# THE RELATIONSHIP BETWEEN LENDING INTEREST RATES AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

**BY**

**JOHN NDEGWA NJOROGE**

**D61/61883/2010**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, UNIVERSITY OF NAIROBI**

**OCTOBER, 2013**

## DECLARATION

This is my original work and has not been presented for a study in any University or college.

**John Ndegwa Njoroge** Date.....

**D61/61883/2010**

Sign.....

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

**Name Mr. Mirie Mwangi**

Sign.....…… Date……

## ACKNOWLEDGEMENTS

Unconditional thanks to God whose love and care made everything possible.

My sincere appreciation goes to my supervisor, Mr. Mirie Mwangi for the professional guidance he gave me while doing my research paper and ensured that my project is as per the acceptable standards.

My sincere gratitude also goes to my Family and friends. I find no fitting words with which to thank you for your support, prayers, and encouragement.

I am also indebted to all my MBA lecturers and colleagues for their criticism and contribution.

Last but not least to the University of Nairobi, for the opportunity to study my MBA course.

May God bless you.

## DEDICATION

This research paper is dedicated to my dear parents, Joseph Njoroge and Lucy Wangari, and my brother and sisters for the love, faith, and support they have shown throughout this project and the entire course.

To my Wife Lawrenzia and my Son Adrian who have remained a source of inspiration.

May God bless you.

## ABSTRACT

Due to competition in the banking industry in the global market, financial institutions are necessitated to offer attractive lending rates to their customers in order to survive (Salloum and Hayek, 2012). Interest rates offered by commercial banks globally and locally attract customers to purchase products and services of financial institutions. Commercial banks play a vital role in the economic resource allocation of countries. This Study set out with an objective of establishing the relationship between lending interest rates and financial performance of commercial banks in Kenya.

To achieve the objective of the study, the researcher used regression analysis to establish the relationship between lending interest rate and ROA. The study adopted a quantitative research design. Quantitative research method refers to the systematic scientific investigation of data and their relationships. This involves developing and using mathematical models, theories, and hypothesis to analyze the relationship between variables. The quantitative research design was adopted to facilitate investigation of the relationship between returns on assets (dependent variable) and lending interest rate (independent variable).

The findings and analysis reveal that lending interest rates have an insignificant effect on financial performance of commercial banks in Kenya. The results obtained from the model shows that there is a positive relationship between lending interest rates and financial performance of commercial banks in Kenya which is insignificant. However, since the relationship is insignificant we conclude that lending interest rates by Commercial Banks does not necessarily improve the financial performance.

## TABLE OF CONTENTS

## LIST OF TABLES

## LIST OF ABBREVIATIONS

| | |
|---|---|
| CBK- | Central Bank of Kenya |
| CIRP- | Covered Interest Rate parity |
| FP - | Financial Performance |
| KBA- | Kenya Bankers Association |
| OLS- | Ordinary Least Square |
| ROA- | Return on Assets |
| ROCE- | Return on Capital Employed |
| ROE- | Return on Equity |
| RO I- | Return on Investment |
| ROS - | Return on Sales |
| SG- | Sales Growth |
| SSA- | Sub-Saharan African |
| UCIRP- | Uncovered Interest Rate Parity |

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of the Study

Due to competition in the banking industry in the global market, financial institutions are necessitated to offer attractive lending rates to their customers in order to survive (Salloum and Hayek, 2012). Interest rates offered by commercial banks globally and locally attract customers to purchase products and services of financial institutions. Commercial banks play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously (Siddiqui, 2012).

Folawewo and Tennant (2008) argued that for sustainable intermediation function, banks need to be profitable. Beyond the intermediation function, the financial performance of banks has critical implications for economic growth of countries. Good financial performance rewards the shareholders for their investment (Sanya and Gaertner, 2012). This, in turn, encourages additional investment and brings about economic growth. On the other hand, poor banking performance can lead to banking failure and crisis, which have negative repercussions on the economic growth (Folawewo and Tennant, 2008).

Radha (2011) define interest rate as the amount received in relation to an amount loaned, generally expressed as a ratio of dollars received per hundred dollars lent. However, a distinction should be made between specific interest rates and interest rates in general (Sanya and Gaertner, 2012). Specific interest rates on a particular financial instrument for example, a mortgage or bank certificate of deposit reflect the time for which the money is on loan, the risk that the money may not be repaid, and

the current supply and demand in the marketplace for funds available for lending (Siddiqui, 2012).

Banks issue loans with the money that individuals and institutions have deposited in their different savings, checking, or money market accounts (Nyamwange, 2009). Financial institutions give depositors an incentive to leave their money in these accounts, allowing the institution to use it for loans, by paying interest on the money in these accounts. Commercial bank interest rates for these accounts are higher overall when the bank is in greater need of money to lend (Entrop, Memmel and Wilkens, 2012). Banks will also pay higher interest rates for accounts from which customers are less likely to withdraw their money (Nampewo, 2013). This is why certificates of deposit, from which depositors cannot withdraw money before a certain date without paying a penalty, pay higher interest rates than regular savings accounts.

When there are a large number of borrowers applying for loans, banks can charge higher interest rates (Folawewo and Tennant, 2008). When the number of borrowers applying for loans is reduced, banks usually charge lower interest rates to attract more customers. Inflation is a major concern for commercial bank interest rates within these higher or lower ranges (Gambacorta, 2004). The rate of inflation determines how much purchasing power, and real value, each unit of currency loses every year. If the annual interest rate is 5%, then the same amount of money this year is 5% less valuable than it was last year. If the rate of inflation exceeds the interest rate that a bank is charging on a loan, then the bank could end up losing money in the transaction. For this reason, banks estimate what the rate of inflation will be during the time in which a borrower will be repaying a loan (Kadri, 2012).

After taking into consideration the market's demand for loans and projected inflation, commercial bank interest rates are based on an individual borrower's credit worthiness. An individual with a good credit history is more likely to repay the loan than an individual with poor one (Moosa and Bhatti, 2010). If a bank is going to loan money to an individual who is less likely to repay his or her loan, it will charge a higher interest rate than it would for someone who is more likely to repay the loan (Mwega and Ndung'u, 2008).

Interest rates are associated with the dealings of market needs and supplies to be precise money that is borrowed and lent (Gertz, 2008). The money is borrowed for the desires of business purposes, financial expenses for the development purposes by the government and expenses for household activities (Moosa and Bhatti,2010). The money available in the bank to let the loan depends upon the amount that comes into banks and other financial sectors through means of consumers and into financial markets. So, the dealings between the need of money to be borrowed and the availability of money to supply determines the level of interest rates. If any of these factors get affected, then this will cause direct impact on interest rates (Kadri, 2012).

### 1.1.1 Lending Interest Rates

The financial systems of most developing nations have come under stress as a result of the economic shocks of the 1980s. The economic shocks largely manifested through indiscriminate distortions of financial performance of commercial banks (Gertz, 2008). Lending interest rates which may be on short, medium or long-term basis is one of the services that deposit money banks do render to their customers. In other words, banks do grant loans and advances to individuals, business organizations

as well as government in order to enable them embark on investment and development activities as a means of aiding their growth in particular or contributing toward the economic development of a country in general (Kadri, 2012).

Deposit money banks are the most important savings, mobilization, and financial resource allocation institutions. Consequently, these roles make them important institutions in economic growth and development. In performing this role, it must be realized that Commercial Banks have the potential, scope, and prospects for mobilizing financial resources and allocating them to productive investments and in return promote their performance (Kadri, 2012). In addition, no matter the sources of the generation of income or the economic policies of the country, deposit money banks would be interested in giving out loans and advances to their numerous customers bearing in mind, the three principles guiding their operations which are, profitability, liquidity and solvency (Moosa and Bhatti, 2010).

However, deposit money banks' decisions to lend out loans are influenced by a lot of factors such as the prevailing interest rate, the volume of deposits, the level of their domestic and foreign investment, banks liquidity ratio, prestige and public recognition to mention just but a few (Moosa and Bhatti,2010). For the banks to balance their main objectives of liquidity, profitability and solvency, lending interest rates must be handled effectively and the banks must behave in a way that there potential customers are attracted and retained (Kadri, 2012).

### 1.1.2 Financial Performance of Commercial Banks

Moosa and Bhatti (2010) identify three broad groups of measures of organizational performance: accounting, market, and hybrid measures. Accounting measures of organizational performance include: return on assets (ROA), return on sales (ROS), return on equity (ROE), return on investment (ROI), return on capital employed (ROCE) and sales growth (SG). Accounting measures have several strengths. They are widely available because governments require firms to publish accounting data and the fact that they are subject to internal controls within firms enhances their reliability (Beck, Randa, and Trandafir, 2010).

Sound financial health of a bank is the guarantee not only to its depositors but is equally significant for the shareholders, employees, and whole economy as well. Efforts have been made from time to time, to measure the financial position of each bank and manage it efficiently and effectively. Capital adequacy is a reflection of the inner strength of a bank, which would stand it in good stead during the times of crisis (Beck, Randa, and Trandafir, 2010). Capital adequacy may have a bearing on the overall performance of a bank, like opening of new branches, fresh lending in high risk but profitable areas, manpower recruitment and diversification of business through subsidiaries or through specially designated branches (Moosa & Bhatti, 2010).

Asset quality is another important aspect of the evaluation of a bank's performance under the Reserve Bank of India guidelines, the advances of a bank are to be disclosed in a classified manner as; standard, sub-standard and doubtful and loss asset (Beck, Randa, and Trandafir, 2010). The performance of Management capacity is usually

qualitative and can be understood through the subjective evaluation of Management systems, organization culture, and control mechanisms and so on (Gertz, 2008). However, the capacity of the management of a bank can also be gauged with the help of certain ratios of off-site evaluation of a bank. The capabilities of the management to deploy its resources, aggressively to maximize the income, utilize the facilities in the bank productively and reduce costs (Moosa and Bhatti, 2010).

The 'Earnings/Profit' is a Conventional Parameter of measuring financial performance. Higher income generally reflects a lack of financial difficulties and so would be expected to reduce the likelihood of failure of a bank. In the pre-liberalization phase (before 1991), interest income used to be reckoned on accrual basis with little variation therein (Gertz, 2008).The ability of a bank to provide liquidity requires the existence of a highly liquid and readily transferable stock of financial asset (Gertz, 2008). Liquidity and transferability are the key ingredients for such transactions. The liquidity requirement means that financial assets must be available to owners on short notice (a day or less) at par. The transferability requirement means that ownership rights in financial assets must be portable, at par, to other economic agents, and in a form acceptable to the other part (Beck, Randa, and Trandafir, 2010).

### 1.1.3 The Relationship Between Lending Interest Rates and Financial Performance of Commercial Banks

Interest income from loans is the major source of revenue for commercial banks but the loan book and deposit book are not the only determinants of financial performance (Aboagye, et al, 2008). Total bank assets and total deposits facilitate

huge loan books and interest revenues but other factors that affect cost efficiency must be controlled for the high revenue figures to translate into high levels of financial performance (Beck, and Hesse, 2006). Large institution size banks have greater access to large wholesale deposits and have greater power to control cost of deposits and lending rates but these advantages can only be translated into good financial performance with accompanying cost efficiency. Ahokpossi (2013) argues that there is a positive relationship between interest lending rates and performance of Commercial Banks in the financial markets globally.

Profitability indicators such as ROE and ROA tend to summarize performance in all area of the company. Margarida (2000) found out that the net interest margin reacts positively to operating cost and hence changing market condition would have an impact on the market interest rate which would have a direct impact on profit. Maher (1997) found out that the availability of more advance risk management techniques have resulted in smaller amount of interest rate sensitivity for banks.

### 1.1.4 Commercial Banks in Kenya

The Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK, 2012), governs the Banking industry in Kenya. The banking sector was liberalized in 1995 and exchange controls lifted. The CBK, which falls under the Minister for Finance's docket, is responsible for formulating and implementing monetary policy and fostering the liquidity, solvency and proper functioning of the financial system. The CBK publishes information on Kenya's commercial banks and non-banking financial institutions, interest rates and other publications and guidelines. The banks have come together

under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and addresses issues affecting its members (CBK, 2012).

According to the Central Bank of Kenya, there are 43 licensed commercial banks in Kenya. Three of the banks are public financial institutions with majority shareholding being the Government and state corporations. The rest are private financial institutions. Of the private banks, 27 are local commercial banks while 13 are foreign commercial banks. Commercial banks in Kenya play a major role in Kenya. They contribute to economic growth of the country by making funds available for investors to borrow as well as financial deepening in the country. Commercial banks therefore have a key role in the financial sector and to the whole economy (CBK, 2012).

There are various banking laws in Kenya that govern and regulate the way banks are formed, operate and are managed in the country. Some of these laws include but not limited to the appropriation act, banking act, bankruptcy act, Barclays of Kenya limited act, capital markets, central bank of Kenya act, central depositories act, cheques act, general loans and stock act among other laws (Mutai, 2010).The laws are divided and partitioned to cover the different aspects in the banking industry (CBK, 2012).

According to customer surveys that have been carried out on customer satisfaction, clearly indicate that quality service delivery to customers by Commercial Banks in Kenya still has remained a challenge due to inappropriate strategies adopted. Adoption of effective strategies by Commercial Banks in Kenya in managing service quality will enhance organizational performance and market competitiveness based on quality (CBK, 2012).

Financial measures of organizational performance commonly used by commercial banks include; return on assets (ROA), return on sales (ROS), return on equity (ROE), return on investment (ROI), return on capital employed (ROCE) and sales growth (SG). Accounting measures have several strengths. They are widely available because governments require firms to publish accounting data and the fact that they are subject to internal controls within firms enhances their reliability (Bergen, 2010).

### 1.2 Research Problem

Banks play vital role in the economic growth and development of the country. So, to uphold the economic growth of the country, the banking sector must perform its task properly (Beck and Hesse, 2006). For the banking sector, lending interest rates play the vital role as it has ability to affect total demand of money and subsequently, the investment opportunities. Lending interest rate by commercial banks determine the profitability of commercial banks among other factors (Gardener et al 2005). High Lending interest rates have remained a macroeconomic problem that has been difficult to eliminate and thus hindering economic development. Banks are one of the determining factors in lending interest rate (Bergen, 2010).

Morgan (2008) on determinants of interest rates of Commercial Banks in Europe indicated that liquidity is the problem and a key challenge which has affected the inter banking lending rate. Despite of higher interest rate provided by commercial bank in the deposits, it still fails to attract the depositors. Beside decline in deposits, another problem that banking sector were facing is to recover the loans given or provided to

the Commercial Banks .Flannery (1983) found a negative relationship between the banks interest rates and banks net asset position. Bosson and Jog-Ken (2003) found out that profitability of Ghanaina banks is skewed towards large banks and that there is correlation between bank size and profitability.

Related studies that have been carried in Kenya by Ngugi (2001) on empirical analysis of interest rates spread in Kenya and Wambua (2006) on casual relationship between interest rates and foreign exchange rates in Kenya reported that the banking sector in Kenya is faced with the challenge of liquidity crisis, inflated interest rate, declining deposits and danger of real estate collapse. Decrease in transactions of Commercial Banks is seen as a major challenge that is limiting the lending interest rates of Commercial Banks in Kenya. On the other hand, Commercial Banks are also facing the problem of keeping up profitability. The profit of banks has come down due to narrowing margin and extreme rivalry among competing players in the banking industry (Mwega and Ndung'u, 2008). The Poor performance of commercial banks put pressure on to retain high lending rates in an attempt to minimize the loses associated with the loan (Matu, 2011).

Other risks that are associated with high interest rate are that some groups and business sectors on the business environment may suffer from an unequal proportion of higher interest rates and lack of credits impacts (Nyachieo, 2008). As an example, small businesses which operate with relatively small profit margins are most likely to be affected. Small businesses get their profit cut so heavily such that they cannot afford to borrow money because of increment in the cost of borrowing money (Mutai, 2010). This ultimately results in discouraging the small investor's willingness to

borrow the money from the bank and that makes small and medium businesses hard to survive in the business world.

High Lending interest rates also encourage commercial banks to lend money to large, traditional borrowers but completely omitting capability of small and medium businesses and destabilized all the efforts to encourage slim down of loans to smaller borrowers. Mbai (2006) found out that proper interest rates management reduced bank exposure to risk and provided an opportunity to stabilize and improve the net income.

However, it is evident from the findings of the above studies that researchers did not focus on the relationship between lending interest rates and financial performance of commercial banks. Also other studies were conducted in developed countries while Kenya is a developing country. It is for this reason that the study seeks to establish the relationship between lending interest rates on the financial performance of commercial banks in Kenya. Therefore, this study will be guided by the following research question; what is the relationship between lending interest rates and financial performance of Commercial Banks in Kenya?

### 1.3 Research Objective

To determine the relationship between lending interest rates and financial performance of commercial banks in Kenya.

### 1.4 Value of the Study

This study will be beneficial to Commercial Bank managers as it will help them better understand the determinant lending interest rates and their effects on their bank's performance. The Government will find the information useful in diagnosing the

problems affecting lending interest rates by Commercial Banks thus formulating policies that enhance the investment in the country hence economic growth and stability.

The findings of the study will be beneficial to members of the public based on accurate decision making during the investment decisions. This study will also guide policy makers in the banking sector especially the Central Bank of Kenya and the Treasury in coming up with policies which will manage exchange rates and spur growth and profitability in this sector. Researchers and academicians in the field of finance, economics and banking will find this study a useful guide for carrying out further studies in the area.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter outlines theoretical review, factors that influence the level of market interest rates and empirical study.

### 2.2 Theoretical Review

Different theories have been suggested by different authors that argue about the relationship between lending interest rates and financial performance of commercial bank. Some of the theories include;

## 2.2.1 Interest Rate Parity and Interest Rates

Interest rate is the rate of interest charged for the amount of money borrowed. Banks or lending institutions usually have general guidelines for the rate they intend to charge. Money borrowed by the bank on short-term basis (such as overdraft facility) or long-term basis (debentures, mortgages, or bank loans) has different interest rate. The interest rate parity condition was developed by Keynes (1933), as what is called interest rate parity nowadays, to link the exchange rate, interest rate and inflation. The theory also has two forms: covered interest rate parity (CIRP) and uncovered interest rate parity (UCIRP). CIRP describes the relationship of the spot market and forward market exchange rates with interest rates on bonds in two economies (Ngugi, 2001).

UCIRP describes the relationship of the spot and expected exchange rate with nominal interest rates on bonds in two economies (Radha, 2011). This is the normal form of the covered interest rate parity, which states that the domestic interest rate must be higher than the foreign interest rate by an amount equal to the forward premium (discount) on domestic currency. According to CIRP, if the exchange rate of, say, the shilling against the USD is fixed, the interests of the two countries should be equal. Thus, a small country with a pegged exchange rate regime cannot carry out monetary policy independently (Salloum and Hayek, 2012).

Interest rates, inflation, and exchange rates are all highly correlated (Central Bank of Kenya, 2012). By manipulating interest rates, central banks exert influence over both inflation and exchange rates, and changing interest rates impact inflation and currency values (Devereux, & Lane, 2001). Higher interest rates offer lenders in an economy a higher return relative to other countries. Therefore, higher interest rates attract foreign capital and cause the exchange rate to rise. The impact of higher interest rates is mitigated, however, if inflation in the country is much higher than in others, or if additional factors serve to drive the currency down. The opposite relationship exists for decreasing interest rates - that is, lower interest rates tend to decrease exchange rates (Bergen, 2010). Karfakis & Kim (1995) using Australian exchange rate data found that unexpected current account deficit is associated with exchange rate depreciation, and a rise in interest rates.

### 2.2.2 Irving Fisher's Theory

Fisher’s real rate of interest framework is essential for the inflation-targeting framework. It provides a rationale for the idea that monetary policy should be

concerned mainly (if not only) with managing inflation expectations in order to keep real interest rates at a stable level that promotes saving and investment. Irving Fisher's theory of interest rates relates the nominal interest rate i to the rate of inflation π and the "real" interest rate r. The real interest rate r is the interest rate after adjustment for inflation. It is the interest rate that lenders have to have to be willing to loan out their funds (Keynes, 1933). The relation Fisher postulated between these three rates is:

$(1+i) = (1+r)\,(1+\pi) = 1 + r + \pi + r\,\pi$

This is equivalent to:

$i = r + \pi\,(1 + r)$

Thus, according to this equation, if π increases by 1 percent the nominal interest rate increases by more than 1 percent. This means that if r and π are known then i can be determined. On the other hand, if i and π are known then r can be determined and the relationship is:

$1+r = (1+i)/\,(1+\pi)$

When π is small then r is approximately equal to i-π, but in situation involving a high rate of inflation the more accurate relationship must be taken into account. Fisher assumes that *r** is given by technology and tastes. *r** is a physical rate of return. However, in his analysis, Fisher recognizes that *r** is actually calculated in money terms and that price expectations matter for the decision—the rate of return over cost is the monetary expression of *r** and is the essential variable for investment (Fisher 1930). Later, Keynes explicitly stated that the marginal efficiency of capital and the rate of return are identical concepts. One could then wonder if it is justified to criticize Fisher’s analysis for not taking into account the importance of money and monetary expectations.

Fisher's theory, money is a veil and Keynes should not have confounded marginal efficiency of capital and marginal rate of return over cost as depicted by Fisher. Indeed, in Fisher, the real return is guaranteed because it depends on the technical capacity of the productive assets. Stated alternatively, the rate of return over cost is concerned with the "profit" obtained from the produced output expressed in monetary terms, whereas the marginal efficiency of capital is concerned with the profit obtained from the *sale* of the production. Thus, the rate of return is just a monetary expression of the "primitive cost and return typified by labor and satisfaction" (Fisher 1930). On the other side, Keynes was very careful to state that the marginal efficiency of capital does not rest *directly* on technical concepts (Kregel 1988): "If capital becomes less scarce, the excess yield will diminish, without its having become less productive at least in the physical sense" (Keynes, 1933).

### 2.2.3 Expectations Theory of Interest Rates

Expectations theory of interest rates purports to explain the shape of the yield curve, or the term structure of interest rates. The forces that determine the shape of the yield curve have been widely debated among academic economists for a number of years (Fisher, 1930).The American economist Irving Fisher advanced the expectations theory of interest rates to explain the shape of the curve. According to this theory, longer-term rates are determined by investor expectations of future short-term rates. In mathematical terms, the theory suggests that:

$(1 + R_2)^2 = (1 + R_1) \times (1 + E(R_1))$

Where

$R_2$ = the rate on two-year securities,

$R_1$ = the rate on one-year securities,

$E(R_1)$ = the rate expected on one-year securities one year from now.

The left side of this equation is the amount per dollar invested that the investor would have after two years if he invested in two-year securities. The right side shows the amount he can expect to have after two years if he invests in one-year obligations. Competition is assumed to make the left side equal to the right side. The theory is easily generalized to cover any number of maturity classes. And however many maturity classes there may be, the theory always explains the existence of longer-term rates in terms of expected future shorter-term rates (Keynes, 1933). The expectations theory of interest rates provides the theoretical basis for the use of the yield curve as an analytical tool by economic and financial analysts. For example, an upward-sloping yield curve is explained as an indication that the market expects rising short-term rates in the future. Since rising rates normally occur during economic expansions, an upward-sloping yield curve is a sign that the market expects continued expansion in the level of economic activity (Keynes, 1933).Financial analysts sometimes use this equation to obtain a market-related forecast of future interest rates. It can be rewritten as follows: $E(R_1) = [(1 + R_2)^2 / (1 + R_1)] - 1$

The equation suggests that the short-term rate expected by the market next period can be obtained from knowledge of rates today (Kregel, 1985).

### 2.3 Factors that Influence the level of Market Lending Interest Rates

Factors that influence the level of market interest rates and performance of financial institutions include; expected levels of inflation, demand, and supply of money, monetary policy, and intervention by the government and general economic conditions.

### 2.3.1 Expected Levels of Inflation

Inflation is defined as a rise in the general level of prices of goods and services in an economy over a period of time. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation reflects a reduction in the purchasing power per unit of money which is a loss of real value in the medium of exchange and unit of account within the economy. Over time, as the cost of products and services increase, the value of money decreases. Consumer will therefore have to spend more money for the same products or services, which had cost less in the previous year (Chirwa and Mlachila, 2004).

As for finance lending sector, borrowers may find it is attractive to borrow now but less attractive for lender. This is because the value of money now has fallen as compared to the time when they lent their money. In order to compensate this loss, lenders have to increase the interest rate (Demirguc-Kunt and Huizinga, 1998).

### 2.3.2 Demand and Supply of Money

Supply and demand is a fundamental concept in market economy (Brock, and Franken, 2003). In general, supply refers to the level of quantity of services or products can be offered, while demand refers to the quantity required for the services and products. Demand and supply of money can affect interest rates (Bennaceur and Goaied, 2008).

In United States, The Federal Reserve Bank has taken a step to manipulate money supply through an open market operation, by purchasing large volumes of government

security to increase money supply, thus reduce the interest rates, or sell large volumes of government security to reduce money supply which will subsequently increase interest rates (Aboagye, et al, 2008)

On the other hand, liquidity preference theory is linked to demand of money. Developed by John Keynes, this theory explains how demand and supply for money influence interest rates. It states that demand for liquidity is determined by transaction, precaution, and speculation motives. Therefore, the supply of money interacts with liquidity-preference curve to determine the level of interest rate at which the quantity of money demanded equals supply (Ahokpossi, 2013).

### 2.3.3 Monetary Policy and Intervention by the Government

One of the government's strategies to control the flow of money within its consumers is by monetary policy (Beck and Hesse, 2006). People will avoid borrowing money when the interest rates are high. This in turn will reduce the money outflow and affect the country's revenue as consumers will not be spending unless it is necessary (Beck, Randa, and Trandafir, 2010).

In order to stimulate growth, government may offer lower interest rates on borrowing which subsequently attracts consumer to spend more borrowing. As a result, when the growth rate increases rapidly to the extent that economy may face overheat problem, the government then have to curb this by imposing higher interest rates (Ben-Khedhiri, 2005).

### 2.3.4 General Economic Conditions

This is the state of the economy in a country or region. Folawewo and Tennant, (2008) notes that Economic conditions change over time in line with the economic

and business cycle, as an economy goes through expansion and contraction. Economic conditions are considered to be sound or positive when an economy is expanding, and are considered to be adverse or negative when an economy is contracting. A country's economic conditions are influenced by numerous macroeconomic and microeconomic factors, including monetary and fiscal policy, the state of the global economy, unemployment levels, productivity, exchange rates, inflation and so on. Economic condition may face series its booms and slumps (Folawewo and Tennant, 2008). The world economy has been on the slump side since the past five years with many business closures. Banks are unable to provide loan at lower rate as they have to cover their cost (Dornbusch and Fisher, 2003).

Apart from the above, other factors such as political and financial stability and investors' demand for debt securities also affect interest rates. While increase in interest rates helps consumer to save more, it is not good news for lenders and business as they lose their revenue. Globally, this also adversely affects the world economy (Entrop, Memmel, and Wilkens, 2012).

### 2.4 Empirical Studies

Studies on interest rate spread with respect to African countries include those by Folawewol and Tennant (2008), Beck and Hesse (2006), Aboagye et al (2008), Ikhide (2009) and Ndung'u and Ngugi (2000). Using dynamic panel data model, Folawewol and Tennant (2008) study the determinants of interest rate spread in 33 Sub-Saharan African (SSA) countries focusing on macroeconomic variables. Their results show that interest rate spread is influenced by the extent of the crowding out effect of government borrowing, public sector deficits, discount rate, inflation, level of money supply, reserve requirement, level of economic development and population size.

A study carried out by Samad (2004) examined commercial banks performances during 1994-2001. The focus of the study was to examine empirically the performance of Bahrain's commercial banks with respect to credit (loan), liquidity and profitability during the period. By applying t-test to the financial measure, it was shown that commercial banks liquidity performance is not at par with the banking industry. That is commercial banks are relatively less profitable and less liquid as expected.

Chizea (1994) asserted that, "there are certain aspects of fiscal and monetary policies which could affect the decision of the discerning and informed public to patronize the bank and the lending behavior of commercial banks. Paramount amongst these measures is what could be called the interest rate disincentives. Interest rates have been so low in the country that they are negative in real terms. As inflation increased, the purchasing power of money lodged in deposit accounts reduce to the extent that savers per force pay an inflation tax. There is also the fear that the hike in interest rates would increase inflations rates and make a negative impact on the rate of investment.

A study by Bennaceur and Goaied (2008), investigated the determinants of commercial banks interest margin and profitability" (evidence from Tunisia). The study received the impact of banks characteristics, financial structure and macroeconomic indicators on bank's net interest margin and profitability in Tunisia banking sector for the period of 1980-2000. It shows that individual bank characteristic explains a substantial part of the within country variation in bank interest margin and net profit.

High net interest margin and profitability tend to be associated with a bank that holds a relatively high amount of capital and with large overheads size is found to impact negatively on profitability which implies that Tunis banks are operating above their optimum level. Aboagye et al. (2008) investigated the question of the optimal spread between bank lending rates and rates that banks pay on deposits in Ghana. They found that increases in bank market power, bank size, staff costs among other factors significantly increase net interest margins, while increases in bank excess cash reserves and central bank lending rate decrease them.

Finally, in a more recent paper, Odhiambo (2009) investigated the impact of interest rate reforms on financial deepening and economic growth in Kenya. He found a positive relationship in both cases using standard (I (0)/I (1)) co integration techniques. The empirical results show that bank-specific factors play a significant role in the determination of lending interest rate. 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.

**2.5 Summary of Literature Review.**

A study by Folawewol and Tennant (2008), Beck and Hesse (2006), Aboagye et al (2008), Ikhide (2009) on interest rate spread with respect to African countries were too general and the their scope was in Africa. A study by Folawewol and Tennant (2008) on the determinants of interest rate spread in 33 Sub-Saharan African (SSA) countries focusing on macroeconomic variables was too general and was conducted in developed countries compared to Kenya.

It can be concluded from the empirical evidence that previous studies did not investigate on the relationship of lending interest rates on the financial performance of commercial banks in Kenya. Most of the studies carried out focused on different areas and countries which are more developed compared to Kenya which is a developing country. It is evident that Bank asset, loan performance, bank liquidity, operating costs, and return on investment influence lending interest rates of commercial banks. However it is for this reason this study seeks to determine the relationship between the lending interest rates and the financial performance of Commercial Banks in Kenya.

# CHAPTER THREE:

# RESEARCH METHODOLOGY

## 3.1 Introduction

The chapter outlines the methods and sources of the data, which data was collected in order to investigate the relationship between the lending interest rates and the financial performance of Commercial Banks in Kenya. It further discusses how the data was analyzed and presented.

## 3.2 Research Design

The study adopted a quantitative research design. Quantitative research method refers to the systematic scientific investigation of data and their relationships. This involves developing and using mathematical models, theories, and hypothesis to analyze the relationship between variables. The quantitative research design was adopted to facilitate investigation of the relationship between returns on assets (dependent variable) and lending interest rate (independent variable).

## 3.3 Target Population.

The study was a census where all the 43 Commercial Banks operating in Kenya and registered by Central Bank of Kenya was used to determine the relationship between the lending interest rates and the financial performance of Commercial Banks in Kenya. The selection of Commercial Banks was based on their lending interest rates and financial performance from 2005 to 2012.

## 3.4 Data Collection

The study relied on secondary data, which was collected from Central Bank of Kenya

Annual reports; Capital Market Authority reports, media publications covering the business process management of Commercial Banks in Kenya and CBK supervisory report.

### 3.5 Data Analysis

The study adopted quantitative data analysis techniques. This included regression 7 The dependent variable was financial performance (FP), which was measured by the ROA. This was calculated as follows:

ROA = Net Income after Tax / Total Assets.

The independent variable was the lending interest rate (IR) that was given by the lending interest rate of commercial banks in a particular year.

#### 3.5.1 Regression Model

Specifically the regression model was of the form;

$ROA=\beta o+\beta_1 IR + \varepsilon$

Where:

ROA=Return on Assets

IR = Lending Interest Rates

$\beta o$= Minimum value of the dependent variable when the independent variable is zero.

$\beta_1$ = Risk Factor that can influence the constant positively or negatively

$\varepsilon$= Error term.

The model was estimated using pooled ordinary least squares regression (OLS) method.

### 3.5.2 Test of Significance

The validity of this analysis will be based on the following criteria;

T-test will be carried out in order to ascertain the significant of the parameters. The student t distribution tests the null hypothesis; H0 = bi = 0 against the alternative hypothesis. H1 = bi≠0. Thus, we derive the results whether the computed t value, t(n-k) degree of freedom at 5% level of significance is greater or less than the critical t value from the table. If the computed t is greater than the critical t, we reject the H0 and accept the alternative hypothesis that beta estimate is significantly different from zero.

This reveals the percentage or proportional variable that is explained by the independent variables. Its maximum value is 1 or 100%.

F- Test reveals the significance of the overall regression equation for further prediction. This test at (k-1) (n-K) degree and N is the number of observation and at 5% level of significance indicates whether or not the expected variable(s) is likely to have occurred by chance or not. The decision rule is that, if computed F is greater than critical F, accept the model as significant and reliable for prediction purpose or policy formulation if computed F is less than critical F, and accept the equation as significant and unreliable.

Regression Coefficient shows the value and sign attached to each of the parameters. The signs are very important because they help to determine whether the results actually confirm the stated theory or not. If a positive relationship is expected between a dependent variable, then the sign of the coefficient is positive as vice versa.

# CHAPTER FOUR

# DATA ANALYSIS, RESULTS AND DISCUSSION.

## 4.1 Introduction

This chapter presents the data analysis, results, interpretation, and discussion of the research findings. To achieve the objective of the study, STATA version 11 statistical software was used to analyze the data. Linear regression was used to establish the relationship between lending interest rates and financial performance of commercial banks in Kenya.

## 4.2 Data Analysis and Findings

The study seeks to determine the relationship between lending interest rates and financial performance of commercial banks in Kenya. In this study a total of 43 commercial banks in operation were under study. However, the researcher obtained data for only 37 commercial banks that were operating as a bank from the year 2005 to 2012. The references included websites, financial performance states, CBK survey on bank charges and lending interest rates and CBK supervisory annual reports.

## 4.3 Descriptive Statistics

Table 1

| **Variable** | **Mean** | **Standard Deviation** | **Minimum value** | **Maximum Value** | **Observations** |
|---|---|---|---|---|---|
| ROA | 2.076723 | 1.795005 | -4.03 | 17.43 | 296 |
| IR | 16.60595 | 2.093054 | 11 | 25.00 | 296 |

Table 1 presents the descriptive statistics for the data set. Two variables namely, ROA

and IR with 296 observations each were used in the analysis. ROA had a mean of 2.08% and a standard deviation of 1.80%. Its minimum value was -4.03% and maximum value was 17.43% IR had a mean of 16.61% and a standard deviation of 2.09%. Its minimum and maximum values are 11% and 25.00% respectively.

### 4.4 Correlation Matrix

| | ROA | IR |
|---|---|---|
| ROA | 1.0000 | 0.0290 |
| IR | 0.0290 | 1.0000 |

The correlation between ROA and IR is presented in the correlation matrix above. Each variable is perfectly correlated with itself as indicated by the coefficient of 1. IR has a positive correlation with ROA as indicated by the coefficient of 0.0290.

### 4.5 Pooled OLS Regression Model

#### 4.5.1 ANOVA table

| Source | Sum of squares | Degrees of freedom | Mean squares |
|---|---|---|---|
| Model | 0.790540919 | 1 | 0.79050919 |
| Residual | 950.21259 | 294 | 3.23201561 |
| Total | 951.011131 | 295 | 3.22376655 |

The ANOVA table presents the variance of the data. Much of the variation is attributed to random error (residual) as illustrated by its large sum of squares (950.21259). The independent variable, IR, explains only a small portion of the variation as indicated by its relatively small sum of squares (0.79050919).

### 4.5.2 Model Fit

Table 2: Model Fit

| Observations | F (1, 294) | Prob. > F | R-squared | Adjusted R-squared | Root MSE |
|---|---|---|---|---|---|
| 296 | 0.25 | 0.6195 | 0.0008 | -0.0026 | 1.7978 |

The Total number of observations used in the regression was 296.

F (1, 294) is the F statistics testing the null hypothesis that all coefficients of the model are equal to zero. The numbers in parentheses are the degrees of freedom for the model and reseals as indicated in the ANOVA table. The F statistic was found to be 0.25 as indicated in table 2.

Prob.> F denotes the p- value of the F-test (F-statistic mentioned above). The P-value enables us to determine if all the coefficients of the model are statistically significant or not. The coefficients are considered to be statistically significant if the p-value is less than the chosen level of significance and vice versa. I.e. for the 95% level of significance, the coefficients are significant/insignificant if:

P-value < 0.05; the coefficients are statistically significant

P-value > 0.05; the coefficients are statistically insignificant

The p-value was found to be0.6195 and its interpretation is as follows:

| **P – value** | **significance Level** | **conclusion** |
|---|---|---|
| 0.6195 | 99% 0.6195 >0.01 | Insignificant |
| 0.6195 | 95% 0.6195 > 0.05 | Insignificant |
| 0.6195 | 90% 0.6195 > 0.10 | Insignificant |

The F-test indicates that none of the coefficients of the model is statistically significant. Hence the model is insignificant. The model's R-squared is 0.0008, which

implies that IR explains only 0.08% of the variation in ROA. The remaining 99.92% of the variation is attributed to factors/ variables not included in the model.

### 4.5.3 Coefficients of the Model

Table 3 Pooled OLS (Coefficient of the Model)

Table 3

| **ROA** | **Coefficient** | **Standard Error** | **t** | $p > \|t\|$ |
|---|---|---|---|---|
| Constant | 1.661952 | 0.000959 | 1.90 | 0.009 |
| IR | 0.0248575 | 0.0500087 | 0.50 | 0.620 |

The pooled OLS model has a constant of 1.661952 and the coefficient of IR is 0.0248575 as indicated in table 3. The t statistic for the constant and IR are 1.90 and 0.50 respectively. In order to conclude that the coefficient of IR is statistically significant or not, we compare its p-value with the chosen level of significance. The coefficient was significant if the p-value was less than the chosen level of significance. Consequently, the coefficient of IR is statistically insignificant at 99% (0.01), 95% (0.05), and 90% (0.10) level of significance. The estimated pooled OLS regression model was:

ROA=1.661952+0.0248575IR (1)

Model 1 indicates that IR has a positive relationship with ROA, which implies that an increase in IR by one unit increases ROA by 0.0248575

### 4.6 Fixed Effect Model

Table 4 : Fixed Effect Model (Coefficient of the model)

| **ROA** | **Coefficient** | **Standard Error** | **t** | $p > \|t\|$ |
|---|---|---|---|---|
| Constant | 1.029101 | 0.9008747 | 2.03 | 0.043 |
| IR | 0.0140354 | 0.053712 | 0.20 | 0.783 |

Table 5: Fixed Effect Model (F Test)

| F (1, 250) | Prob > F |
|---|---|
| 0.08 | 0.7826 |

The fixed effect model assumes that the unique (time-invariant) characteristics of each bank are correlated with the independent variable, IR. In this regard, the independent variable will be biased. The fixed effect model controls for the effects of the time-invariant characteristics so that the Classical Linear Regression Model assumption of no correlation between the error term and the independent variable is not violated.

As indicated in table 5, the F-statistic had a p-value of 0.7826, which was statistically insignificant at 99%, 95% and 90% significance level. Hence, the fixed effect model was insignificant and reliable for estimating the relationship between ROA and IR.

As shown in table 4, the fixed effect model had a constant of 1.029101 and IR has a coefficient of 0.0140354. The coefficient of IR was statistically insignificant at 99%, 95% and 90% significance level as indicated by its p-value of 0.20. Hence, the fixed effect model was:

ROA=1.029101+0.0140354IR (2)

### 4.7 Random Effect Model

Table 6 Random Effect Model

| **ROA** | **Coefficient** | **Standard Error** | **z** | $p > \|t\|$ |
|---|---|---|---|---|
| Constant | 1.760100 | 0.0555117 | 2.07 | 0.039 |
| IR | 0.010495 | 0.0502040 | 0.37 | 0.713 |

Table 7 Random Effect Model (F Test)

| Wald $Chi^2$ (1) | Prob > $Chi^2$ |
|---|---|
| 0.14 | 0.7126 |

The random effects model assumes that the time-invariant characteristics of each bank was random and was not correlated with the independent variable (IR). Hence, these characteristics can be allowed to influence ROA, which was the dependent variable.

The results of the random effect model are reported in table 6 and 7. In table 7, Wald $Chi^2$ (1) was the F-statistic. Its p-value of 0.7126 indicates that the random effect model was insignificant. Table 6 shows that the model had a constant of 1.760100 and the coefficient of IR is 0.010495 Hence the estimated model was:

ROA=1.760100+0.010495IR (3)

The coefficient of IR is statistically insignificant at 99%, 95% and 90% level of significance as indicated by its p-value of 0.37.

### 4.8 Hausman Test

Table 8: Hausman Test

| | **Coefficients** | | | |
|---|---|---|---|---|
| | (b) fixed | (B) Random | (b-B) Difference | Standard Error |
| IR | 0.0148354 | 0.0184955 | -0.0036601 | 0.0190905 |

B: consistent under Ho and Ha

B: inconsistent under Ha, efficient under Ho

Table 9: Hausman Test

| $Chi^2$ (1) | Prob > $Chi^2$ |
|---|---|
| 0.04 | 0.848 |

The Hausman test helps us to choose between the fixed effect and the random effect model. It tests the null hypothesis that the fixed effect is the preferred model against

the alternative that the random is the preferred model. The results of the test were presented in table 8 and 9. The coefficient of IR in the random effect model was consistent under the null and alternative hypotheses. The coefficient of IR in the random effect model was inconsistent under the alternative hypothesis, but efficient under the null hypothesis. The p-value of 0.848 was insignificant; thus, the null hypothesis was rejected. In this regard, the study adopts the random effect model. Hence, the final model for the study was:

ROA=1.029101+0.0140354IR (4)

### 4.9 Discussion of the Results

The coefficient of IR was positive and statistically insignificant in the OLS, fixed effect and the random effect model. The Hausman test indicated that the random effect is the preferred model for the study. As indicated in model 4, IR is positively related to ROA, which implies that a unit increase in IR raises ROA by 0.0140354 as shows in the regression model below;

ROA=1.029101+0.0140354IR (5)

Since the relationship is statistically insignificant, we conclude that lending interest rate has statistically insignificant effect on bank performance proxied by returns on assets. In particular, an increase in lending interest rate does not necessarily improve returns on assets. This finding was inconsistent with theory since an increase in lending interest rate does not increase the banks' income, thereby it does not improve their financial performance (ROA).

# CHAPTER FIVE

# SUMMARY, CONCLUSION, AND RECOMMENDATIONS

## 5.1 Introduction

This chapter presents the summary of finds, conclusion, and the recommendations derived from the findings .The chapter also presents the limitations that were encountered with suggestions for further research.

## 5.1 Summary of Findings

The objective of the study was to establish the relationship between lending interest rates and financial performance (returns on assets) of commercial banks in Kenya. To achieve this objective, the study used data for the period 2005 to 2012. The relationship between the dependent variable, return on assets, and the independent variable, lending interest rate, was established using a linear regression model, which was estimated with the aid of STATA version 11 statistical software.

The finding of the study shows that lending interest rate has a positive but statistically insignificant relationship with returns on assets. This implies that an increase in lending interest rate positively does not affect commercial banks' financial performance proxied by ROA. In particular, model 4 indicates that a unit increase in interest rate raises returns on assets by 0.0140354. This finding is inconsistent with that of Musa (2011) who found that lending interest rates have positive and statistically significant relationship with the financial performance (return on equity) of commercial banks in Kenya. Moreover, Kamau (2008), also found that in microfinance institutions, profit before tax depend on interest income, interest expense, shareholders fund, loan and advances to customers.

## 5.2 Conclusion

The results obtained from the model shows that there is a positive and statistically insignificant relationship between lending interest rates and financial performance of commercial banks in Kenya. This implies that lending interest rate is not a major determinant of commercial banks' financial performance in Kenya.

The positive relationship is to be expected since interest earned from loans advanced to customers is one of the main sources of income for commercial banks. In this regard, an increase in lending interest rates may increases the income of commercial banks. This is likely to be the case if the increase in lending interest rate is not accompanied by a reduction in the uptake of loans. However, this has been ruled out by the researcher who found that, despite the positive relationship between lending interest rates and financial performance, the significance level is weak. Consequently, commercial banks should focus on other factors that improve or may increase the financial performance.

## 5.3 Recommendations

The study has showed that lending interest rates is a not major determinant of the financial performance of commercial banks in Kenya. However, previous studies have indicated lending interest rates are subject to competitive forces in the market. For instance, increased competition in the banking industry will exert a downward pressure on interest rates, thereby reducing banks' financial performance. In this context, commercial banks should diversify their product portfolios by developing alternative revenue streams that are not heavily dependent on interest rates. This will cushion their financial performance from fluctuations in lending interest rates.

Finally, CBK should ensure that all commercial banks use regular interest rates so as to avoid the commercial banks exploiting potential customers by thinking that by increasing the lending interest rates, it will translate to increasing of their financial performance. In addition, the banking sector should focus on monitoring other factors, probably under management, so as to increase their performance financially.

### 5.4 Limitation of the Study

In carrying out this study, a limitation relating to the measurement of financial performance was noted. In this regard, ROA was used to measure the financial performance of commercial banks. However, financial performance could be measured using market ratios such as price earnings ratio, market yield ratio among others. It is possible that if any of those ratios were included in the study, the results would probably be different.

The study was conducted using secondary data derived from the financial statements of the commercial banks; such data has got some limitations since the data may have been subjected to manipulation by management to suit their own needs. In addition, the financial ratios used in the study were generated from financial statements, which had been prepared under different accounting policies hence lack of consistency.

Given the nature of the study, many commercial banks expressed a lot of fear in divulging firsthand information which could have provided a higher degree of accuracy in terms of interest lending rates.

Finally, the study was conducted within the constraint of time and resources hence other issues inherent in study could not be addressed adequately. The researcher further noted that the study made use of data that was not adjusted for the inflation changes.

### 5.5 Suggestions for Further Study

The objective of the study was to establish the relationship between lending interest rates and financial performance (returns on assets) of commercial banks in Kenya This study established a positive relationship between lending interest rates and financial performance of commercial banks. Future studies should endeavor to determine the optimal lending interest rates that do not benefit commercial banks at the expense of borrowers.

There is need for further research to establish the relationship between lending interest rates and financial performance of other financial institutions such as micro-finance institutions and Sacco's. In addition, same research may be conducted using other profitability indices and more independent variables as well as categorizing the banks as per their asset base.

Finally, in the study, lending interest rates were used as the independent variable. Therefore, the researcher suggests that there is need to establish the relationship between the customer deposits and the financial performance of commercial banks in Kenya.

# REFERENCES

Aboagye,Q., Akoena, T., Antwi, A & Gockel A.F. (2008). Explaining Interest Rate Spreads in Ghana, *African Development Review*, 20( 3), 378- 399.

Ahokpossi, C. (2013). Determinants of Bank Interest Margins in Sub-Saharan Africa, *IMF Working Paper* WP/13/34.Washington D.C.: International Monetary Fund.

Beck,T & Hesse, H (2006). Bank Efficiency, Ownership and Market Structure: Why Are Interest Spreads So High in Uganda? *World Bank Policy Research Working Paper 4027*.

Bergen, S. H (2010). Performance of Public Sector Banks in 1994-1995. *IBA Bulletin*, 17(8), 46-48.

Beck, R, Randa, W. & Trandafir, P, (2010). Profitability Management in Commercial Banks: An Exploratory Study. The Business Review- *Journal of the Faculty of Commerce and Management Studies*, (8) 36-49

Ben, H., Casu, B & Sheik F. (2005). Profitability and Interest Rates Differentials in Tunisian Banking. *Working Papers* University of Wales

Bennaceur, S & Goaied, M (2008). The Determinants of Commercial Bank Interest Margin and Profitability: Evidence from Tunisia, *Frontiers in Finance and*

*Economics*, 5(1).

Bosson, B. & Jog L. (2002). In Finance matter. *IMF Working paper* 02/113.

Brock, P. & Franken, H. (2003). Measuring the Determinants of Average and Marginal Bank Interest Rate Spreads in Chile, 1994-2001, *Working Papers* UWEC-2003-25, University of Washington, and Department of Economics.

Central Bank of Kenya (2012). *Bank Supervision Annual Report*, CBK Chou, W. (2000),

Chirwa E. W & Mlachila, M (2004). Financial Reforms and Interest Rate Spreads in the Commercial Banking System in Malaw*i*, *IMF Staff Papers*, 51(1),

Chizea, B. (1994). Finance for Farming*: A Guide to the Lending Banker*; Lagos Institute of Banker, Nigeria

Demirguc, A. & Huizinga, H. (1998). Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence, *World Bank Economic Review*. 13(2), 379-408.

Devereux, M, & Lane. R, (2001). Understanding Bilateral Exchange Rate Volatility, mimeo. *New York* University

Dornbusch, R. & Fisher, S (2003). International Financial Crisis, *Working Paper*, 926.

Entrop, O., Memmel, C., Ruprecht, B. & Wilkens, M. (2012). Determinants of Bank Interest Margins: Impact of Maturity Transformation, Deutsche Bundes. *Bank Discussion Paper* 17.

Flannery, M. J. (1981). Market Interest Rates and Commercial Bank Profitability. An Empirical Investigation, *journal of Finance,* 1085-1101.

Folawewo, A. O & Tennant, D. (2008). Determinants of Interest Rate Spread in Sub-Saharan African Countries*:*A Dynamic Panel Analysis. *A paper prepared for the 13th Annual African Econometrics Society Conference,* 9 – 11 July, 2008, Pretoria, Republic of South Africa

Fisher, I. (1930). The Theory of Interest. *New York:* Macmillan.

Gambacorta, L. (2004). How Banks Set Interest Rates? National Bureau of Economic Research *Working Paper* 10295, Cambridge.

Gardner, M., Mills, D. and Cooper Man, E. (2005). Managing Financial Institution 5th Edition. *McGraw*-Hill Higher Education.

Gertz, G. (2008). Kenya's Trade Liberalization of the 1980s and 1990s: Policies, Impacts, and Implications, *Carnegie Endowment for International Peace,* 8 - 22

Ikhide P. L. (2009). Post-Martem of Financial Performance and Prediction of Future

Earning Capability of a Bank: An Application of CAMEL Rating and Balanced Scorecard. *Indian Journal of Accounting, 34*(1), 8-16

Kamau, J.W. (2008).*Determinants of profitability of microfinance institution in Kenya*.Unpublished MBA project .University of Nairobi.

Keynes, J.M. (1933). *A Tract on Monetary Reform*, London, Macmillan

Kregel, J.A. (1985). Hamlet without the Prince: Cambridge Macroeconomics without Money. *American Economic Review* 75(2): 133–139.

Karfakis, C., & Kim, S.J. (1995). Exchange Rates, Interest Rates and Current Account News: Some Evidence from Australia, *Journal of International Money and Finance*, 14, (4), 575-595.

Kadri, M. (2012). *Determinants of Bank Interest Spread in Estonia*, Tallinn Eesti Pank *Working Paper 1/2012*.

Mahar, M. (1997). Bank Holding Company Risk from 1976-1986 with a Two Factor Model. *Financial Review* 32, 357-72

Margarida, A. & Mendes, V. (2000). What financial systems for the year 2000. Paperback. Principia

Mbai, A. (2006). The Relationship between Interest Rate Risk and Net Interest Income of Commercial Bank Quoted at Nairobi Stock Exchange. *Unpublished*

*MBA project* University of Nairobi.

Moosa, I.A. & Bhatti, R.H. (2010).*The Theory and Empirics of Exchange Rates*. World Scientific Inc, Portland.

Mutai, P. (2010). The Influence of Interest Rates on the Profitability of Commercial Banks. *Unpublished MBA Project*, University of Nairobi.

Musa, K. (2011). The relationship between Interest Rates and Financial Performance of Commercial Banks in Kenya. *Unpublished seminal paper*, University of Nairobi.

Mwega, F, M. & Ndung'u, S. (2008). Explaining African Economic Growth Performance: The Case of Kenya in B. J. Ndulu, S. A. O'Connell, J.-P. Azam, R. H. Bates, A. K. Fosu, J. W. Gunning, & D. Njinkeu, eds, *The Political Economy of Economic Growth in Africa*, 1960-2000. (2): Country Case Studies (Cambridge: CUP): 325-68

Morgan, P. (2008). On Determinants of interest rates of Commercial Banks in Europe International *Journal of Economics and Finance*; 6(1), 76 – 87

Nyachieo, P. M. (2008). The Impact of Changes in Foreign Exchange Rates on Volume of Horticultural Exports in Kenya, *Unpublished MBA Project*, University of Nairobi.

Nyamwange, C. (2009). The Relationship between Real Exchange Rates & International Trade in Kenya *Unpublished MBA Project*, University of Nairobi

Nampewo, D. (2013). What Drives Interest Rate Spreads in Uganda's Banking Sector? *International Journal of Economics and Finance*; 5(1), 76 – 85

Ndung'u, N. & Ngugi, R.W. (2000*).* Banking Sector Interest Rate Spreads in Kenya, KIPPRA *Discussion Paper No. 5.* Nairobi: Kenya Institute for Public Policy Research and Analysis (KIPPRA).

Ngugi, R. (2001). *An Empirical Analysis of Interest Rate Spread in Kenya, AERC Research Paper 106. Nairobi*: African Economic Research Consortium (AERC)

Odhiambo, N. (2009). Impact of Interest Rate Reforms on Financial Deepening and Economic Growth in Kenya, *Journal of Developing Areas*, 43 (1), 295-313

Radha, U. (2011). Analyzing the Sources and Impact of Segmentation in the Banking Sector*: A Case Study of Kenya.* Economics PhD Thesis, Department of Economics, School of Oriental and African Studies (SOAS), University of London.

Salloum, A. & Hayek, J. (2012). Analyzing the Determinants of Commercial Bank Profitability in Lebanon, *International Research Journal of Finance and Economics, Issue. 93*

Sanya, S. & Gaertner, M. (2012). Assessing Bank Competition within the East

African Community, *IMF Working Paper WP 12/32*

Samad, A. (2004). Commercial Banks Performances during 1994-2001.Research Paper University of Tunisia

Siddiqui, M. A. (2012). Towards Determination of Interest Spread of Commercial Banks: Empirical Evidences from Pakistan, *African Journal of Business Management. 6 (5), 1851 – 1862.*

Wambua, J. (2006). The Casual Relationship between Interest Rates & Foreign Exchange Rates in Kenya, *Unpublished MBA Project*, University of Nairobi.

**APPENDIX I**

# List of Commercial Banks in Kenya

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

23 Habib Bank A.G.

24 Habib Bank Ltd

25 Imperial Bank Limited

26 Investments and Mortgages

27 Kenya Commercial Bank Ltd

28 K-Rep Bank

29 Middle East Bank (K) Limited

30 National Bank Of Kenya

31 Nic Bank

32 Oriental Commercial Bank

33 Paramount Universal Bank Ltd

34 Prime Bank Limited

35 Standard Chartered

36 Trans-National Bank

37 Victoria Commercial Bank Ltd

## APPENDIX II

## Lending Interest rates

| | Bank | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | African Banking Corporation | 19.95 | 19.00 | 18.90 | 18.00 | 18.00 | 18.00 | 17.25 | 16.55 |
| 2 | Bank of Africa Kenya Ltd | 19.50 | 19.50 | 19.00 | 18.00 | 18.50 | 17.00 | 16.00 | 17.55 |
| 3 | Bank of Baroda | 19.52 | 18.00 | 18.00 | 16.00 | 17.50 | 16.00 | 15.00 | 14.55 |
| 4 | Bank of India | 18.63 | 16.00 | 16.00 | 15.50 | 16.50 | 15.50 | 13.22 | 14.25 |
| 5 | Barclays Bank of Kenya Limited | 17.00 | 17.50 | 15.00 | 16.00 | 17.41 | 14.00 | 16.00 | 14.68 |
| 6 | Cfc Stanbic Bank | 19.73 | 17.00 | 17.00 | 16.00 | 22.25 | 21.75 | 13.00 | 14.00 |
| 7 | Chase Bank (Kenya) Limited | 20.00 | 18.00 | 18.00 | 16.00 | 16.50 | 18.00 | 13.60 | 14.00 |
| 8 | Citibank N.A. | 19.00 | 19.00 | 18.00 | 17.00 | 17.00 | 18.00 | 16.00 | 15.00 |
| 9 | Commercial Bank of Africa Ltd | 20.00 | 19.00 | 19.00 | 17.00 | 19.00 | 18.00 | 17.00 | 15.55 |
| 10 | Consolidated Bank of Kenya Ltd | 19.50 | 18.50 | 18.50 | 18.00 | 19.00 | 14.00 | 15.50 | 15.50 |
| 11 | Co-Operative Bank | 20.50 | 18.00 | 14.00 | 13.00 | 13.50 | 13.50 | 19.00 | 14.32 |
| 12 | Credit Bank Ltd | 19.50 | 18.00 | 18.00 | 17.00 | 17.00 | 15.00 | 16.00 | 14.00 |
| 13 | Development Bank of Kenya | 20.00 | 19.00 | 18.00 | 17.00 | 17.00 | 16.00 | 15.00 | 15.00 |
| 14 | Diamond Trust Bank | 19.50 | 19.00 | 19.00 | 18.00 | 17.00 | 16.00 | 18.00 | 14.65 |
| 15 | Dubai Bank of Kenya Ltd | 20.00 | 19.00 | 18.00 | 18.00 | 18.00 | 20.00 | 15.00 | 15.00 |
| 16 | Ecobank Kenya Ltd | 20.00 | 18.00 | 17.00 | 18.00 | 18.00 | 18.00 | 17.00 | 17.00 |
| 17 | Equitorial Commercial Bank Ltd | 17.00 | 15.00 | 11.00 | 11.00 | 14.00 | 11.00 | 12.20 | 13.00 |
| 18 | Equity Bank | 20.50 | 18.00 | 17.00 | 15.00 | 18.00 | 15.00 | 18.00 | 18.00 |
| 19 | Fidelity Commercial Bank | 18.50 | 16.00 | 16.00 | 14.00 | 16.00 | 15.00 | 14.00 | 14.00 |
| 20 | Fina Bank | 18.00 | 14.00 | 14.00 | 13.00 | 14.00 | 15.00 | 16.00 | 16.00 |
| 21 | Giro Bank Ltd | 17.00 | 17.00 | 17.00 | 16.00 | 16.00 | 15.00 | 14.30 | 14.00 |
| 22 | Guardian Bank | 18.00 | 18.00 | 18.00 | 17.00 | 17.00 | 15.00 | 16.00 | 15.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 23 | Habib Bank A.G. | 19.00 | 18.50 | 17.00 | 18.00 | 20.00 | 16.00 | 13.40 | 12.00 |
| 24 | Habib Bank Ltd | 19.00 | 18.00 | 17.00 | 17.00 | 16.00 | 16.00 | 16.00 | 14.50 |
| 25 | Imperial Bank Limited | 20.00 | 18.50 | 18.00 | 17.00 | 14.00 | 16.00 | 16.00 | 14.00 |
| 26 | Investments and Mortgages | 17.00 | 15.00 | 14.00 | 14.00 | 15.00 | 14.00 | 13.50 | 13.00 |
| 27 | Kenya Commercial Bank Ltd | 25.08 | 19.08 | 17.13 | 18.00 | 16.25 | 15.00 | 17.63 | 18.50 |
| 28 | K-Rep Bank | 17.00 | 15.00 | 14.00 | 14.00 | 21.00 | 16.00 | 16.00 | 15.00 |
| 29 | Middle East Bank (K) Limited | 19.00 | 18.00 | 17.00 | 17.00 | 18.00 | 18.00 | 17.00 | 17.00 |
| 30 | National Bank Of Kenya | 18.55 | 15.00 | 14.00 | 14.00 | 15.00 | 15.00 | 14.00 | 14.00 |
| 31 | Nic Bank | 19.00 | 19.00 | 19.00 | 18.00 | 20.00 | 17.00 | 17.00 | 17.00 |
| 32 | Oriental Commercial Bank | 19.62 | 19.00 | 18.00 | 17.00 | 16.00 | 16.00 | 15.00 | 15.00 |
| 33 | Paramount Universal Bank Ltd | 19.00 | 18.00 | 18.00 | 16.00 | 17.00 | 15.00 | 15.00 | 14.00 |
| 34 | Prime Bank Limited | 18.95 | 17.55 | 17.00 | 17.00 | 16.00 | 15.00 | 16.00 | 16.00 |
| 35 | Standard Chartered | 19.50 | 18.00 | 18.00 | 18.78 | 18.00 | 19.00 | 17.00 | 16.00 |
| 36 | Trans-National Bank | 18.00 | 18.36 | 18.00 | 17.00 | 17.75 | 15.00 | 14.00 | 14.00 |
| 37 | Victoria Commercial Bank Ltd | 17.00 | 16.00 | 15.00 | 13.50 | 15.25 | 13.50 | 13.85 | 12.20 |

**APPENDIX III**

## Return on Asset (%)

| | BANK | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | African Banking Corporation | 2.22 | 2.94 | 3.25 | 1.15 | 2.38 | 2.19 | - | - |
| 2 | Bank of Africa Kenya Ltd | 0.97 | 1.12 | 1.33 | 1.14 | 1.16 | 1.51 | 0.81 | - |
| 3 | Bank of Baroda | 2.98 | 3.72 | 4.31 | 2.39 | 2.36 | 2.47 | - | - |
| 4 | Bank of India | 0.52 | 3.28 | 2.28 | 2.60 | 3.13 | 2.80 | - | - |
| 5 | Barclays Bank of Kenya Limited | 4.73 | 4.83 | 6.15 | 3.69 | 3.28 | 3.11 | 3.82 | 3.58 |
| 6 | Cfc Stanbic Bank | 2.10 | 1.09 | 1.00 | 0.03 | 0.76 | 2.14 | 2.33 | 1.67 |
| 7 | Chase Bank (Kenya) Limited | 1.84 | 1.65 | 1.74 | 1.62 | 1.64 | 2.19 | 1.89 | 17.43 |
| 8 | Citibank N.A. | 6.36 | 3.94 | 2.79 | 3.62 | 3.94 | 2.21 | 2.38 | 2.42 |
| 9 | Commercial Bank of Africa Ltd | 2.64 | 1.76 | 2.94 | 2.13 | 2.56 | 2.51 | - | - |
| 10 | Consolidated Bank of Kenya Ltd | 0.77 | 0.98 | 1.69 | 1.17 | 2.07 | 0.63 | 0.47 | (0.41) |
| 11 | Co-Operative Bank | 3.84 | 3.09 | 2.84 | 2.68 | 2.84 | 2.37 | 1.50 | 0.86 |
| 12 | Credit Bank Ltd | 1.09 | 0.87 | 0.75 | 1.58 | 1.49 | 1.89 | 2.43 | 2.23 |
| 13 | Development Bank of Kenya | 0.54 | 0.94 | 1.50 | 1.66 | 1.84 | 2.36 | 2.66 | 4.21 |
| 14 | Diamond Trust Bank | 3.25 | 2.90 | 2.97 | 2.03 | 2.18 | 1.97 | 2.24 | 1.80 |
| 15 | Dubai Bank of Kenya Ltd | (0.89) | 0.61 | 0.10 | 0.17 | 0.20 | 0.38 | 0.90 | 1.17 |
| 16 | Ecobank Kenya Ltd | (4.83) | (2.38) | 0.47 | 5.71 | 0.66 | 1.25 | 2.46 | 2.32 |
| 17 | Equitorial Commercial Bank Ltd | (3.42) | 0.56 | 0.65 | 1.15 | 0.13 | 1.09 | 1.60 | 1.93 |
| 18 | Equity Bank | 5.10 | 5.52 | 5.64 | 4.73 | 4.87 | 3.56 | 3.77 | 3.01 |
| 19 | Fidelity Commercial Bank | 0.86 | 2.79 | 3.31 | 0.88 | 0.37 | 1.98 | 0.79 | 0.13 |
| 20 | Fina Bank | 1.85 | 1.37 | 0.64 | 0.60 | 0.44 | 0.98 | 0.16 | 0.98 |
| 21 | Giro Bank Ltd | 1.84 | 2.54 | 5.02 | 2.15 | 1.35 | 0.58 | 0.84 | 0.09 |
| 22 | Guardian Bank | 1.31 | 1.32 | 0.94 | 0.57 | 0.53 | 3.07 | 0.69 | 0.88 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 23 | Habib Bank A.G. | 2.58 | 1.86 | 1.96 | 2.51 | 2.40 | 2.17 | 2.00 | 2.00 |
| 24 | Habib Bank Ltd | 1.95 | 1.76 | 1.76 | 1.50 | 2.19 | 1.96 | 0.62 | 0.51 |
| 25 | Imperial Bank Limited | 3.69 | 4.39 | 4.58 | 3.62 | 3.47 | 3.21 | 2.90 | 2.64 |
| 26 | Investments and Mortgages | 3.67 | 4.02 | 2.37 | 3.91 | 3.05 | 3.00 | 2.90 | 1.91 |
| 27 | Kenya Commercial Bank Ltd | 3.65 | 3.48 | 3.95 | 2.71 | 2.18 | 1.03 | 0.81 | 1.69 |
| 28 | K-Rep Bank | 2.05 | 0.66 | 1.86 | 1.85 | (4.26) | 1.86 | 1.93 | 0.80 |
| 29 | Middle East Bank (K) Limited | 0.76 | 2.03 | 3.50 | 2.01 | 0.55 | 1.92 | 1.95 | 2.01 |
| 30 | National Bank Of Kenya | 1.06 | 2.28 | 3.37 | 2.85 | 2.91 | 2.70 | 1.73 | 1.84 |
| 31 | Nic Bank | 2.80 | 3.43 | 3.16 | 2.28 | 2.43 | 2.38 | 2.21 | 1.11 |
| 32 | Oriental Commercial Bank | 1.52 | 3.02 | 3.42 | 1.25 | 2.12 | 6.97 | (3.42) | (3.80) |
| 33 | Paramount Universal Bank Ltd | 1.52 | 2.13 | 5.71 | 1.11 | 1.39 | 1.28 | 0.98 | 0.53 |
| 34 | Prime Bank Limited | 2.20 | 2.37 | 1.87 | 1.70 | 1.66 | 1.72 | 1.32 | 1.23 |
| 35 | Standard Chartered | 4.13 | 3.56 | 3.77 | 3.82 | 3.28 | 3.81 | 3.25 | 3.37 |
| 36 | Trans-National Bank | 2.42 | 2.78 | 2.99 | 2.68 | 3.88 | 5.91 | 2.43 | 1.86 |
| 37 | Victoria Commercial Bank Ltd | 3.40 | 3.01 | 3.46 | 2.93 | 2.62 | 2.55 | 2.07 | 2.02 |

## APPENDIX IV

### Total Asset

| | BANK | TOTAL ASSET | TOTAL ASSET | TOTAL ASSET | TOTAL ASSET | TOTAL ASSET | TOTAL ASSET | TOTAL ASSET | TOTAL ASSET |
|---|---|---|---|---|---|---|---|---|---|
| | | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 |
| | | Ksh'000' | Ksh'000' | Ksh'000' | Ksh'000' | Ksh'000' | Ksh'000' | Ksh'000' | Ksh'000' |
| 1 | African Banking Corporation | 19,070,779 | 12,566,087 | 10,348,739 | 25,518,315 | 6,583,687 | 6,142,940 | - | - |
| 2 | Bank of Africa Kenya Ltd | 48,957,925 | 38,734,220 | 26,699,124 | 16,919,962 | 18,758,591 | 7,657,010 | 6,488,089 | - |
| 3 | Bank of Baroda | 46,137,777 | 36,700,797 | 32,331,505 | 21,939,617 | 18,360,677 | 14,758,785 | - | - |
| 4 | Bank of India | 23,035,423 | 23,352,157 | 16,731,370 | 15,394,571 | 12,049,149 | 10,344,261 | - | - |
| 5 | Barclays Bank of Kenya Limited | 184,825,000 | 167,029,000 | 172,415,000 | 164,876,000 | 168,510,000 | 157,656,000 | 117,722,000 | 104,226,000 |
| 6 | Cfc Stanbic Bank | 143,212,155 | 150,171,015 | 140,080,202 | 127,690,950 | 111,128,799 | 43,262,781 | 40,368,662 | 33,095,280 |
| 7 | Chase Bank (Kenya) Limited | 49,105,498 | 36,449,609 | 21,858,603 | 12,969,712 | 10,300,395 | 5,776,343 | 4,122,536 | 2,612,946 |
| 8 | Citibank N.A. | 69,579,795 | 74,646,417 | 62,069,592 | 51,371,890 | 47,534,569 | 47,300,670 | 37,794,280 | 30,927,848 |
| 9 | Commercial Bank of Africa Ltd | 118,300,651 | 94,771,471 | 63,591,642 | 57,628,290 | 50,110,401 | 39,508,635 | - | - |
| 10 | Consolidated Bank of Kenya Ltd | 18,000,858 | 15,318,148 | 10,204,682 | 6,898,919 | 4,656,792 | 4,108,814 | 3,437,096 | 2,915,578 |
| 11 | Co-Operative Bank | 200,886,582 | 167,772,390 | 153,983,533 | 110,678,091 | 83,485,855 | 65,324,205 | 57,688,384 | 51,832,473 |
| | Credit Bank Ltd | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | | 6,407,485 | 5,394,064 | 4,530,094 | 3,664,947 | 3,636,674 | 3,357,535 | 2,609,744 | 2,798,158 |
| 13 | Development Bank of Kenya | 13,417,095 | 11,523,037 | 10,649,758 | 8,135,934 | 6,520,212 | 4,707,518 | 3,297,116 | 2,745,225 |
| 14 | Diamond Trust Bank | 94,511,818 | 77,447,778 | 83,600,177 | 66,679,080 | 41,592,049 | 30,313,363 | 21,737,391 | 16,384,422 |
| 15 | Dubai Bank of Kenya Ltd | 2,584,333 | 2,316,000 | 1,874,268 | 1,596,398 | 1,639,146 | 1,543,883 | 1,247,760 | 1,152,456 |
| 16 | Ecobank Kenya Ltd | 31,771,339 | 27,210,496 | 26,892,183 | 13,949,401 | 10,498,916 | 9,426,272 | 3,503,739 | 2,199,230 |
| 17 | Equatorial Commercial Bank Ltd | 14,108,996 | 12,926,902 | 10,404,500 | 4,461,421 | 4,410,436 | 4,878,587 | 3,962,389 | 3,671,178 |
| 18 | Equity Bank | 215,829,000 | 176,911,000 | 133,890,000 | 96,512,000 | 77,135,000 | 53,076,000 | 20,024,000 | 11,456,543 |
| 19 | Fidelity Commercial Bank | 11,772,118 | 10,789,498 | 8,208,537 | 5,498,596 | 4,333,612 | 3,237,636 | 2,316,367 | 1,666,557 |
| 20 | Fina Bank | 25,263,399 | 22,645,013 | 20,943,933 | 18,331,250 | 14,366,249 | 11,623,247 | 65,501,853 | 6,236,230 |
| 21 | Giro Bank Ltd | 12,279,809 | 11,846,372 | 10,233,964 | 6,914,485 | 5,937,715 | 5,611,124 | 5,098,323 | 4,926,194 |
| 22 | Guardian Bank | 11,745,363 | 8,836,279 | 8,031,214 | 6,777,889 | 5,558,014 | 5,539,643 | 4,916,914 | 4,451,405 |
| 23 | Habib Bank A.G. | 9,702,223 | 8,721,781 | 8,127,135 | 7,339,320 | 6,557,388 | 6,205,576 | 5,322,970 | 4,742,630 |
| 24 | Habib Bank Ltd | 11,827,733 | 9,862,088 | 10,358,320 | 9,588,500 | 4,490,763 | 3,845,212 | 2,963,256 | 2,890,003 |
| 25 | Imperial Bank Limited | 38,048,610 | 27,278,183 | 19,322,415 | 15,358,108 | 13,431,704 | 11,723,137 | 9,405,838 | 7,773,091 |
| 26 | Investments and Mortgages Bank | 91,519,623 | 76,903,271 | 86,882,153 | 54,434,467 | 36,655,878 | 29,420,098 | 22,348,245 | 18,046,278 |
| 27 | Kenya Commercial Bank Ltd | 304,112,307 | 282,493,553 | 223,024,556 | 168,223,215 | 174,711,564 | 112,210,660 | 143,461,112 | 78,315,052 |
| 28 | K-Rep Bank | 9,546,050 | 7,670,049 | 9,318,715 | 8,494,382 | 8,184,063 | 7,038,807 | 5,220,245 | 3,800,482 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **29** | Middle East Bank (K) Limited | 5,869,715 | 4,639,160 | 4,018,428 | 4,328,794 | 3,297,200 | 3,097,412 | 4,051,330 | 3,401,481 |
| **30** | National Bank Of Kenya | 68,664,516 | 68,664,516 | 60,026,694 | 51,404,408 | 42,695,700 | 41,414,272 | 36,122,843 | 32,583,569 |
| 31 | Nic Bank | 108,348,593 | 78,984,005 | 59,013,922 | 47,558,241 | 42,619,119 | 31,281,018 | 20,699,868 | 26,062,413 |
| 32 | Oriental Commercial Bank | 6,219,906 | 5,030,089 | 4,558,349 | 3,052,314 | 2,289,129 | 1,771,750 | 1,449,372 | 1,376,134 |
| 33 | Paramount Universal Bank Ltd | 7,254,561 | 4,727,237 | 4,419,806 | 3,100,351 | 2,645,836 | 2,366,526 | 2,196,892 | 1,493,646 |
| 34 | Prime Bank Limited | 43,462,888 | 35,184,677 | 32,444,424 | 23,699,952 | 19,944,574 | 13,861,817 | 10,452,332 | 7,153,773 |
| 35 | Standard Chartered | 195,352,756 | 164,046,624 | 142,746,249 | 123,778,972 | 99,019,571 | 91,121,942 | 81,014,123 | 72,841,617 |
| 36 | Trans-National Bank | 8,801,382 | 7,286,906 | 4,761,852 | 3,364,458 | 3,414,488 | 3,220,661 | 2,566,225 | 2,035,225 |
| 37 | Victoria Commercial Bank Ltd | 10,322,819 | 7,645,235 | 6,215,384 | 5,130,103 | 4,460,174 | 4,130,763 | 4,284,013 | 4,212,221 |

## APPENDIX V

## Net Income after Tax

| | BANK | NET INCOME AFTER TAX | NET INCOME AFTER TAX | NET INCOME AFTER TAX | NET INCOME AFTER TAX | NET INCOME AFTER TAX | NET INCOME AFTER TAX | NET INCOME AFTER TAX | NET INCOME AFTER TAX |
|---|---|---|---|---|---|---|---|---|---|
| | | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 | 2005 |
| | | Ksh '000' | Ksh '000' | Ksh '000' | Ksh '000' | Ksh '000' | Ksh '000' | Ksh '000' | Ksh '000' |
| 1 | African Banking Corporation | 423,883 | 369,966 | 336,566 | 293,054 | 156,626 | 134,402 | - | - |
| 2 | Bank of Africa Kenya Ltd | 473,743 | 432,725 | 355,258 | 192,439 | 218,349 | 115,869 | 52,625 | - |
| 3 | Bank of Baroda | 1,376,100 | 1,363,881 | 1,393,402 | 524,196 | 433,657 | 364,569 | - | - |
| 4 | Bank of India | 120,126 | 765,862 | 381,363 | 400,199 | 377,593 | 289,291 | - | - |
| 5 | Barclays Bank of Kenya Limited | 8,741,000 | 8,073,000 | 10,599,000 | 6,091,000 | 5,525,000 | 4,910,000 | 4,492,000 | 3,729,000 |
| 6 | Cfc Stanbic Bank | 3,009,891 | 1,639,157 | 1,407,643 | 35,928 | 846,593 | 924,717 | 940,140 | 552,491 |
| 7 | Chase Bank (Kenya) Limited | 904,370 | 602,246 | 381,393 | 210,514 | 169,185 | 126,222 | 78,079 | 455,519 |
| 8 | Citibank N.A. | 4,428,587 | 2,942,221 | 1,731,114 | 1,857,870 | 1,874,901 | 1,044,195 | 899,877 | 747,276 |
| 9 | Commercial Bank of Africa Ltd | 3,123,257 | 1,671,824 | 1,870,873 | 1,226,199 | 1,280,973 | 991,511 | 903,043 | 511,413 |
| 10 | Consolidated Bank of Kenya Ltd | 139,249 | 149,824 | 172,478 | 80,938 | 96,223 | 25,821 | 16,263 | (11,862) |
| 11 | Co-Operative Bank | 7,723,858 | 5,186,343 | 4,379,230 | 2,967,962 | 2,373,936 | 1,549,606 | 866,512 | 446,134 |
| | | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12 | Credit Bank Ltd | 69,669 | 47,074 | 33,791 | 57,803 | 54,049 | 63,380 | 63,380 | 62,280 |
| 13 | Development Bank of Kenya | 71,952 | 108,073 | 160,222 | 134,894 | 119,688 | 111,172 | 87,578 | 115,624 |
| 14 | Diamond Trust Bank | 3,068,693 | 2,246,891 | 2,482,170 | 1,354,435 | 905,119 | 598,300 | 487,830 | 294,598 |
| 15 | Dubai Bank of Kenya Ltd | (23,040) | 14,166 | 1,849 | 2,677 | 3,239 | 5,915 | 11,236 | 13,512 |
| 16 | Ecobank Kenya Ltd | (1,533,789) | (646,254) | 125,122 | 796,261 | 68,920 | 118,173 | 86,365 | 50,939 |
| 17 | Equatorial Commercial Bank Ltd | (481,940) | 72,341 | 68,064 | 51,306 | 5,707 | 53,219 | 63,307 | 71,017 |
| 18 | Equity Bank | 10,997,000 | 9,774,000 | 7,555,000 | 4,563,000 | 3,753,000 | 1,890,000 | 754,000 | 344,598 |
| 19 | Fidelity Commercial Bank | 101,627 | 301,515 | 271,779 | 48,148 | 16,121 | 64,216 | 18,218 | 2,212 |
| 20 | Fina Bank | 466,705 | 311,033 | 134,073 | 109,426 | 63,158 | 113,459 | 101,729 | 61,027 |
| 21 | Giro Bank Ltd | 226,360 | 301,096 | 513,763 | 148,887 | 80,157 | 32,589 | 42,646 | 4,244 |
| 22 | Guardian Bank | 153,610 | 116,606 | 75,233 | 38,351 | 29,493 | 170,180 | 34,018 | 39,064 |
| 23 | Habib Bank A.G. | 250,025 | 162,152 | 159,415 | 184,068 | 157,487 | 134,574 | 106,671 | 95,064 |
| 24 | Habib Bank Ltd | 230,604 | 173,582 | 182,318 | 143,615 | 98,216 | 75,286 | 18,396 | 14,869 |
| 25 | Imperial Bank Limited | 1,403,302 | 1,197,383 | 885,246 | 555,878 | 465,687 | 376,009 | 272,505 | 205,540 |
| 26 | Investments and Mortgages | 3,362,893 | 3,094,618 | 2,057,499 | 2,130,395 | 1,119,093 | 882,852 | 648,898 | 345,520 |
| 27 | Kenya Commercial Bank Ltd | 11,089,839 | 9,838,337 | 8,818,860 | 4,552,679 | 3,811,485 | 1,156,333 | 1,156,333 | 1,326,027 |
| 28 | K-Rep Bank | 196,078 | 50,639 | 173,366 | 156,726 | (348,569) | 130,815 | 100,912 | 30,489 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 29 | Middle East Bank (K) Limited | 44,342 | 94,196 | 140,709 | 87,000 | 17,994 | 59,359 | 78,860 | 68,247 |
| 30 | National Bank Of Kenya | 729,752 | 1,564,113 | 2,021,919 | 1,462,955 | 1,240,610 | 1,119,396 | 624,496 | 598,544 |
| 31 | Nic Bank | 3,036,794 | 2,707,137 | 1,863,918 | 1,085,718 | 1,037,681 | 745,687 | 458,004 | 288,334 |
| 32 | Oriental Commercial Bank | 94,468 | 152,003 | 155,769 | 38,210 | 48,526 | 123,411 | (49,578) | (52,270) |
| 33 | Paramount Universal Bank Ltd | 110,247 | 100,470 | 252,245 | 34,367 | 36,725 | 30,204 | 21,520 | 7,910 |
| 34 | Prime Bank Limited | 954,719 | 834,424 | 606,413 | 404,078 | 330,347 | 238,865 | 138,052 | 87,675 |
| 35 | Standard Chartered | 8,069,533 | 5,836,821 | 5,376,191 | 4,732,754 | 3,250,813 | 3,469,877 | 2,634,300 | 2,452,174 |
| 36 | Trans-National Bank | 213,393 | 202,580 | 142,342 | 90,156 | 132,413 | 190,493 | 62,395 | 37,901 |
| 37 | Victoria Commercial Bank Ltd | 350,532 | 230,250 | 214,774 | 150,469 | 116,815 | 105,396 | 88,855 | 85,002 |