significance of the coefficients was calculated at the level of 95%. The study findings indicate that the variables are statistically significance to influencing financial performance of banks as indicated by the positive and strong Pearson correlation coefficients. This implies that the interest rate spread are relied upon to make conclusions about the financial performance of commercial banks as shown by their strong and positive correlation coefficients.

According to the regression equation established, taking all factors into account interest rate spread, regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate financial performance measured by ROA will be 12.122. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in the interest rate spread will lead to a 0.132 increase in the return on asset; a unit increase in the regulated savings will lead to a 0.044 increase in the return on asset in financial performance; a unit increase in the operating efficiency will lead to a 0.654 increase in the return on asset this indicate clear impact on financial performance.

The Standardized Beta Coefficients gave 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 0.082 level of significance, regulated saving had a 0.023 level of significance, operating efficiency had a 0.054 level of significance and liquidity risk had a 0.014 level of significance. Further the study carried out the hypothesis testing between interest spread variables on financial performance of commercial banks in Kenya.

A Pearson coefficient of 0.740 and p-value of 0.000 shows a strong, significant, positive relationship between interest rate spread variables and financial performance of commercial banks in Kenya. Therefore basing on these findings the study rejected the

null hypothesis that there is no relationship between interest spread variables and financial performance of commercial banks in Kenya and accepts the alternative hypothesis that there exists a relationship between interest spread variables and financial performance of commercial banks in Kenya.

5.3 Conclusions

The results showed tests on the differences in means of all variables of the financial performance model considered. The positive values implied that the variables under the model are significant in determining the financial performance of commercial banks in Kenya. Kurtosis values indicated that all variables have platy-kurtic distribution and it is concluded that variables are not normally distributed. The findings showed the correlations between the independent variables considered in the regressions: interest rate spread, regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate as independent variables in the model and ROA as a measure of financial performance of commercial banks in Kenya. The significance of the coefficients was calculated at the level of 95%.

The study findings indicate that the variables are statistically significance to influencing financial performance of banks as indicated by the positive and strong Pearson correlation coefficients. This implies that the interest rate spread are relied upon to make conclusions about the financial performance of commercial banks as shown by their strong and positive correlation coefficients. According to the regression equation established, taking all factors into account interest rate spread, regulated saving deposit

rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate financial performance measured by ROA will be 12.122.

The Standardized Beta Coefficients gave 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.

A higher Pearson coefficient showed a strong, significant, positive relationship between interest rate spread variables and financial performance of commercial banks in Kenya. Therefore basing on these findings the study rejected the null hypothesis that there is no relationship between interest spread variables and financial performance of commercial banks in Kenya and accepts the alternative hypothesis that there exists a relationship between interest spread variables and financial performance of commercial banks in Kenya.

5.4 Recommendations

The study found that interest rate spread is the most significant factors influencing financial performance of commercial banks in Kenya. The study therefore recommends that central bank should put in place measures of monitoring interest rate spread related measures such as regulated saving deposit rate, operating efficiency, liquidity risk, provision for loans losses, market power and Gross domestic growth rate in order to boost financial performance of commercial banks in Kenya.

The study recommends that there are several loose knots that need to be tightened for the economy to experience significant positive effects of financial performance of commercial banks . The study found that interest rate spread affect performance assets in banks as it increases the cost of loans charged on the borrowers, regulation on interest rates have far reaching effects on assets non-performance, central banks should therefore come up with such regulations to determine the interest rate spread in banks and also help mitigate moral hazards incidental to financial performance of commercial banks.

Inefficiency in the intermediation process is a characteristic of a repressed financial system. This is because in a control policy regime selective credit policies involve substantial administrative costs, and interest rates with set ceilings fail to reflect the true cost of capital. Such a policy regime constrains the growth of the financial system in terms of diversity of institutions and financial assets and encourages non-price competition which should be well addressed by commercial banks management in conjunction with central bank therefore controlling interest rate spread is a delicate process a lot of factors should be taken into consideration.

5.5 Limitations of the study

Since the main purpose of this study was to determine the effect of interest rate spread on financial performance of commercial banks in Kenya, central bank considered some information sensitive and confidential and thus the researcher had to convince them that the purpose of information is for academic research only and may not be used for any other intentions.

The findings of this study may not also be generalized to all commercial banks but can be used as a reference to commercial banks in developing countries since they face almost the same challenges due to the same prevailing economic situations as opposed to commercial banks in developed countries. Interest rate spread keeps on changing from period to period depending on prevailing economic situations and demand from the central bank. The findings therefore may not reflect the true effect of interest rate spread on financial performance of commercial banks for a period considered.

5.6 Suggestions for further study

There is need for further studies to carry out similar study for a longer time period. A similar study should also be carried out on the effect of interest rate spread on financial performance of commercial banks in Kenya incorporating more financial and accounting variables and also taking into account the prevailing macroeconomic situation in the country as opposed to the current study which took into consideration only six interest rate spread variables.

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APPENDICES

APPENDIX 1: LIST OF COMMERCIAL BANKS IN KENYA

1. African Banking Corporation Ltd. Date Licensed: 5/1/1984
2. Bank of Africa Kenya Ltd. Date Licenced:1980
3. Bank of Baroda (K) Ltd Date Licenced:7/1/1953
4. Bank of India Date Licenced: 6/5/1953
5. Barclays Bank of Kenya Ltd Date Licenced: 6/5/1953
6. CFC Stanbic Bank Ltd Date Licensed: 5/14/1955
7. Charterhouse Bank Ltd Date Licensed: 11/11/1996
8. Chase Bank (K) Ltd Date Licenced: 4/1/1991
9. Citibank N.A Kenya Date Licenced: 7/1/1974
10. Commercial Bank of Africa Ltd Date Licenced: 1/1/1967
11. Consolidated Bank of Kenya Ltd Date Licenced: 12/18/1989
12. Co-operative Bank of Kenya Ltd Date Licenced: 1/1/1965
13. Credit Bank Ltd Date Licenced:5/14/1986
14. Development Bank of Kenya Ltd Date Licenced: 1/1/1973
15. Diamond Trust Bank Kenya Ltd Date Licenced:1/1/1946
16. Dubai Bank Kenya Ltd Date Licenced: 1/1/1982
17. Ecobank Kenya Ltd Date Licenced: 01/11/2005
18. Equatorial Commercial Bank Ltd Date Licenced: 12/20/1995
19. Equity Bank Ltd Date Licenced: 28/12/2004
20. Family Bank Limited Date Licenced: 1984
21. Fidelity Commercial Bank Ltd Date Licenced: 6/1/1992

22. Fina Bank Ltd Date Licenced: 1/1/1986

23. First community Bank Limited Date Licenced: 29.04.2008

24. Giro Commercial Bank Ltd Date Licenced: 12/17/1992

25. Guardian Bank Ltd Date Licenced: 12/17/1992

26. Gulf African Bank Limited Date Licenced: 1/11/2007

27. Habib Bank A.G Zurich Date Licenced: 1/7/1978

28. Habib Bank Ltd Date Licenced: 2/3/1956

29. Imperial Bank Ltd Date Licenced: 1/11/1992

30. I &M Bank Ltd Date Licenced: 1/1/1974

31. Jamii Bora Bank Limited Date Licenced: 9/10/1984

32. Kenya Commercial Bank Ltd Date Licenced: 1/1/1896

33. K-Rep Bank Ltd Date Licenced: 3/25/1999

34. Middle East Bank (K) Ltd Date Licenced: 10/1/1980

35. National Bank of Kenya Ltd Date Licenced: 1/1/1968

36. NIC Bank Ltd Date Licenced: 9/17/1959

37. Oriental Commercial Bank Ltd Date Licenced: 8/2/1991

38. Paramount Universal Bank Ltd Date Licenced: 10/1/1993

39. Prime Bank Date Licenced: 3/1/1992

40. Standard Chartered Bank Kenya Ltd Date Licenced: 10/1/1910

41. National Bank Ltd Date Licenced: 8/1/1985

42. UBA Kenya Bank Limited Date Licenced: 24/09/2009

43. Victoria Commercial Bank Ltd Date Licenced: 6/1/1987

APPENDIX II: RETURN ON ASSETS

		2011	2012
	NAME OF INSTITUTION:	R.O.A	
1	CFC Stanbic Bank	1.37%	2.33%
2	Fina Bank Limited	1.54%	1.65%
3	African Banking Corporation	2.99%	2.22%
4	Bank of Africa	1.12%	0.97%
5	Bank of Baroda (K) Ltd	3.72%	2.98%
6	Bank of India	3.28%	2.36%
7	Barclays Bank	4.83%	4.72%
8	Chase Bank Limited	1.65%	1.84%
9	Citibank, N.A.	3.94%	6.36%
10	Commercial Bank of Africa	1.97%	2.63%
11	Consolidated Bank of Kenya	0.98%	0.77%
12	Co-op Bank	3.09%	3.67%
13	Credit Bank Ltd	0.87%	1.09%
14	Development Bank of Kenya	0.94%	0.54%
15	Diamond Trust Bank Kenya	2.90%	3.25%
16	Dubai Bank Limited	0.61%	-0.89%
17	Ecobank Kenya Ltd	0.74%	-3.32%
18	Equitorial Commercial Bank	0.56%	-3.42%
19	Equity Bank Limited	5.52%	5.10%
20	Family Bank	1.36%	1.75%
21	Fidelity Commercial Bank	1.83%	0.76%
22	First community Bank	0.82%	2.42%
23	Giro Commercial Bank	1.93%	1.84%
24	Guardian Bank	1.41%	1.31%
25	Gulf African Bank	0.74%	1.79%
26	Habib AG Zurich	1.86%	2.58%
27	Habib Bank Limited	2.83%	4.08%
28	Housing finance	2.11%	1.69%
29	I & M Bank	4.02%	3.67%
30	Imperial Bank Limited	4.67%	4.06%
31	Jamii Bora Bank	-1.83%	1.50%

32	Kenya Commercial (KCB)	3.48%	3.65%
33	K-Rep Bank Ltd	1.86%	2.05%
34	Middle East Bank of Kenya	2.03%	0.76%
35	National Bank(NBK)	2.25%	1.09%
36	NIC Bank Ltd	3.44%	2.86%
37	Oriental Comm. Bank	3.02%	1.52%
38	Paramount-Universal Bank	2.13%	1.52%
39	Prime Bank Limited	2.37%	2.20%
40	Standard Chartered Bank Ltd	3.55%	4.11%
41	Transnational Bank Limited	2.78%	1.81%
42	UBA BANK	-4.75%	2.42%
43	Victoria Comm. Bank Ltd	3.01%	-9.83%

APPENDIX III: MARKET POWER

	NAME OF INSTITUTION:	2011	2012
1	CFC Stanbic Bank	5.10	5.01
2	Fina Bank Limited	0.69	0.74
3	African Banking Corporation	0.63	0.76
4	Bank of Africa	1.70	1.83
5	Bank of Baroda (K) Ltd	1.83	1.92
6	Bank of India	1.17	1.08
7	Barclays Bank	8.90	8.08
8	Chase Bank Limited	1.49	1.87
9	Citibank, N.A.	3.96	3.42
10	Commercial Bank of Africa	3.98	4.08
11	Consolidated Bank of Kenya	0.68	0.66
12	Co-op Bank	8.41	8.74
13	Credit Bank Ltd	0.28	0.29
14	Development Bank of Kenya	0.46	0.47
15	Diamond Trust Bank Kenya	3.77	4.10
16	Dubai Bank Limited	0.15	0.15
17	Ecobank Kenya Ltd	1.02	1.06
18	Equitorial Commercial Bank	0.57	0.52
19	Equity Bank Limited	9.98	10.06
20	Family Bank	1.34	1.42
21	Fidelity Commercial Bank	0.50	0.48
22	First community Bank	0.41	0.41

23	Giro Commercial Bank	0.60	0.54
24	Guardian Bank	0.44	0.48
25	Gulf African Bank	0.60	0.56
26	Habib AG Zurich	0.44	0.43
27	Habib Bank Limited	0.32	0.32
29	I & M Bank	4.09	4.08
30	Imperial Bank Limited	1.27	1.44
31	Jamii Bora Bank	0.24	0.27
32	Kenya Commercial (KCB)	14.52	13.54
33	K-Rep Bank Ltd	0.47	0.42
34	Middle East Bank of Kenya	0.26	0.26
35	National Bank(NBK)	3.59	3.00
36	NIC Bank Ltd	3.70	4.32
37	Oriental Comm. Bank	0.31	0.31
38	Paramount-Universal Bank	0.28	0.32
39	Prime Bank Limited	1.64	1.71
40	Standard Chartered Bank Ltd	7.74	8.29
41	Transnational Bank Limited	0.44	0.42
42	UBA BANK	0.16	0.18
43	Victoria Comm. Bank Ltd	0.40	0.48

APPENDIX IV: LIQUIDITY

	NAME OF INSTITUTION:	2011	2012
1	CFC Stanbic Bank	37.80%	46.40%
2	Fina Bank Limited	48.00%	44.00%
3	African Banking Corporation	34.64%	42.50%
4	Bank of Africa	26.10%	25.60%
5	Bank of Baroda (K) Ltd	49.20%	55.80%
6	Bank of India	78.50%	65.90%
7	Barclays Bank	42.50%	46.80%
8	Chase Bank Limited	47.20%	43.40%
9	Citibank, N.A.	63.00%	82.00%
10	Commercial Bank of Africa	44.95%	47.62%
11	Consolidated Bank of Kenya	27.60%	47.40%
12	Co-op Bank	27.20%	35.80%
13	Credit Bank Ltd	41.30%	48.90%
14	Development Bank of Kenya	36.00%	46.00%
15	Diamond Trust Bank Kenya	35.70%	38.00%
16	Dubai Bank Limited	33.90%	24.10%
17	Ecobank Kenya Ltd	41.00%	40.00%
18	Equitorial Commercial Bank	32.33%	32.33%
19	Equity Bank Limited	37.00%	46.00%
20	Family Bank	28.20%	38.60%
21	Fidelity Commercial Bank	30.60%	34.30%
22	First community Bank	48.00%	40.00%
23	Giro Commercial Bank	41.90%	55.05%
24	Guardian Bank	30.10%	38.60%
25	Gulf African Bank	38.00%	28.98%
26	Habib AG Zurich	73.40%	86.30%
27	Habib Bank Limited	77.90%	63.02%
28	Housing finance	29.10%	36.80%
29	I & M Bank	38.32%	35.40%
30	Imperial Bank Limited	33.60%	39.30%
31	Jamii Bora Bank	146.00%	62.00%
32	Kenya Commercial (KCB)	31.30%	35.50%
33	K-Rep Bank Ltd	29.00%	31.00%

34	Middle East Bank of Kenya	32.29%	40.89%
35	National Bank(NBK)	34.00%	30.00%
36	NIC Bank Ltd	27.41%	35.38%
37	Oriental Comm. Bank	44.00%	45.00%
38	Paramount-Universal Bank	58.00%	66.00%
39	Prime Bank Limited	42.30%	47.50%
40	Standard Chartered Bank Ltd	34.00%	39.00%
41	Transnational Bank Limited	67.00%	60.00%
42	UBA BANK	191.80%	112.80%
43	Victoria Comm. Bank Ltd	36.00%	38.40%

APPENDIX V: PROVISION FOR LOANS LOSSES

		2011			2012		
	NAME OF INSTITUTION:	Earning asset	Loans provisions	Provision for loan losses	Earning asset	Loan Loss Provision	Provision for loan losses
1	Kenya Commercial (KCB)	179,844	4,652	0.0259	187,023	3,120	0.0167
2	CFC Stanbic Bank	64,257	593	0.0092	66,150	740	0.0112
3	Fina Bank Limited	7,277	287	0.0395	8,743	66	0.0075
4	African Banking Corporation	7,074	135	0.0191	9,790	24	0.0025
5	Bank of Africa	21,640	39	0.0018	29,882	86	0.0029
6	Bank of Baroda (K) Ltd	19,144	530	0.0277	21,923	8	0.0004
7	Bank of India	7,229	105	0.0145	10,015	19	0.0019
8	Barclays Bank	99,072	4,930	0.0498	104,204	144	0.0014
9	Chase Bank Limited	18,139	215	0.0118	29,284	144	0.0049
10	Citibank, N.A.	28,451	139	0.0049	23,331	-	0.0000
11	Commercial Bank of Africa	39,610	1,477	0.0373	42,504	107	0.0025
12	Consolidated Bank of Kenya	9,197	361	0.0393	10,077	168	0.0166
13	Co-op Bank	109,409	3,828	0.0350	119,088	1,000	0.0084
14	Credit Bank Ltd	2,883	160	0.0556	3,112	6	0.0018
15	Development Bank of Kenya	5,902	266	0.0451	6,932	24	0.0035
16	Diamond Trust Bank Kenya	50,944	549	0.0108	59,930	921	0.0154
17	Dubai Bank Limited	1,517	242	0.1593	1,783	178	0.0996
18	Ecobank Kenya Ltd	11,381	646	0.0568	13,968	177	0.0127
19	Equitorial Commercial Bank	6,635	248	0.0373	7,538	169	0.0225
20	Equity Bank Limited	106,486	1,086	0.0102	122,410	1,456	0.0119
21	Family Bank	16,332	917	0.0561	17,869	645	0.0361
22	Fidelity Commercial Bank	6,546	(27)	-0.0041	6,639	95	0.0143

23	First community Bank	4,258	37	0.0087	5,453	56	0.0103
24	Giro Commercial Bank	6,360	114	0.0180	5,519	(8)	-0.0015
25	Guardian Bank	5,865	311	0.0530	7,153	27	0.0037
26	Gulf African Bank	7,440	55	0.0074	9,447	64	0.0068
27	Habib AG Zurich	2,667	71	0.0265	2,328	35	0.0149
28	Habib Bank Limited	2,177	34	0.0156	3,341	28	0.0085
30	I & M Bank	46,779	475	0.0102	55,375	14	0.0003
31	Imperial Bank Limited	14,904	504	0.0338	19,038	137	0.0072
32	Jamii Bora Bank	302	66	0.2200	1,309	31	0.0236
33	K-Rep Bank Ltd	6,754	349	0.0516	6,955	292	0.0420
34	Middle East Bank of Kenya	2,564	36	0.0141	3,145	15	0.0049
35	National Bank(NBK)	28,068	854	0.0304	28,347	726	0.0256
36	NIC Bank Ltd	52,025	1,587	0.0305	66,381	265	0.0040
37	Oriental Comm. Bank	2,851	335	0.1175	3,499	35	0.0100
38	Paramount-Universal Bank	2,067	145	0.0702	2,740	6	0.0020
39	Prime Bank Limited	18,394	445	0.0242	21,151	128	0.0060
40	Standard Chartered Bank Ltd	96,098	424	0.0044	112,695	882	0.0078
41	Transnational Bank Limited	3,382	230	0.0679	4,360	51	0.0116
42	UBA BANK	506	5	0.0092	440	36	0.0820
43	Victoria Comm. Bank Ltd	4,110	-	0.0000	5,291	-	0.0000

APPENDIX VI: OPERATING EFFECIENCY

			2011			2012	
	NAME OF INSTITUTION:	Total operating expenses	Total opereating income	Efficiency	Total operating expenses	Total operating income	Efficiency
1	CFC Stanbic Bank	7,557	10,686	1.41	9,209	13,921	1.51
2	Fina Bank Limited	1,031	1,342	1.30	944	1,292	1.37
3	African Banking Corporation	700	1,216	1.74	825	1,382	1.68
4	Bank of Africa	1,350	1,905	1.41	1,736	2,372	1.37
5	Bank of Baroda (K) Ltd	779	2,455	3.15	800	2,467	3.08
6	Bank of India	313	1,288	4.12	359	966	2.69
7	Barclays Bank	14,326	26,338	1.84	14,405	27,424	1.90
8	Chase Bank Limited	1,732	2,582	1.49	2,650	3,966	1.50
9	Citibank, N.A.	2,014	6,816	3.38	2,268	9,496	4.19
10	Commercial Bank of Africa	3,284	6,268	1.91	3,728	7,726	2.07
11	Consolidated Bank of Kenya	1,241	1,488	1.20	1,347	1,523	1.13
12	Co-op Bank	11,903	18,071	1.52	13,967	23,541	1.69
13	Credit Bank Ltd	457	508	1.11	453	534	1.18
14	Development Bank of Kenya	297	454	1.53	280	383	1.37
15	Diamond Trust Bank Kenya	3,188	6,436	2.02	3,983	8,653	2.17
16	Dubai Bank Limited	297	318	1.07	581	552	0.95
17	Ecobank Kenya Ltd	1,863	1,985	1.07	2,414	880	0.36
18	Equitorial Commercial Bank	673	744	1.11	1,191	535	0.45
19	Equity Bank Limited	13,363	25,467	1.91	15,815	31,875	2.02
20	Family Bank	3,243	3,766	1.16	3,848	4,691	1.22
21	Fidelity Commercial Bank	453	755	1.67	537	639	1.19
22	First community Bank		846	1.15			1.34

		734			854	1,148	
23	Giro Commercial Bank	244	495	2.03	456	663	1.45
24	Guardian Bank	289	439	1.52	413	636	1.54
25	Gulf African Bank	901	1,057	1.17	1,080	1,454	1.35
26	Habib AG Zurich	293	547	1.87	336	748	2.22
27	Habib Bank Limited	191	462	2.42	223	680	3.04
29	I & M Bank	2,227	6,685	3.00	2,462	7,184	2.92
30	Imperial Bank Limited	1,778	3,410	1.92	2,043	3,995	1.96
31	Jamii Bora Bank	183	146	0.80	288	341	1.18
32	Kenya Commercial (KCB)	19,289	33,371	1.73	22,686	38,441	1.69
33	K-Rep Bank Ltd	1,359	1,615	1.19	1,402	1,709	1.22
34	Middle East Bank of Kenya	240	333	1.38	252	299	1.19
35	National Bank(NBK)	5,351	7,795	1.46	6,463	7,610	1.18
36	NIC Bank Ltd	2,567	5,973	2.33	3,103	7,414	2.39
37	Oriental Comm. Bank	261	454	1.74	275	389	1.41
38	Paramount-Universal Bank	189	302	1.60	220	310	1.41
39	Prime Bank Limited	1,207	2,287	1.90	1,307	2,468	1.89
40	Standard Chartered Bank Ltd	7,945	16,196	2.04	9,445	20,964	2.22
41	Transnational Bank Limited	547	841	1.54	645	967	1.50
42	UBA BANK	470	287	0.61	543	146	0.27
43	Victoria Comm. Bank Ltd	272	602	2.21	326	817	2.50

APPENDIX VII: INTEREST SPREAD

	NAME OF INSTITUTION:	2011	2012
1	Jamii Bora Bank	30.71%	7.79%
2	CFC Stanbic Bank	9.12%	9.50%
3	Fina Bank Limited	8.86%	8.09%
4	African Banking Corporation	8.65%	8.82%
5	Bank of Africa	4.65%	5.25%
6	Bank of Baroda (K) Ltd	7.39%	9.09%
7	Bank of India	5.81%	2.16%
8	Barclays Bank	13.23%	12.67%
9	Chase Bank Limited	10.49%	9.85%
10	Citibank, N.A.	5.70%	9.93%
11	Commercial Bank of Africa	7.29%	9.13%
12	Consolidated Bank of Kenya	9.45%	12.45%
13	Co-op Bank	9.45%	12.89%
14	Credit Bank Ltd	9.66%	14.46%
15	Development Bank of Kenya	2.68%	2.15%
16	Diamond Trust Bank Kenya	8.74%	9.41%
17	Dubai Bank Limited	9.90%	14.20%
18	Ecobank Kenya Ltd	9.19%	7.65%
19	Equitorial Commercial Bank	6.69%	10.74%
20	Equity Bank Limited	12.82%	17.36%
21	Family Bank	12.73%	18.15%
22	Fidelity Commercial Bank	5.74%	9.27%

23	First community Bank	9.96%	10.30%
24	Giro Commercial Bank	5.22%	12.51%
25	Guardian Bank	4.85%	6.82%
26	Gulf African Bank	9.16%	10.87%
27	Habib AG Zurich	7.81%	10.53%
28	Habib Bank Limited	10.08%	7.20%
30	I & M Bank	8.26%	7.12%
31	Imperial Bank Limited	17.74%	19.84%
32	Kenya Commercial (KCB)	10.27%	11.93%
33	K-Rep Bank Ltd	16.82%	19.06%
34	Middle East Bank of Kenya	5.04%	6.16%
35	National Bank(NBK)	10.36%	12.50%
36	NIC Bank Ltd	6.98%	6.74%
37	Oriental Comm. Bank	5.83%	4.26%
38	Paramount-Universal Bank	4.37%	8.55%
39	Prime Bank Limited	7.01%	6.68%
40	Standard Chartered Bank Ltd	8.99%	10.51%
41	Transnational Bank Limited	10.58%	11.86%
42	UBA BANK	10.83%	15.24%
43	Victoria Comm. Bank Ltd	9.81%	8.40%

APPENDIX VIII: GDP GROWTH RATE

Year	GDP growth rate
2011	4.4%
2012	5.1%