

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

BY

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DECLARATION

This management research project is my original work and has not been submitted for a degree in any other university.

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

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DEDICATION

To my parents who sacrificed greatly to start me out in life with an education that did lay the foundation and the desire in my heart to achieve.

To my wife Lilian and my son Victor who have remained sources of inspiration for everything I set out to achieve.

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LIST OF ABBREVIATIONS

CBK	:	Central Bank of Kenya
P/E	:	Price Earnings Ratio
NSE	:	Nairobi Stock Exchange
ROE	:	Return on Equity
ROI	:	Return on Investment
SAP	:	Structural Adjustment Programme
SPSS	:	Statistical Package of Social Sciences

ABSTRACT

This study set out with an objective of establishing the relationship between interest rates and financial performance of commercial banks in Kenya. To achieve the objective of the study regression models were developed using financial performance as the independent variable and interest rates as dependent variables. In the model ROE was defined as the profitability indicator. Secondary data was collected from published reports for a period of five years between 2006 and 2010.

The findings and analysis reveal that interest rates have an effect on financial performance of commercial banks in Kenya. The study used regression analysis to establish the relationship between interest rates and ROE. The results obtained from the regression model shows that there is a positive relationship between interest rates and financial performance of commercial banks in Kenya. Banks should therefore prudently manage there interest rates to improve their financial performance.

The analysis shows that the effect of interest rates on profitability is not significant in the short term for all the banks. In view of this the other factors which influence profitability needs to be enhanced to improve the financial performance of commercial banks in Kenya.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

1.1.1 Interest Rates

Interest rates represent the cost of borrowing capital for a given period of time. Price changes are anticipated in the real world and these expectations are part of the process that determines interest rates (Gardner and Cooperman, 2005).

Before the implementation of the structural adjustment programme (SAP) in 1983 the financial sector in Kenya suffered from severe repression. Interest rates were maintained below the market rates and direct control of credit was the primary monetary control instrument of the authorities (Naude, 1995). Uncompetitive banking systems, inadequate regulatory framework and borrowers that are insensitive to interest rates undermine the efficiency of market based credit allocation. Accompanying the SAP, interest rates deregulation took place in 1991. The Kenyan government adopted the CBK amendment act (commonly called the Donde Act) in 2001. The act allows CBK to regulate interest rates.

Interest rate influences the overall level of economic activity, flow of goods and services and financial assets within the economy (Saunders, 1999). The major determinants of interest rates include; expected inflation rates, level of government borrowing and efficiency of the banking sector.

It is widely believed that fluctuations of market interest rates exert significant influence on the performance of commercial banks. According to Samuelson (1945), under general conditions, bank profits increase with rising interest rates. He argued that the banking system as a whole is immeasurably helped rather than hindered by an increase in interest rates. A more accurate measurement of how fluctuations in market interest rates affect banking firms largely depends on the sensitivity of banks' assets and liabilities (interest

rates and volume) toward variations in open market rates.

The pace of change from a high-transaction cost, centrally planned economy, to a low-transaction cost, market-oriented economy, involves a complex process of adjustment to efficient rules. In an analysis of the portfolio mechanism of money growth and capital formation, an increase in the rate of inflation would lower the rate of return of fiat money relative to that of capital, thereby increasing capital and increasing real output. The seminal works of McKinnon (1973) and Shaw (1973) argue that high real interest rates tend to encourage savings, whilst savings determine investment. Interest rate liberalization and low inflation can therefore promote capital accumulation and economic growth in less developed countries.

1.1.2 Financial Performance Measures

Performance is the ability to sustain income stability and growth. A profitable banking sector is better able to withstand negative shocks and contribute to the stability of the financial systems.

Financial measures are expressed in monetary units. The techniques widely used for analytical purposes include; ratio analysis, trend analysis and cross sectional analysis. A ratio is a mathematical expression of an amount in terms of another. Chandra (2005) noted that ratio analysis gives an objective picture of a company's financial performance because ratios eliminate the size effect. Two different firms whose sizes differ can be compared. According to Winfield and Curry (1994), computation of financial ratios can be grouped into five broad categories namely; liquidity, leverage, turnover, profitability and valuation ratios.

The study utilized profitability ratio to analyze financial performance of commercial banks in Kenya. Profitability ratios consist of tests used to evaluate a firms earning performance. The major types of profitability ratios are calculated in relation to sales and investments. Profitability in relation to sales ratios includes; gross profit margin, net profit margin, contribution ratio, operating expenses ratio while profitability in relation to investments includes; return on investments, return on equity (ROE) and return on total

assets.

According to Musundi (2008), a bank can expand its customer deposits in terms of demand deposit and time deposit savings to strengthen its financial base, increase its earnings and ultimate market share. Magman (1997), concludes that two measures captures bank performances; return on assets which is the ratio of net earnings available to common stock holders divided by average annual assets and stock market returns which affect year end stock prices plus annual dividends divided by prior year end stock prices.

The potential impact of interest rates on commercial banks financial performance has long been a concern for policy makers and bankers. Banks have been traditionally viewed to borrow short and lend on long term. Banks engage in financial intermediation activities such that the maturity structure of their assets may exceed the maturity structure of their liabilities. Banks earning therefore are affected by unanticipated changes in interest rates. The exposure of banks profitability and net worth to unanticipated changes in interest rates is what is meant by the term interest rates risk (Robinson, 1995).

1.1.3 Commercial Banks in Kenya.

Commercial banks in Kenya dates back to 1896 when the predecessor of the current Kenya commercial bank, the National Bank of India opened an outlet in Mombasa. Eight years later in 1904, the Bank extended its operations to Nairobi. As per the CBK annual reports (2008) as at the end of 2008 the banking sector comprised of 45 financial institutions. The sector experienced rapid expansion with the branch network increasing by 44.6%.

According to Thygerson (1995), commercial banks perform the role of servicing and portfolio risk management. Commercial banks in Kenya among other roles act as intermediaries between savers and borrowers, provide investment opportunities for savers and provide savers with experts in financial management.

The activities of commercial banks are regulated and supervised by the CBK. However

despite the government efforts to streamline the banking sector by introducing statutory regulations measures which include capital adequacy measures, creation of deposit protection fund more banks have been put under receivership or even collapsed due to their financial performances.

Lending and deposit rates are important variables for commercial banks in Kenya. If this spread is large, it works as an impediment to the expansion and development of financial intermediation. This is because it discourages potential savers due to low returns on deposits and thus limits financing for potential borrowers. This has the economy-wide effect of reducing feasible investment opportunities and thus limiting future growth potential (Shaw, 1973).

The stochastic behavior of market rates is also a significant factor that determines the way banks adopt in delivering their services. Desmukh et al (1983), showed that in a volatile interest rate environment, banks minimize their risk exposure by performing the role of brokers, merely matching the arrival of assets and liabilities. The impact of variations in market interest rates on banks' profitability is ambiguous; it largely depends on the degree of responses of asset and liability rates. Since both sides of banks' balance sheets are affected by market interest rates in a parallel fashion, the net impact on banks' profitability can be deduced by tracing the responses of both assets and liabilities as market interest rates changes.

1.2 Statement of the Problem

Interest rates determine the profitability of a commercial bank among other factors (Gardner et al 2005). High interest rates have remained a macroeconomic problem that has been difficult to eliminate. Economic observers and academicians in Kenya have pointed out that high interest rates are regressive to the economic development of the country. The central bank of Kenya (CBK) has attempted to correct the situation but the policy definition and design has not been appropriately designed (Ochieng, 1999).

Commercial banks derive income primarily from the lending and the securities portfolio. Loans form a larger portion of assets of a bank; this implies that interest and fees on

loans are more important sources of their income, when profit margin is threatened banks sustain a widening spread. To handle the credit risk due to distress borrowings and poor macro-economic conditions banks charge a higher premium on their interest rates. According to Doran (2004) commercial banks accept deposits and issue loans with different maturity and at different interest rates.

Various studies have been performed investigating interest rates and profitability in advanced economies. Flannery (1983), found a negative relation between the bank interest rates and bank net asset position. Bosson and Jog-kun (2002), however found out that profitability of Ghanaian banks is skewed towards large banks and that there is correlation between bank size and profitability. Other studies include (Robinson,1995; Wright and Houpt, 1996) who examined the extent of banks exposure to interest rates risk.

In Kenya there has been an extensive research on the area of interest rates and profitability. Ochieng (1999) in a study of the relationship between deposit portfolios and profitability found a very strong correlation between various deposits categories and bank performance. Mbai (2006) found out that proper interest rate management reduced bank exposure to risk and provides an opportunity to stabilize and improve their net income.

Kathanje (2000) on his study on the financial performance before and after liberalization found out that the performance of banks improved during the post liberalization period. Musyoki (2003) compared quality improvement with financial performance and found weak evidence that quality improvement enhance financial performance.

Ndungu (2003) carried out a study on the determinants of profits for quoted commercial banks in Kenya. The findings revealed that sound asset and liability management were found to have a significant influence on profitability. According to Matu (2001) the poor performance of commercial banks puts pressure on them to retain high lending rates in an attempt to minimize the losses associated with these loans.

Njihia (2005) found out that the loan component have a significant effect on quoted

commercial banks profit. Musundi (2008) also noted that profits have a strong positive relationship with bank loans. High risk borrowers and long term investments tend to earn banks higher returns. However Bett (1992) found out that banks lend to their major big borrowers because they fear that if they fail the bank will follow suit and high risk operators at a higher interest rates who were unable to pay and thus lowers the banks profit. Obiero (2002) observed that between 1984 and 2001 there were 39 financial institutions which failed, of the 39 institution 14 failed partly because of high levels of nonperforming loans.

While the above research outcomes provide valuable insights on interest rates and financial performance they only provide partial insight on the relationship between interest rates and financial performance. Due to the controversies which the above findings presented it became imperative to study the relationship between interest rates and financial performance in Kenya. The study therefore was aimed to establish the relationship between interest rates and financial performance within the banking industry in Kenya.

1.3 Objective of the Study

The objective of the study was to establish the relationship between interest rates and financial performance of commercial banks in Kenya.

1.4 Importance of the Study

Commercial Banks

The banking industry, especially decision makers involved in implementing interest rates for their banks will draw inference in developing mechanism and policies to take advantage of interest rates in the market.

The Government

The government policy makers will obtain information and an understanding of the behavior of interest rates and its impact on performance which enables them come up

with appropriate policies and formulate legal frameworks that encourage market growth by protecting depositors, borrowers as well as shareholders.

Management Consultants

The study provides information and advice on the possible opportunities that consultants can use to expand the knowledge on interest rates and its relationship with financial performance for the development of the commercial banks.

Researchers

It highlights areas for further research and also contributes to the body of knowledge. It is of value to researchers as a basis for future empirical research.

Central Bank

Being the regulator of operations of commercial banks, the study informs the CBK in formulation of policies geared towards regulation of interest rates in the banking sector.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter looks into the development of interest rates from both the banking and non banking perspective. It also explores on the various studies that have been carried out on the topic of interest rates and financial performance.

2.2 Interest Rates

Interest is the "rent" paid to borrow money. The lender receives a compensation for foregoing other uses of their funds, including (for example) deferring their own consumption. The original amount lent is called the "principal," and the percentage of the principal which is paid or is payable over a period of time is the "interest rate." (Thygersson, 1995)

According to Saunders, (1999) an interest rate is a price, and like any other price, it relates to a transaction or the transfer of a good or service between a buyer and a seller. This special type of transaction is a loan or credit transaction, involving a supplier of surplus funds, i.e., a lender or saver, and a demander of surplus funds, i.e., a borrower.

Interest was used in the study to relate to additional money received as payment for a loan that is calculated as a fraction of the amount borrowed and is used to make a profit from the transaction.

2.3 Interest Rate Theories

2.3.1 Expectations Theory

This theory is based on the expectations that people will have in regard to future conditions. If investors expect future interest rates to be high, they will prefer to hold long term securities and if the vice versa is true, they will prefer short term securities. Other expectations that will influence securities demand will include expectations

on political conditions, expected inflation levels, among others. Investors expecting higher short-term interest rates are more likely to buy bonds maturing in the short term. If they were to invest money into a long term debt they might not be able to make as much interest (Auerbach, 1988).

The theory was developed by Professor Lutz and is based on the assumptions that investors have perfect knowledge about the future short term interest rates, there are no taxes or other costs involved in holding or trading and investors are assumed to be profit maximizers. With these assumptions the theory comes to the conclusion that a long term interest rate is an average of the expected future rates on short term bonds. Ignoring the compound interest factor this average will be a simple average. If the long term rate of interest is an average of the short term rates of interest, if the short term interest rates rise the average will also rise and the long term interest will also rise. Thus the long term rate always moves in the same direction in which short term rates move. However the fluctuations in the long term rate will be lower than the fluctuations in the short term rates.

2.3.2 Liquidity Preference Theory

According to this theory, investors will always prefer short term securities to long term securities. To encourage them hold long term bonds, long term securities should yield higher interests than short term bonds. Therefore, the yield curve will always be upward sloping.

It is based on the observation that, all else being equal, people prefer to hold on to cash (liquidity) and that they will demand a premium for investing in non-liquid assets such as bonds, stocks, and real estate. The theory suggests that the premium demanded for parting with cash increases as the period (term) for getting the cash back increases. The rate in the increase of this premium, however, slows down with the increase in the period for getting the cash back. In the language of financial trading, this theory is expressed as "forward rates should exceed the future spot rates" (Auerbach, 1988).

2.3.3 Market Segmentation Theory

As per this theory long term and short term security markets are independent and there is no causal relationship. Supply and demand forces in different maturity segments of market determine rate for that particular segment. The yield curve is constructed by connecting the equilibrium points" (Auerbach, 1988).

This theory asserts that securities of different maturities are poor substitutes for one another. According to Lloyds, (1979) this is true from the point of view of both lenders and borrowers. Given the institutional factors that determine the segment of the maturity spectrum in which buyers and sellers of security will operate there exist restrictions on the degree of substitutability among securities of different maturity.

2.4 Factors Influencing Interest Rates

As with any other price in the market economy, interest rates are determined by the forces of supply and demand, in this case, the supply of and demand for credit (Ngugi, and Kabubo, 1998). The general level of interest rates is determined by the interaction of the supply and demand for credit. When supply and demand interact, they determine a price (the equilibrium price) that tends to be relatively stable.

If the supply of credit from lenders rises relative to the demand from borrowers, the price (interest rate) will tend to fall as lenders compete to find use for their funds. If the demand rises relative to the supply, the interest rate will tend to rise as borrowers compete for increasingly scarce funds. According to Pandley (1997), the principal source of the demand for credit is from our desire for current spending and investment opportunities. The principal source of the supply of credit comes from savings, or the willingness of people, firms, and governments to delay spending.

A rise in the interest rates affects the valuation of stocks. The rise in the value of stocks raises the expectations of the market participants, who demand better returns to

commensurate with the increased returns on bonds.

There is a negative correlation between the P/E ratios of stock market indexes at the end of every year and the bond yield of the corresponding period (Brial, Ivan and Oded P., 1992). The above relationship of market P/E ratio and bond Yield gives a very good indication of, how over the long-term the stock markets are impacted by the change in interest rates.

In a low interest rate regime, companies are able to increase profitability by reducing their interest expenses. However in a rising interest rate regime since interest expenses rise, profitability is lowered. Thygerson, (1995) found that calculating the inherent value of a company by the cash flow discounting model yields a two-fold impact. There is a reduction in the cash flows due to lower profitability, and a higher discounting rate due to higher interest rate regime. This leads to a relatively lower intrinsic value of the company.

Investors, who are averse to risk, tend to move funds from one asset class to another. When interest rates rise, investors move from equities to bonds and vice-versa. However, it does not mean that all the funds moves from one asset class to another, but it happens that the marginal shift of funds does change valuations to an extent. Whereas when interest rates fall, returns on bonds fall while the returns on equities tends to look relatively more attractive and the migration of fund from bonds to equities takes place, and increasing the prices of equities(Auerbach, 1988)

For many investors, a declining market or stock price is not a desirable outcome. Investors wish to see their invested money increase in value. Such gains come from stock price appreciation, the payment of dividends - or both. Brial, Ivan and Oded ,(1992) argues that with a lowered expectation in the growth and future cash flows of the company, investors will not get as much growth from stock price appreciation, making stock ownership less desirable. Investing in stocks can be viewed as too risky compared to other investments.

When the Government raises the discount rate, newly offered government securities, such

as Treasury bills and bonds, are often viewed as the safest investments and will usually experience a corresponding increase in interest rates (Ngugi, and Kabubo, 1998). In other words, the "risk-free" rate of return goes up, making these investments more desirable. When people invest in stocks, they need to be compensated for taking on the additional risk involved in such an investment, or a premium above the risk-free rate. The desired return for investing in stocks is the sum of the risk-free rate and the risk premium. Different people have different risk premiums, depending on their own tolerance for risk and the company they are buying. However, in general, as the risk-free rate goes up, the total return required for investing in stocks also increases. Therefore, if the required risk premium decreases while the potential return remains the same or becomes lower, investors might feel that stocks have become too risky, and will put their money elsewhere.

The interest rate has a wide and varied impact upon the economy. When it is raised, the general effect is to lessen the amount of money in circulation, which works to keep inflation low. It also makes borrowing money more expensive, which affects how consumers and businesses spend their money; increases expenses for companies, lowering earnings somewhat for those with debt to pay; and, finally, it tends to make the stock market a slightly less attractive place to investment.

However, each of these factors and results are all interrelated. Interest rates are not the only determinant of stock prices and there are many considerations that go into stock prices and the general trend of the market, an increased interest rate is only one of them (Hartman and Khambata, 1993). Therefore, an interest rate hike by the government will not necessarily have an overall negative effect on stock prices, interest rates affect but don't determine the Stock Market.

2.5 Effects of an Increase in Interest Rates

When the government increases the discount rate, it does not have an immediate impact on the stock market. Instead, the increased discount rate has a single direct effect – it becomes more expensive for banks to borrow money from the CBK. However, increases

in the discount rate also cause a ripple effect, and factors that influence both individuals and businesses are affected (Obiero, 2002).

With an increased discount rate banks increase the rates that they charge their customers to borrow money. Individuals are affected through increase in credit card and mortgage interest rates, especially if they carry a variable interest rate. This has the effect of decreasing the amount of money consumers can spend, save or invest. People still have to pay the bills, and when those bills become more expensive, households are left with less disposable income. This means that people will spend less discretionary money, which will affect business revenues and profits (Ndungu, 2003).

Businesses are also indirectly affected by an increase in the discount rate as a result of the actions of individual consumers. But businesses are affected in a more direct way as well. They, too, borrow money from banks to run and expand their operations. When the banks make borrowing more expensive, companies might not borrow as much and will pay a higher rate of interest on their loans. Less business spending can slow down the growth of a company, resulting in decreases in profit. Securities of firms making continuous losses, usually suffer from price decline (Kisaka, 1999).

2.6 Commercial Banks and Market Interest Rates

Commercial banks' activities greatly rely on their intermediation services, filling the gap between suppliers and demanders of funds. Their profitability is partly due to the difference in interest rates charged on loans and what is paid to suppliers of funds, i.e., the interest rate spread. Pyle (1971) argued that the larger the spread between loan and deposit rates, the more likely the necessary condition for intermediation to occur can be met. Earlier explanations that allow positive spread to be maintained rest on the ability of commercial banks to minimize transaction costs in loans originating through their intermediation services.

Benston and Smith (1976) found out that transaction costs are central to the theory of financial intermediation and the ability of the financial intermediary to exploit the returns to scale implicit in the structure of the transaction costs by purchasing large blocks of

securities, repackaging, and reselling them at a lower cost supports the existence of intermediaries. Based on the transaction cost explanation, positive spread is consistent with banks' profitability since banks largely play the brokerage role intermediating between depositors and lenders.

Contemporary banking theory, however, argues that traditional arguments based on transaction costs are insufficient and proposed the existence of banking institutions as a solution to informational asymmetries prevailing in the economy. Banks are viewed as providing a special role in the economy as asset transformers. The existence of banks minimizes the adverse selection and moral hazard problems, which are prevalent in direct financial transactions. Through maturity and liquidity transformation and their specialization in sorting and evaluating information, banks can properly evaluate loans that cannot be priced accurately by market participants. The maturity and liquidity intermediation causes the maturity of a bank's balance sheet to be mismatched and therefore expose the bank to variation in market rates. The imbalance of adjustment of asset and liability rates toward changes in market rates (which cause changes in the spread) significantly affects the value of bank equity.

Banking institutions are special and contribute to the efficiency of the economy, thus, positive spread remains as a main feature of banking activities. The impact of changes in market interest rates on banking activities can be analyzed in several frameworks. Banks' balance sheets' maturity structure of 'borrowing short and lending long' is argued to be the main source of the interest rate risk faced by commercial banks. Flannery (1981) explains that banks are exposed to fluctuations in market interest rates in two ways. First, the imbalance of maturity(duration) of assets and liabilities, i.e., 'borrowing short and lending long', subjects banks to a non-synchronized refunding schedule, which could be expensive during a high interest rate environment. Banking decisions entails solving precautionary portfolio allocation problems with banks attempting to minimize the cost of unexpected deposit withdrawals. Since penalty is imposed on deposit shortfall, banks have to properly weigh its probabilities in their allocations of assets into earnings assets (investment and loans) and defensive assets. Second, even if banks accurately matched the maturity of assets and liabilities, different degrees of market interest rate

elasticity between assets and liabilities components could still exert significant effects on banks' profitability.

2.7 Financial Performance Measures

An interpretation and analysis of financial accounting statements provide a framework for making informed judgments about a firm's financial performance. Financial performance can be evaluated based on accounting data and market based approaches. Accounting data based method utilizes accounting data while market based methods are based on what the shareholders can fetch in case they sell their shares. According to Kaplan and Norton (1992) it may be unfair to use share prices to evaluate financial performance because share prices incorporate external market factors which are beyond the manager's control. Where markets are efficient security prices can be used to measure a firm performance and where markets are not well developed accounting data provides a better measure of performance.

Financial analysis is the process of critically examining in detail accounting information given in the financial statements and reports. It is the process of evaluating relationships between component parts of financial statements to obtain a better understanding of the firm's financial position. The analysis involves selection from the total information available those relevant to the decision under consideration, arranging the information in a manner that would bring out the relationship and a study of the relationships and interpretation of the results thereof. The techniques widely used for analysis are; ratio analysis, trend analysis and cross sectional analysis (Pandley, 1997).

As a performance measures ratio analysis are classified into; liquidity ratios used to assess the firm's ability in meeting its short term obligations, long term solvency ratios, operating efficiency ratios that measures how effective the firm is using its assets, profitability ratios used to evaluate a firms earning performance and investment ratios which are used to assess the value and quality of an investment in the ordinary share of a company.

According to Gardner, Mills and Cooperman (2005), ROI and ROE are ratios commonly

used to measure the financial performance of financial institutions.

ROI is a measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. To calculate ROI, the benefit (return) of an investment is divided by the cost of the investment; the result is expressed as a percentage or a ratio. ROI analysis compares the magnitude and timing of investment gains directly with the magnitude and timing of investment costs. A high ROI means that investment gains compare favorably to investment costs.

$$\text{ROI} = \frac{\text{Net Profit After Tax}}{\text{Net Assets or Capital Employed}}$$

ROE measures a corporation's profitability by revealing how much profit a company generates with the money the shareholders have invested. It tells the rate that shareholders are earning on their shares.

$$\text{ROE} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

2.8 Interest Rates and Financial Performance

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

Wolfgang and Opfer (2003) compared the financial performance of financial institutions and five other industries and found out that financial institutions have a greater sensitivity to changes in long term interest rates.

The key determinant of commercial banks success is the ability to understand movement

in interest rates and to interpret forecast in interest rates. Among the most difficult situation facing commercial banks is the existence of uncertainty regarding their inflows which are mainly constituted by customers' deposits. These deposits attract an interest expense to the commercial banks (Baltensperger and Milde, 1976)

2.9 Empirical Studies

The argument that advocates that interest rate liberalization leads to financial development and eventually to economic growth is based on the theoretical framework and analytical underpinning by McKinnon (1973) and Shaw (1973). The proposition of McKinnon and Shaw is that a repressed financial sector interferes with economic development in various ways. First, in a repressed economy the savings vehicles are not well developed, and the returns on savings are negative and unstable. Secondly, financial intermediaries that collect savings do not allocate them efficiently amongst competing uses. Thirdly, firms are discouraged from investing because poor financial policies reduce the returns to investment thus making them uncertain and, as a result, growth is retarded. Financial repression in this context is leads to artificially low deposit and loan rates that give rise to excess demand for loans and to non-price credit rationing (McKinnon, 1973; and Shaw, 1973).

Saunders and Schumacher (2000) in a study in six European countries and the US using data from 614 banks for the period 1988 to 1995, found out that the regulatory requirements and interest rate volatility had significant effects on bank interest rate margin across these countries.

Katie (1998) found out that the lower a bank's exposure to interest rate risk, as measured by net interest margin, the more likely the bank is to use derivatives. The study also found that larger banks tend to use derivatives to a greater extent than smaller banks and those banks with a greater proportion of credit risk are more likely to use derivatives. Furthermore banks that utilize derivatives typically have a higher capital to asset ratio. These results might indicate that banks with relatively more credit risk are more likely to use derivatives. This study found no relationship between bank profitability and

derivative use.

The widespread notion that commercial banks "borrow short and lend long" implies that sharp market interest rate increases may induce a significant number of banking failures. Flannery (1981) estimated the average asset and liability maturities for a sample of large money center banks. Regression models were tested to determine if market rate fluctuations have a significant impact on bank profitability. The conclusion was negative: large banks have effectively hedged themselves against market rate risk by assembling asset and liability portfolios with similar average maturities.

Saunders (1999) noted that maintaining a positive spread is crucial for banking firms as this will compensate them for taking the risk of providing immediacy of loans and deposits, that are viewed as stochastic, which arrive at different times. The estimate shows that the magnitude of 'pure spread' is significantly affected by interest rate volatility. This dichotomy of asset and liability rates is achieved as lending rates are shown to be sensitive to open market rates while deposit rates are not. Restrictions on interest rates are shown to be important factors that dichotomize lending and deposit rates. The net impact on bank profitability can be examined by studying the behavior of interest rate spread.

The secondary banking crisis in the United Kingdom in the 1970's reflected at least in part the funding of long term assets with short term liabilities. Similarly funding of long term fixed rate mortgages with savings deposits led to a very sharp drop in net interest margins at US thrift institutions in the early 1980's when interest rates rose to historic high and the yield curve inverted. The result was negative net interest income for two years after net interest margins had averaged 1.5% over the preceding decade (English 2002).

Wolfgang (2003) sought to analyze the importance of various macroeconomic factors in explaining the return structure for six German industry indices for the period 1974 to 2000. The objective was to find out whether financial institutions reveal a different behavior relative to other industries indices. A comparison of the results revealed greater

sensitivity of the financial institutions to changes in long term interest rates.

Njihia (2005) found out that the loan component have a significant effect on quoted banks profit. If banks do not get enough deposits, capital adequacy level may be affected and extension of loans may not be done hence interest on deposits is an important consideration. Different degrees of elasticity leads to non-proportionate changes in the value of assets and liabilities as market interest rates change which then affect the value of the banking firm. The behavior of interest rate spread is critical in analyzing this issue.

Banks operate in an environment of considerable risk and uncertainty. Ogwesio (2006), found a positive relationship between interest rates and nonperforming loans an indication that when interest rates increase commercial banks should put in place mechanism to deal with non performing loans to minimize the adverse effects on bank performance. The poor performance of commercial banks puts pressure on them to retain high lending rates in an attempt to minimize the losses associated with these loans (Matu, 2001). Obiero (2002) observed that between 1984 and 2001 there were 39 financial institutions which failed. Of the 39 institution 14 failed partly because of high levels of nonperforming loans.

Bett (1992) while looking at financial performance of the banking sector in Kenya established a multivariate analysis model for predicting financial failure in the Kenyan banking system by discriminating against various performance ratios. He found out that loan portfolio deteriorate as banks keep on lending to their major big borrowers because they fear that if they fail the bank will equally follow suit. He also observed that failed banks were lending at high interest rates to mainly high risk operators who were unable to pay. Omuondo (2003) found out that the face of intermediation in the financial sector is changing. Banks take money from depositors and pass to borrowers. Since borrowers are not willing to pay more banks are bringing down deposit rates continuously and chasing retail business.

Kamau (2008) found out that in microfinance institutions profit before tax depended mainly on interest income, interest expenditure, shareholders funds, and loan and

advances to customers. Margarita et al (2000) found out that well capitalized banks face lower expected bankruptcy cost thus lower funding costs and higher returns interest margins on assets.

Cherutoi (2006) sought to establish the extent to which commercial banks are exposed to foreign exchange risk. The study established that there is a high exposure of commercial banks in Kenya to foreign exchange risk. Musyoki (2003) compared quality improvement with financial performance in an attempt to establish the link if any between quality and financial performance. Performance was monitored using liquidity and leverage ratios. The data collected gave weak evidence that quality improvement variables enhance financial performance of commercial banks.

Mwanza (2007) investigated whether the level of derivative activities is associated with the market perception of banks interest rates and exchange rate risk. The study found a positive relationship between bank stock return and long term and short-term interest rates and exchange rates. The level of derivative activities was positively associated with long term interest rates exposure but negatively associated with short term interest rate and exchange rate exposure.

Mbai (2006) in a study of the relationship between interest rate risk and net interest income of commercial banks quoted at NSE, demonstrated that proper interest rate risk management reduces banks exposure to risks and provides opportunities to stabilize and improve their net interest income. The appropriate composition of bank's assets and liabilities in terms of their maturity helps moderate the effects of changes and volatility in short-term interest rates on the net income. Kilongosi (2005) in a study on the relationship between net bank interest margin and interest rate risk among registered commercial banks in Kenya found out that interest rate risk contributes 50.4% influence of the total variation of net bank interest margin of commercial banks.

2.10 Summary of Literature Review

Empirical evidence has provided some support for the importance of interest rates in financial institutions. Robinson (1995) established that bank stock returns appeared to be

more negatively correlated with unanticipated short term interest rates while stock markets view interest rates positively. Bank market values were more sensitive to changes in interest rates in the long run.

Interest on loans is behind a banks dismal profitability (Njihia, 2005). This is contrary to Maher, (1997) who found out that existence of more advanced risk management techniques have resulted to a minimum impact of interest rates on profitability of commercial banks.

Prior to interest rates liberalization, interest rates were determined through administrative controls. With liberalization, Interest rates are determined by market forces which include; inflation rate, level of government borrowing, foreign and domestic interest rates differential and the efficiency of the banking sector (Ngungi and Kabubo, 1998).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the methods and procedures which were used to carry out the study. It covers the overall methodology used in the study; the research design, population, sampling technique, data collection methods and data analysis.

3.2 Research Design

A research design is an outline plan or scheme that is used to generate answers to the research problems. It is basically the structure and plan of investigation.

A causal design was used in this study. A causal research design explores the cause and effect relationship between two or more variables. Causal design measure the extend of relationship between variables. Causal designs differ from descriptive designs in their greater probability of establishing causality. Causal designs are also known as experimental designs. They are used to show the impact of one variable on another. For example a study of the relationship between interest rates and financial performance of commercial banks in Kenya. It analyzes the cause – effect relationship between the variables (Zinkmund, 2003).

3.3 Population

A population is the total collection of elements from which we wish to make some inference (Donald 1990). The population of the study was all the 44 commercial banks which were registered and were in operation as at 31st December 2010 licensed to carry out banking business in Kenya under the banking Act Cap 488.

3.4 Sampling

A random sample of 30 commercial banks was taken from the population. This represents 70% of the entire population. The sample fairly represents the whole population and was

considered large enough to provide the necessary inference of the entire population and serve as a good basis for valid and reliable conclusion.

3.5 Data Collection Methods

Secondary data was used for this study. Data on interest rates was obtained from publications from CBK and National Bureau of Statistics and other individual bank publications while data on financial performance was obtained from the published financial statements and management accounts of individual commercial banks and CBK supervisory reports.

3.6 Data Analysis and Presentation

The analysis was quantitative and descriptive. Quantitative analysis was carried out using linear regressions. Regression analysis is used in finding out whether an independent variable predicts a given dependent variable (Zinkmund, 2003). The regression model used was of the form;

$$Y = \alpha + \beta X$$

Profitability for each bank was regressed against interest rates. The regression equation used was as follows;

$$ROE = \alpha + \beta(IR)$$

Where;

ROE is the profitability measure

α is the value of profitability when IR is zero.

β is the regression coefficient or change induced on profitability by IR

IR is the interest rates

According to Young (2000), models and quantification are only as good as the data they are build on. Interests rates were measure by looking at size that is observed extend of the interest rates and frequency and presented in percentage form. Interest rates were

distributed into time bands. This helps evaluate the effects of changing interest rates on profitability by applying sensitivity weights to each time band (CBK 2005).

The banking sector has shifted their focus to profitability because of the recent development in the sector which includes; the need for additional capital adequacy implying that profits should be boosted as a source of finance, increased need for provision of bad debts due to non performing loans among others. Altman (1987) concluded that profitability ratios affirm the ability to avoid failure.

The measure of financial performance was return on equity (ROE). ROE is considered as an important indicator of the bank's profitability because it indicates how well the bank is doing with the investment contributed by owners. It tells the rate that shareholders are earning on their shares. ROE measures a corporation's profitability by revealing how much profit a company generates with the money the shareholders have invested (Gardner, Mills and Cooperman, 2005). ROE is useful for comparing the profitability of a company to that of other firms in the same industry and removes the size effect.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

4.1 Introduction

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

4.2 Background information

4.2.1 Companies covered by the study

The study was based on 30 commercial banks in Kenya. Information on performance and lending rates was collected from published reports for a five year period from 2006 to 2010. See appendix 2 for list of banks.

4.2.2 Trend of Interest Rates and Financial Performance

The study sought to establish the trend of lending rates and firm performance (as measured by ROE) over the five year period. The table below shows the results.

Table 4.1: Descriptive statistics for Interest rates and ROE

	N	Minimum		Maximum		Mean		Std. Deviation	
		Interest rate (%)	ROE (%)	Interest rate (%)	ROE(%)	Interest rate (%)	ROE (%)	Interest rate (%)	ROE (%)
2006	30	12.20	1.00	19.00	50.00	15.6273	20.4033	1.94158	12.01779
2007	30	11.00	3.00	21.75	45.30	15.8917	21.1800	2.01041	11.63678
2008	30	13.50	-42.00	20.00	41.30	16.6667	19.0100	1.80078	16.35689
2009	30	11.00	-26.10	19.00	48.70	16.0333	18.8700	1.91605	13.96708
2010	30	11.00	-3.70	19.00	47.40	16.7167	24.6167	1.92839	12.87409

Source: Research data, 2011

From table 4.1 above, it was observed that the average annual lending rates were on the increase in all subsequent years from the base year. The mean lending rates increased from 15.62% in year 2006 to 16.72% in the year 2010. This represents an average change of 7% in interest rates over the period. It is interesting to note that while the least interest rates stood at around 11% over the five years, the maximum rate ranged from 41% to 50%.

However, unlike interest rates, the average performance fluctuated over the five years with the highest mean ROE in 2010 of 24.62% and the lowest ROE being observed in 2009 (18.87%).

4.3 Relationship between Interest Rates and Financial Performance

4.3.1 Correlation analysis between ROE and Interest rates (IR)

The study sought to examine the correlation between financial performance as measured by ROE and Lending rates (IR) for each of the five years. The table below shows the results.

Table 4.2: Correlation analysis between ROE and Interest rates (IR)

		IR (2006)	IR (2007)	IR (2008)	IR (2009)	IR (2010)
ROE (2006)	Pearson Correlation	.228	.040	-.061	-.058	-.074
	Sig. (2-tailed)	.225	.833	.747	.762	.699
	N	30	30	30	30	30
ROE (2007)	Pearson Correlation	.004	.177	.000	-.027	-.124
	Sig. (2-tailed)	.983	.348	1.000	.886	.515
	N	30	30	30	30	30
ROE (2008)	Pearson Correlation	-.086	-.012	.026	-.019	-.108
	Sig. (2-tailed)	.663	.953	.895	.924	.583
	N	28	28	28	28	28
ROE (2009)	Pearson Correlation	.170	.191	.131	.233	.111
	Sig. (2-tailed)	.388	.331	.507	.233	.573
	N	28	28	28	28	28
ROE (2010)	Pearson Correlation	-.089	-.102	-.030	-.068	.058
	Sig. (2-tailed)	.646	.599	.878	.726	.766
	N	29	29	29	29	29

Source: Research Data, 2011

From table 4.2 above it was found that, while all the correlations for each of the years were positive (see results in bold), none of them was statistically significant ($P > 0.05$).

This points out that the annual performance does not have a significant relationship with interest rates charged over that period.

4.3.2 Annual data Regression analysis for ROE and lending rates

To further examine the relationship between financial performance and interest rates, bivariate regression analysis of the form $y_t = b_t + i_t$ was fitted to the data; where $y = \text{ROE}$; $b = \text{constant}$; $t = \text{year}$. The table below shows the results.

Table 4.3: Regression analysis between financial performance and interest rates

Model	Constant	Coefficient (B)	P-Value of B	R-Square
ROE (2006) = f(I(2006))	-1.66	1.412	0.225	0.052
ROE (2007) = f(I(2007))	4.86	1.027	0.954	0.031
ROE (2008) = f(I(2008))	-13.25	1.935	0.258	0.045
ROE (2009) = f(I(2009))	-8.32	1.696	0.216	0.054
ROE (2010) = f(I(2010))	-6.2	1.843	0.14	0.043

Source: Research Data, 2011

From table 4.3 above, the coefficients of determination range between 0.031 and 0.054 indicating that Interest rates explain a tiny proportion of the variability in financial performance (between 3.1% and 5.4%) for each of the years examined. The beta coefficients are all positive indicating a positive relationship between interest rates and financial performance. However, none of the coefficients is statistically significant ($P > 0.05$) which further confirms that financial performance and interest rates are not significantly related in the short term.

4.3.3 Regression analysis using pooled data

The study sought to examine whether financial performance of banks depend on interest rates in the long term. This was done by using pooled data from 2006 to 2010 for both ROE and interest rates. The results were as shown in the table below.

Table 4.4: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.226 ^a	.051	.045	13.15407

a. Predictors: (Constant), VAR00001

Source: Research Data, 2011

Table 4.5: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.557	9.038		-.504	.615
	Interest rates	1.567	.554	.226	2.827	.005

a. Dependent Variable: ROE

Source: Research Data, 2011

From table 4.5 above, the coefficient of determination is 0.051 indicating that in the long term, interest rates explain 5.1% of the variability in financial performance. This conforms to the findings of the annual regression results for short term periods above. However, unlike the findings for short term, the relationship between interest rates and financial performance is statistically significant in the long term (p-value of coefficient < 0.05). This shows that, although interest rates account for only 5.1% of the variability in financial performance in the long term, the relationship is statistically significant.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

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

5.2 Summary of Findings and Conclusions

5.2.1 Summary of Findings

The aim of the study was to establish the relationship between interest rates and financial performance of commercial banks in Kenya. In order to achieve this objective, a random sample of 30 commercial banks out of a population of 44 commercial banks was selected. Secondary data on average interest rates and ROE for the sampled commercial banks was collected. The data was obtained from the CBK, individual commercial banks and Kenya National Bureau of Statistics. The data was then analyzed using descriptive and quantitative techniques. SPSS was used to analyze the data.

The findings of the study show that average annual lending rates were on the increase in all subsequent years from the base year. The mean lending rates increased from 15.62% in year 2006 to 16.72% in the year 2010 while average ROE fluctuated over the period.

Regression analysis between ROE and interest rates manifested positive relationship. In the long term, interest rates explain 5.1% of the variability in financial performance. This conforms to the findings of the annual regression results for each of the years which stood at between 3.1% and 5.4%.

Furthermore short term correlations for each of the years was not statistically significant ($P > 0.05$). However, in the long term the relationship between interest rates and financial performance was statistically significant ($P < 0.05$). Thus though interest rates account for

only 5.1% of the variability in financial performance in the long term the relationship is statistically significant.

5.2.2 Conclusions

The findings have shown that if the banks are to attain high financial performance interest rates is among the key determinants. Commercial banks therefore should come up with opportunities to take advantage of interest rates in order to improve on their financial performance. However considering that it only explains 5.1% of the variability, income source diversification strategies should be embraced.

Interest rate as an independent variable was linearly related with the depended variable ROE. Thus simple linear regression model could be used to forecast ROE for commercial banks in Kenya, however care must be taken when using this model and where necessary extra independent variables should be included in the model.

The findings are in congruent with other studies like Kamau (2008), who found out that in microfinance institutions profit before tax depended on interest income, interest expenditure, shareholders funds, and loan and advances to customers.

5.3 Recommendations

The findings of this research paper have an implication on all stakeholders in the banking industry.

The management of commercial banks will therefore need to strategize on ways of developing income earning products that do not rely on interest rates since interest rates only explain less than 5.5% of the variability in the bank's performance. Deregulation and new technology have eroded banks comparative advantages and made it easier for non-bank competitors such as cooperative societies, mobile service providers among others to enter these markets. This has necessitated banks to shift sales mix and diversify towards non-interest income sources.

Shareholders of commercial banks on the other hand need to ensure that management

diversify the commercial banks source of profitability from the over reliance on the interest rates related sources and explore on other avenues of achieving high profitability.

Banks exist to inter-mediate the transactions between demanders and suppliers of money at a given consideration. Earnings from these transactions form banks traditional income generating activities. However, critical analysis of financial statements for commercial banks shows a lot of expenditures which with cost management strategies, will lead to better financial performances.

Among other factors to be implemented are service quality improvements and operations efficiency which will lead to higher number of transactions.

5.4 Limitations of the Study

The study was conducted using financial data derived from secondary data such as financial statements of commercial banks. Such data has got some limitations since it is subject to manipulations by management to suit there own needs.

The financial ratios used in the study were generated from financial statements, which have been prepared under different accounting policies. This means that the consistency of the data could not be ascertained.

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

The study was conducted within the constraint of time and resources and therefore, other issues inherent in such a broad study could not be addressed adequately.

The study also made use of data that was not adjusted for the inflation changes.

5.5 Suggestions for Further Study

Profitability is among the key factors that determine the success of any organization. A research can be conducted to find out whether commercial banks have stabilized their profits through income source diversification.

Further research may be performed to establish the relationship between banks profitability to other variables for example liquidity position, loan default, foreign exchange risk, operations efficiency among others.

The study was only carried out on thirty commercial banks. As at 30th December 2010 there were 44 commercial banks in Kenya. A further census study should be carried out to evaluate if there is a substantial change of the findings.

Further research on relationship between interest rates and financial performance by industry is another potential area of investigation in order to understand cross industry effect of interest rates. Such industry players include building societies and non-bank financial institutions.

The period covered by the study was 5 years. A similar study with an extended time period may be done.

In the study lending rates was used as the dependent variable. However since bank profits depends on interest income and interest expenses, a further research may extend the analysis by using interest rate margin in the place of interest rates.

All banks were considered to be of the same size in the study. A research can be carried out where banks are categorized per their asset base, and profitability.

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APPENDICES
Appendix I
Commercial banks in kenya

1. African Banking Corporation Ltd
2. Bank of Africa Kenya Ltd
3. Bank of Baroda
4. Bank of India
5. Barclays Bank of Kenya Ltd
6. CFC Stanbic Bank Kenya Limited
7. Charterhouse Bank
8. Chase Bank Limited
9. Citibank N.A Kenya
10. Commercial Bank of Africa
11. Consolidated Bank of Kenya Ltd
12. Co-operative Bank of Kenya Ltd
13. Credit Bank
14. Development Bank
15. Diamond Trust Bank Kenya Ltd
16. Dubai Bank Limited
17. Eco Bank
18. Equatorial Commercial Bank Ltd
19. Equity Bank
20. Family Bank
21. Fidelity Commercial Bank Ltd
22. Fina Bank
23. First Community Bank Ltd
24. Giro Commercial Bank Ltd
25. Guardian Bank Limited
26. Gulf Africa Bank
27. Habib Bank A.G. Zurich
28. Habib Bank Limited
29. Imperial Bank
30. Investment and Mortgages Bank Ltd
31. Jamii Bora Bank Ltd
32. Kenya Commercial Bank Ltd
33. K-Rep Bank Ltd
34. Middle East Bank
35. National Bank Of Kenya
36. NIC Bank
37. Oriental Commercial Bank
38. Paramount-Universal Bank Ltd
39. Prime Bank Limited
40. Southern Credit Banking Corp. Ltd
41. Standard Chartered Bank Ltd
42. Trans-National Bank Limited
43. UBA Kenya Bank
44. Victoria Commercial Bank Ltd

Appendix II
Percentage Average Interest Rates Per Year.

	Bank	Year				
		2006	2007	2008	2009	2010
1.	African Banking Corporation Ltd	17.00	18.00	18.00	18.00	19.00
2.	Bank of Africa Kenya Ltd	16.00	17.00	18.75	18.00	19.00
3.	Bank of Baroda	15.00	16.00	17.00	16.00	18.00
4.	Bank of India	13.22	15.50	16.00	15.50	16.00
5.	Barclays Bank of Kenya Ltd	16.00	14.00	18.00	16.00	15.00
6.	CFC Stanbic Bank Kenya Limited	13.00	21.75	18.50	16.00	17.00
7.	Chase Bank Limited	13.60	18.00	17.00	16.00	18.00
8.	Commercial Bank of Africa	19.00	18.00	19.00	17.00	19.00
9.	Consolidated Bank of Kenya Ltd	15.50	14.00	19.00	18.00	18.50
10.	Co-operative Bank of Kenya Ltd	19.00	15.00	13.50	13.00	14.00
11.	Diamond Trust Bank Kenya Ltd	18.00	16.00	17.00	18.00	19.00
12.	Eco Bank	17.00	18.00	18.00	18.00	17.00
13.	Equatorial Commercial Bank Ltd	12.20	11.00	14.00	11.00	11.00
14.	Equity Bank	18.00	15.00	15.00	15.00	17.00
15.	Fidelity Commercial Bank Ltd	14.00	15.00	16.00	14.00	16.00
16.	Fina Bank	16.00	15.00	14.00	13.00	14.00
17.	Giro Commercial Bank Ltd	14.30	15.00	16.00	16.00	17.00
18.	Guardian Bank Limited	16.00	15.00	17.00	17.00	18.00
19.	Habib Bank Ltd	16.00	16.00	16.00	17.00	17.00
20.	Habib Bank A.G. Zurich	13.40	16.00	19.50	18.00	17.00
21.	Investment and Mortgages Bank Ltd	13.50	14.00	15.00	14.00	14.00
22.	Kenya Commercial Bank Ltd	18.10	15.00	16.00	17.00	17.00
23.	K-Rep Bank Ltd	16.00	16.00	15.00	15.00	16.00
24.	National Bank Of Kenya	14.00	15.00	15.00	14.00	14.00
25.	NIC Bank	17.00	17.00	20.00	18.00	19.00
26.	Prime Bank Ltd	16.00	15.00	15.00	17.00	17.00
27.	Southern Credit Banking Corp. Ltd	18.00	18.00	17.00	16.00	17.00
28.	Standard Chartered Bank Ltd	17.00	19.00	18.00	19.00	18.00
29.	Trans-National Bank Limited	14.00	15.00	17.75	17.00	18.00
30.	Victoria Commercial Bank Ltd	13.00	13.50	14.00	13.50	15.00

Appendix III

ROE.

	Bank	Year				
		2006	2007	2008	2009	2010
1	African Banking Corporation Ltd	20.7	22.8	23.2	22.4	29.5
2	Bank of Africa Kenya Ltd	6.3	12.5	5.6	10.4	16.5
3	Bank of Baroda Ltd	29.5	32.4	33.1	28.3	38.5
4	Bank of India	27.1	36.1	36.0	29.4	36.0
5	Barclays Bank of Kenya Ltd	44.6	40.3	39.2	37.2	34.3
6	CFC Stanbic Bank Kenya Limited	22.7	27.6	18.4	16.4	21.0
7	Chase Bank Limited	17.5	25.8	29.3	26.0	31.2
8	Commercial Bank of Africa	36.1	31.0	34.2	28.0	36.1
9	Consolidated Bank of Kenya Ltd	2.3	3.5	10.0	12.6	17.5
10	Co-operative Bank of Kenya Ltd	25.6	33.6	23.9	23.1	27.5
11	Diamond Trust Bank Kenya Ltd	26.3	18.6	24.5	26.1	35.6
12	Eco Bank	1.0	3.0	3.8	5.3	3.8
13	Equatorial Commercial Bank Ltd	15.2	10.9	(1.2)	10.5	(3.7)
14	Equity Bank	50.0	15.9	24.2	23.9	32.9
15	Fidelity Commercial Bank Ltd	9.1	15.3	17.1	10.6	47.0
16	Fina Bank	15.2	11.0	7.0	1.9	11.3
17	Giro Commercial Bank Ltd	11.9	7.8	20.7	21.6	47.4
18	Guardian Bank Limited	6.1	3.1	5.3	5.0	11.8
19	Habib Bank Ltd	21.3	20.4	23.6	26.4	26.2
20	Habib Bank A.G. Zurich	25.4	27.5	31.2	29.9	22.2
21	Investment and Mortgages Bank Ltd	24.0	33.5	31.2	23.6	23.2
22	Kenya Commercial Bank Ltd	26.4	30.1	26.9	28.7	28.2
23	K-Rep Bank Ltd	16.9	18.7	(42.0)	(26.1)	9.6
24	National Bank Of Kenya	24.3	32.4	28.9	27.3	27.2
25	NIC Bank	22.2	22.1	26.7	23.8	30.6
26	Prime Bank Ltd	14.5	16.5	15.0	18.4	19.7
27	Southern Credit Banking Corp. Ltd	6.1	7.4	1.1	(3.0)	1.0
28	Standard Chartered Bank Ltd	37.8	45.3	41.3	48.7	37.9
29	Trans-National Bank Limited	4.1	7.3	9.8	6.6	10.3
30	Victoria Commercial Bank Ltd	21.9	23.0	22.3	23.1	28.2