

**THE EFFECT OF BANK SPECIFIC FACTORS ON FINANCIAL
PERFORMANCE OF COMMERCIAL BANKS IN KENYA**

ERIC GICHARU KAMANDE

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DECLARATION

I understand that plagiarism is an offence and I therefore declare that this project report is my original work and has not been presented to any other institution for any other award.

Signature_____ Date _____

Eric Gicharu Kamande

D61/MAC/20015/2011

This research project report has been submitted for examination with our approval as a University Supervisors

Signature_____ Date_____

Dr. Jared Ariemba

South Eastern Kenya University

Signature_____ Date_____

Mr. Zablon Evusa

South Eastern Kenya University

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DEDICATION

I dedicate this work to my lovely wife Esther and my son Ethan for their undying support and encouragement to pursue my MBA.

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ABBREVIATIONS AND ACRONYMS

CBK Central Bank of Kenya

ES Efficiency Structure

GDP Gross Domestic Product

KBA Kenya Bankers Association

KCB Kenya Commercial Bank

MP Market Power

NSE Nairobi Stocks Exchange

ABSTRACT

The main goal of every banking institution is to operate profitably in order to maintain stability and sustainable growth. External and internal economic environments are viewed as critical drivers for bank performance. The main purpose of this study was to determine the effects of bank specific factors on the financial performance of commercial banks in Kenya for a period of 5 years, starting from the year 2011 to 2015. The dependent variable under investigation was return on assets (ROA). The independent variables were capital adequacy, asset quality, management efficiency, earnings ability and liquidity. The specific objectives of this research were to determine the effects of capital adequacy on the financial performance of commercial banks in Kenya, evaluate the effects of asset quality on the financial performance of commercial banks in Kenya, determine the impact of management efficiency on the financial performance of commercial banks in Kenya, determine the impact of earnings ability on the financial performance of commercial banks in Kenya and evaluate the effects of liquidity on the financial performance of commercial banks in Kenya. The choice of this five-year period was based on the explosive growth of the banking sector in the country and the availability of complete data for that period. The study concentrated on the bank specific factors that affect the banks' financial performance. In this research, the scope was all the 11 banks listed in the Nairobi securities exchange. This study adopted an explanatory approach by using panel data research design to fulfill the objectives. The researcher collected data on published financial statements of the 11 commercial banks listed in the Nairobi securities exchange for five years from 2011 to 2015. Data was analyzed using multiple linear regression models to show the effect of bank specific factors on financial performance of commercial banks over that period under study. The findings were presented in tables and narratives. The results showed that there was positive and significant association between ROA and all the independent factors. The results showed that there has been a significant decrease in capital adequacy during the five-year period. There was also a finding that asset quality affects profitability and the financial performance of banks. The study concludes that Asset quality of the bank have the highest influence on ROA of banks. The study recommends that efficient and effective management should be adopted by bank managers to ensure that banks do not become insolvent.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Banks play very important role in the economic development of nations as they largely wield control over the supply of money in circulation and are the main stimuli of economic progress (Malakolunthu & Rengasamy, 2012). Bank performance may be defined as the reflection of the way in which the resources of a bank are used in a form, which enables it to achieve its objectives. Furthermore, the term bank performance means the adoption of a set of indicators, which are indicative of the bank's status, and the extent of its ability to achieve the desired objectives (Malakolunthu & Rengasamy, 2012). Some of the reasons why we evaluate the performance of banks are to determine their operational results and their overall financial condition, measure their asset quality, management quality, efficiency, and achievement of their objectives as well as ascertain their earning quality, liquidity, capital adequacy and level of bank services.

1.2 Financial performance of commercial banks

One way to measure bank performance is by determining the profitability of the bank. Profitability is the ability of a bank to make profits by earning more money that exceeds the yearly expenses and taxes every financial year. The Banks make profits from fees charged for their services and the interests levied on assets. On the other hand, the main expense incurred by banks is in the interest paid on their liabilities every financial year. A positive difference between the earnings and the expenses represents the profitability of any financial institution. The bank's assets that attract revenue to the institution include loans to individuals, companies, and other institutions and securities the bank holds. The principal liabilities for the banks include deposits and the funds borrowed from other banks or through selling of commercial paper in the money market. The measure of

profitability of a bank is determined by the return of assets (ROA) and the return on equity (ROE). The assets such as the loans and securities are utilized by the banks to earn a large portion of the institution's income. The ROA is determined by dividing the bank's net interest income by average total assets. The ROA is expressed as a percentage. The net interest income is determined by obtaining the difference between the interest received on assets and interest paid on liabilities.

Net interest income = interest received on assets – interest paid on liabilities.

$$\text{Return on Assets (ROA)} = \frac{\text{Net Income}}{\text{Average Total Assets}}$$

(Mulualet, 2015)

Bank profitability can also be measured by determining the return on equity (ROE). The ROE represents the amount of net income returned as a percentage of shareholder's equity. The ROE measures a bank's profitability by determining the institution's earnings using the money invested by the shareholders. Just like ROA, ROE is also expressed as a percentage (Mulualet, 2015).

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholder's Equity}}$$

(Mulualet, 2015)

1.3 Bank specific factors

Bank specific factors or internal factors are the individual bank characteristics, which affect bank performance. These factors are influenced by the internal decisions of management and board. These factors are also within the scope of the bank to manipulate them and they differ from bank to bank. These include capital, size of deposit liabilities, size, and composition of credit portfolio, interest rate policy, labor productivity, and state of information technology, risk level management quality, bank size, and ownership among others (Dang, 2011). To proxy bank specific factors scholars often use CAMEL

framework. CAMEL stands for capital adequacy, asset quality, management efficiency, earnings ability, and liquidity (Muluaem, 2015).

1.3.1 Capital Adequacy

Capital adequacy represents the level of capital required by a commercial bank to allow them endure the risks such as credit, market and operational risks they are prone to in order to absorb the potential losses and protect the organization's debtors. Capital is one of the major bank specific factors that have a direct impact on the level of bank profitability. Capital represents the amount of own finances available to support a commercial bank's business. A bank's capital acts as a buffer in cases where adverse situations occur within the institution. Additionally, capital establishes liquidity for a commercial bank because the deposits are more fragile and prone to bank runs. Good levels of capital minimize the chances of distress within a banking institution. Capital adequacy is measured based on the capital adequacy ratio (CAR) (Nyanga, 2012). CAR is determined by the following formula

$$\text{CAR} = \frac{\text{Tier One Capital} + \text{Tier Two Capital}}{\text{Risk Weighted Assets}}$$

(Muluaem, 2015)

The minimum accepted CAR is 8%. A higher ratio indicates that the bank is at a higher risk of insolvency from excessive losses. A lower value of CAR shows that a bank is under the minimum threshold and possesses a higher ability to deal with the risk of insolvency (Muluaem, 2015).

1.3.2 Asset Quality

Asset quality represents a measure of the likelihood of default on a loan combined with a measure of its marketability. Thus, asset quality is the measure of the price at which a bank would sell a loan to a third party as determined by the borrower. The bank assets constitute of fixed and current assets, credit portfolio among other investments. Loans

comprise of the largest portion of a bank's assets and constitute the greatest amount of risk to their capital (Nyanga, 2012). Real estates, other assets, off-balance sheet items, cash due from accounts and premises constitute other items that have a possible impact on asset quality. The CBK measures asset quality by the ratio of net non-performing loans to gross loans. A higher ratio indicates poor asset quality.

1.3.3 Management Efficiency

Management efficiency is the ability of the board of directors and management to identify measure, control the risks of a banking institution's operations, and guarantee the safe and effective operation in fulfillment of pertinent laws and regulations. The management efficiency of a bank is measured using different financial ratios such as total asset growth, loan growth rate, and earnings growth rate. The performance of management is also often shown by subjective assessment of management systems, organizational discipline, control systems, and quality of staff among other factors (Ongore & Kusa, 2013). Additionally, the ability of the management to utilize its resources effectively, maximize income, minimize operation costs can be measured by financial ratios. Operating profit to income ratio is particularly useful in measuring management quality. The higher the operating profits to total income, the more efficiently the management is in relation to operational efficiency and income generation. Management efficiency significantly determines the level of operating expenses and in turn has an impact on the bank's profitability (Ongore & Kusa, 2013).

1.3.4 Earnings Ability

Earnings ability represents the potential for a bank to realize profits that enable the organization to fund expansion remain competitive and increase its capital. From the bank's regulator viewpoint, earnings ability's essential purpose is to absorb losses and boost the bank's capital. Earning ability can be evaluated using a number of accounting ratios namely return on assets (ROA), return on equity (ROE), and Net interest income margin (NIM), (Ongore & Kusa, 2013). These measures are scored from 1 to 5 rating

system. In the context of the earning ability, a rating of 1 shows that a bank has strong earnings that suffice and maintains adequate capital and loan allowance and can effectively support operations. A rating of 5 shows consistent losses in a banking institution and portrays a distinct threat to a bank's solvency through the erosion of capital (Mulualem, 2015).

1.3.5 Liquidity

Liquidity refers to the bank's ability to meet its obligations, especially that of depositors. Adequate levels of liquidity are directly proportional to the bank's profitability. To measure liquidity, management should use as a proxy variable the ratio of liquid assets that is cash and due from banks, available for sale securities, and government securities to the total assets (Ongore & Kusa, 2013). Commercial banks that hold a reduced level of liquid assets face the risk of not having the ability to finance their daily operations. Liquidity is measured using the common financial ratios that show the liquidity position of a bank. The ratios include customer deposit to total asset and total loan to customer deposits and cash to deposit ratio (Nyanga, 2012).

1.4 The Structure and Regulation of Kenya's Banking System

Pursuant to the banking Act, Cap 488, the Central Bank of Kenya issues regulations and guidelines that subject commercial banks to particular requirements, restrictions, and guidelines. This regulatory structure establishes transparency between banking institutions in Kenya and the individuals and other organizations with which they do business. The main objectives of the Central Bank regulations are to protect depositors, systematic risk reduction, avoid misuse of banks and to protect banking confidentiality Credit allocation (Central Bank of Kenya, 2013). The Central Bank of Kenya also fosters the liquidity, solvency, and proper functioning of a market-based financial system in its supervision functions. The CBK is also involved in continuous review of the banking sector laws and regulations to ensure that they remain relevant amid the changes in the industry. Additionally, the CBK is also involved in licensing all financial institutions and

inspecting them to ensure that they comply with all the laws, regulations and guidelines (Central Bank of Kenya, 2013).

In Kenya, banking is carried out as per the requirements of the Kenya Bankers Association (KBA) that encourages its members to employ best practice when offering financial services to the banking public. The KBA is an umbrella body of commercial banks in Kenya licensed under the Banking Act, Cap 488. The association is entrusted with promoting and developing sound and progressive banking principles and practices leading to eventual development of the banking sector. The KBA also works towards sustaining a close co-ordination with the Central Bank of Kenya, and other institutions in order to create “one industry” in Kenya. As at 31 December 2015, the banking sector comprised of the Central Bank of Kenya, as the regulatory authority, 44 banking institutions (43 commercial banks 1 mortgage finance company).¹¹ of the 44 banking institutions are listed on the Nairobi Securities Exchange.

1.5 Statement of the problem

Understanding the bank specific factors and their influence in bank profitability and performance is crucial to the management of commercial banks, stakeholders and other interest groups such as the central bank and the government. Research studies conducted to assess the internal aspects that determine the profitability and financial performance of commercial banks have revealed several internal bank specific factors, external and industry specific factors. The bank specific factors are particular to a given institution, thus the internal factors that determine profitability in one bank are different from other banking institution in Kenya.

A review in literature indicates that several research studies done on local and international arena concentrated on specific factors. According to a research done by Obamuyi (2013), the determinants of bank’s profitability in developing economies, with a particular interest in Nigeria showed that bank specific factors such as efficient management of expenses and increased interest income affects profitability. Additionally,

the same research indicated that macro environment factors such as favorable economic conditions also result in increased profitability of commercial banks.

This study ignored the industry specific factors. A study by Ongore and Kusa (2013), concentrated on factors influencing banking sector performance in Kenya. The researcher found out that board, management decisions influence the performance of commercial banks in Kenya, and that macro-economic factors have minimal impact on the banks performance. However, the research omitted the impact of industry specific factors on the performance of banks in the country. Available literature has not exclusively concentrated on identifying the bank specific factors that influence bank's profitability in developing countries and with particular focus on Kenya. It is clear that in Kenya, there is limited literature on the bank specific factors and ways in which they determine bank profitability. This study sought to fill this gap.

1.6 Objectives

1.6.1 General objective

To assess the bank specific factors that determines the financial performance of commercial banks in Kenya.

1.6.2 Specific objective

- i. To determine the effects of capital adequacy on the financial performance of commercial banks in Kenya
- ii. To evaluate the effects of asset quality on the financial performance of commercial banks in Kenya
- iii. To determine the impact of management efficiency on the financial performance of commercial banks in Kenya
- iv. To determine the impact of earnings ability on the financial performance of commercial banks in Kenya

- v. To evaluate the effects of liquidity on the financial performance of commercial banks in Kenya

1.7 Research questions

- i. What are the effects of capital adequacy on the financial performance of commercial banks in Kenya?
- ii. How does asset quality affect the financial performance of commercial banks in Kenya?
- iii. What impact does management efficiency have on the financial performance of commercial banks in Kenya?
- iv. What is the impact of earnings ability on financial performance of commercial banks in Kenya?
- v. What is the effect of liquidity on the financial performance of commercial banks in Kenya?

1.8 Significance of the study

The overall purpose of this research was to determine the factors that affect the financial performance of commercial banks in Kenya. This is in line with the general objective where the research may offer information on some of the important determinants of financial performance of banks in details. The benefits that will arise from the study are detailed below.

The results of the study will be useful to the CBK which is the regulator in this sector by providing a guide to counteractive regulatory systems and supervisory program to sustain the operations of all commercial banks and other financial institutions. The study results will provide insights into how the bank specific factors determine the financial performance and therefore the central bank will provide policy guidance to banks on the minimum requirements on these factors.

The study will help the board and management of commercial banks understand more on the effects of bank specific factors on financial performance and undertake steps that will place the banks in a position to continually improve their financial performance .It may also offer a framework for managers and other shareholders to assess their bank's financial performance in terms of profitability with respect to the determinants.

The research will provide information on individual determinants of financial performance namely capital adequacy, asset quality and management efficiency. The elaboration of these determinants will provide detailed information on each factor thus contributing to the body of knowledge.

1.9 Scope of the study

The scope refers to the geographical area to be covered by the research study. In this research study, the scope was all the 11 banks listed in the Nairobi securities exchange. The researcher collected data on published financial statements for eleven years from 2011 to 2015 (CBK, 2015)

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

Several factors influence commercial banks operations and their success in financial operations. Understanding the underlying concepts and the determinants of positive financial performance in the banking sector is crucial in its sustenance. This chapter will review past literatures done related to effects of bank specific factors on commercial banks financial performances. In addition, the chapter explains some theoretical frameworks that help in evaluating the relationship between bank specific factors and the financial performance of commercial banks.

2.2 Theoretical review

An organized research of bank financial performance began in the late 1980's with the application of the Market Power (MP) and Efficiency Structure (ES) theories (Athanasoglou et al, 2008).

2.2.1 Market Power Theory

Market theory is the extent to which a firm can influence the price of an item by exercising control over its demand, supply, or both. Under the economic concept of perfect competition, all firms in a market are assumed to have zero market power. Thus, each firm has to accept the current market price without being able to exercise any control over it. The MP theory states that increased external market forces results into better financial operations and profitability. In addition, the hypothesis asserts that only organizations with large market share and well differentiated portfolio of products can win their competitors and earn monopolistic profit.

The market-power theory includes two hypotheses; the traditional structure-conduct-performance and the relative-market power hypotheses. The structure-conduct-performance hypothesis argues that more concentrated markets lead to higher loan rates and lower deposit rates because of lessened competition whereas the relative-market power hypothesis argues that only large banks with some “brand identification” can influence pricing and raise profits. The difference between those two hypotheses revolves around whether market power proves generic to a market or specific to individual banks within a market.

2.2.2 Efficiency Structure Theory

Conversely, the ES theory proposes that enhanced managerial scale efficiency leads to higher concentration and then to higher profitability. This is a clear indication of desirable financial performance of firms especially the commercial banks. Nzongang and Atemnkeng (2006) asserted that the balanced portfolio theory added a different dimension into the study of bank performance. The theory suggests that the portfolio composition of a commercial bank, its profit and the return to shareholders is the result of the decisions made by the management and the overall bank’s policy decisions. Therefore, the theories contribute to the conclusion that banks financial performance is influenced by both internal and external factors. According to this study, bank specific factors fall under the internal factors. The efficient-structure theory also includes two hypotheses: the X-efficiency and scale efficiency hypotheses. The X-efficiency hypothesis argues that banks with better management and practices control costs and raise profit, moving the bank closer to the best-practice, lower bound cost curve. The scale-efficiency hypothesis argues some banks achieve better scale of operation and, thus, lower costs. Lower costs lead to higher profit and faster growth for the scale efficient banks.

2.3 Empirical Literature

In this section, the researcher will review the literature on the effects of the independent factors on the financial performance of commercial banks. Literature on the studies conducted by various researchers was reviewed on all the independent variables under in the study. The overall financial performance of commercial banks in Kenya has been improving during the last ten years. However, not all commercial banks have been experiencing the improvement. Some banks have been experiencing losses (Oloo, 2010) along the study period of five years. The empirical review will focus on the effects of capital adequacy, asset quality, management efficiency, earnings ability and liquidity on bank performance.

2.3.1 Capital adequacy and bank performance

Jha and Hui (2012) conducted a study that compared the financial performance of different ownership structured commercial banks in Nepal based on their financial characteristics. The study identified the determinants of performance exposed by financial ratios that were based on CAMEL model. Jha and Hui analyzed 18 banks for the period of 2005 to 2010. The researcher utilized the econometric model, multivariate regression analysis, by formulating two regression models utilized in estimating the impact of capital adequacy ratio, non-performing loan ratio, interest expenses to total loan, net interest margin ratio and credit to deposit ratio on the financial profitability. The research results revealed that return on assets was significantly influenced by capital adequacy ratio, interest expenses to total loan and net interest margin, while capital adequacy ratio substantial effect on return on equity.

Similarly, Kosmidou et al., (2008) conducted a research on the impact of bank-specific characteristics, macroeconomic conditions and financial market structure of UK owned commercial banks' profits. The researchers measured the effects on profitability using the return on average assets (ROAA) and net interest margins (NIM). The research covered the period 1995-2002 where an unbalanced panel data set of 224 observations was

provided for the econometric analysis. The findings of the research indicated that capital strength as shown by the equity to assets ratio is a significant determinant of profitability of the UK commercial banks.

A study done by Athanasoglou et al, (2008) examined the impact of bank specific, industry-specific and macroeconomic factors on bank profitability using an empirical framework that incorporated the traditional Structure-Conduct-Performance (SCP) hypothesis. The research involved Greek banks that were conducted 1985-2001. The researchers used several independent variables, namely capital, credit risk, productivity, expense management, ownership, inflation and business cycles. The empirical results indicated that capital is significant in explaining bank profitability. The findings also indicated that capital increased the exposure to credit risk and lowers profits for commercial banks.

Ifeacho C. and Ngalawa H. (2014) carried out a research study on the impact of bank-specific variables and selected macroeconomic variables on the South African banking sector between 1994 and 2011. The researcher considered capital adequacy, asset quality, management, earnings ability and liquidity under the CAMEL model of bank performance evaluation in the study. The Ifeacho and Ngalawa's study employed data in annual frequency from South Africa's four largest banks, namely ABSA, First National Bank, Nedbank, and Standard Bank. The four banks account for over 70% of the South Africa's banking assets. The researcher investigated the banks using the return on assets (ROA) and return on equity (ROE) as measures of the bank performance. Findings indicated that capital adequacy exhibited a significant negative relationship with ROA, while its relationship with ROE is significant and positive as expected.

Okoth and Gemechu (2013) conducted a research on the factor that determines financial performance of commercial banks in Kenya. The study took place during the period 2001 to 2010. The researchers utilized the linear multiple regression model and Generalized Least Square on panel data. The researchers used independent variables such as capital adequacy, asset quality, Management Efficiency, Liquidity Management, GDP growth

rate and inflation. The dependent variables used to measure the performance included the return on investments (ROA), return on equity (ROE), and Net Interest Margin NIM. The findings indicated that the considered bank-specific factors had a significant impact on the performance of commercial banks in the country.

2.3.2 Asset quality and bank performance

Sufian and Chong (2008) examined the determinants of financial performance under profitability during the period 1990-2005 in Philippines banks. The results of the study showed a direct relationship between financial performance and bank-specific factors. Similarly, the empirical results suggested that the bank specific factors including asset quality affects profitability and by extension the financial performance of the banks. Loans are a major asset in Kenya's commercial banks that generates a large portion of a banks income. However, the loans also expose the banks to latent losses derived from delinquent loans (Dang, 2011). It is advisable for banks to keep their amount of nonperforming loans to low levels by commercial banks because such loans affect the profitability of the banks and eventual financial performance (Sangmi & Nazir, 2010).

Vong et al, (2009) conducted a research whose main objective was to assess the contribution of bank-specific, macroeconomic, and financial structure factors to the profitability of banks in Macao. The researchers utilized bank level data for the period of 1993-2007. Additionally, the researchers adopted the panel data regression to establish the important factors in achieving high profitability by using internal variables, namely capital ratio, asset composition, asset quality, expense management, source of funds, and market share. The research also included external variables, such as the GDP growth rate, real interest rate and inflation. ROA was the main ratio used as a measure of profitability for the commercial banks. The findings of the research indicated that capital strength of a bank has a positive impact on profitability. Conversely, asset quality measured by the loan-loss provisions negatively affects the performance of the commercial banks.

A study conducted between 1994 and 2011 by Ifeacho C. and Ngalawa H. on the impact of bank-specific variables and selected macroeconomic variables on the South African banking sector found that asset quality have a positive effect on bank performance .The study used the CAMEL model in evaluation of bank performance and investigated the banks performance using the return on assets (ROA) and return on equity (ROE) as measures of the bank performance. According to the findings, all bank-specific variables are statistically noteworthy determinants of bank performance.

In Kenya, Olweny and Shipho (2011), conducted a study in Kenya's banking sector to investigate the effects on bank-specific factors on financial performance of commercial banks. The study employed an explanatory approach by using panel data research design. Annual financial statements of 38 Kenyan banks from 2002 to 2008 were obtained from the Central Bank of Kenya and banking survey 2009 for the analysis purpose. The researchers analyzed the data using multiple linear regression method. The study revealed that commercial banks can achieve profitability by improving asset quality this is by reducing the rate of non-performing loans.

2.3.3 Management efficiency and bank performance

The ability of the management of commercial banks to deploy its resources efficiently, income maximization, reducing operating costs can be determined using financial ratios. The quality of management exhibited by the finance departments of commercial banks determines the levels of operating expenses and in turn affects profitability and financial performance (Athanasoglou et al., 2008).A study done by Liu (2011) focused on the effects of variables from the CAMEL model on bank performance in China. The study concentrated on the CAMEL variables that included capital adequacy, asset quality, management, earnings ability, and liquidity. The researcher's sample size consisted of 13 Chinese banks all listed in the Shanghai Stock Exchange between 2008 and 2011. Liu implemented the fixed effects multiple linear regression model in his research to measure the relationship between internal factors from CAMEL model and bank performance. The findings of this study indicated that return on assets is directly affected by shareholders

risk-weighted capital adequacy ratio, costs to income ratio, net interest rate margins, and loans to deposits ratio. Additionally, the findings indicated that the return on equity could be affected by costs to income ratio, operating expenses to assets ratio and loans to deposits ratio. Management efficiency was therefore found to be a major influence to the outcome of these indicators and therefore a major determinant of bank performance.

Sufian and Chong (2008) examined the determinants of financial performance under profitability during the period 1990-2005 in Philippines banks. The results of the study showed a direct relationship between financial performance and bank-specific factors. Similarly, the empirical results suggested that the bank specific factors such as capital adequacy, asset quality and management efficiency affects profitability and by extension the financial performance of the banks. According to Sufian and Chong poor expenses management is a main contributor to poor performance. Operational expense efficiency is one way of assessing managerial efficiency in banks. From the findings of the study conducted by Olweny and Shipho (2011) in Kenya it can be noted that banks that improve their capital base, reduce operational costs and employ revenue diversification strategies are likely to be more profitable .The specific items highlighted in the study are an expression of efficiency in management .

2.3.4 Earnings ability and bank performance

Earnings ability represents the potential for a bank to realize profits that enable the organization to fund expansion remain competitive and increase its capital. From the bank's regulator viewpoint, earnings ability's essential purpose is to absorb losses and boost the bank's capital. Earning ability can be evaluated using a number of accounting ratios namely return on assets (ROA), return on equity (ROE), and Net interest income margin (NIM), (Ongore & Kusa, 2013).Aziza and Sarkani (2014) reviewed the financial performance of Mellat bank using the CAMEL model. Mellat bank is a private bank in Iran that has existed since 1980 as a merger of ten pre-revolution private banks. Each of the CAMEL model dimensions were examined using trend analysis method and both mean and standard deviation statistics. In the process, the researchers determined all the

model criteria and identified an ascending trend in the period under investigation. The researchers further investigated the relationship between the model variables and the financial performance of Mellat bank and examined the relationship using two linear and multiple regression as well as OLS method. The findings of the study show that there exist positive significant relationships between the indices of earnings ability with financial performance.

Okoth and Gemechu (2013) conducted a research on the factor that determines financial performance of commercial banks in Kenya. The study took place during the period 2001 to 2010. The researchers utilized the linear multiple regression model and Generalized Least Square on panel data. The researchers used independent variables such as capital adequacy, asset quality, management efficiency, earnings ability, liquidity management, GDP growth rate and inflation. The dependent variables used to measure the performance included the return on investments (ROA), return on equity (ROE), and Net Interest Margin NIM. The findings indicated that the considered bank-specific factors had a significant impact on the performance of commercial banks in the country. Further the study showed significant effect of earnings ability on bank performance.

2.3.5 Liquidity and bank performance

Weersainghe and Ravinda (2013) conducted a research to observe the effects of bank-specific factors such as liquidity risk, bank size, capital adequacy, operating cost, credit risk and macroeconomic determinants such as GDP growth rate and interest rate on the profitability of commercial banks in Sri Lanka. The researchers utilized quarterly data relating to the bank-specific and macroeconomic indicators. The research took place between 2001 and 2011. Multiple panel regression was used to analyze the data and determine the relationship between the dependent and the independent variables. Additionally, the researchers used the ROA and the ROE as profitability indicators of the banks under the study. The empirical results indicated that the larger the commercial banks the more the profits recorded. This is because of the economies of scale as compared to the banks with a higher regulatory capital ratio. Additional findings from the

panel regression indicated that the liquidity was inversely proportional to the commercial banks profitability in the country.

Abera, A. (2012) conducted a study on the factors affecting profitability in Ethiopian banking industry. The empirical study concentrated on investigating bank-specific, industry-specific and macro-economic factors that had a direct impact on the profitability of commercial banks in Ethiopia. The study covered the 2000-2011 period using mixed methods research approach. The approach combined documentary analysis and in-depth interviews to collect substantial data for the study. The target population for Abera's research included commercial banks registered by NBE where 8 banks were sampled and investigated. Even though the regression analysis indicated that liquidity had negligible effect on the profitability of the commercial banks, the in-depth interviews showed that liquidity in banks was a major factor that had significant effect on the profitability of Ethiopian commercial banks. However, the regression analysis and the interviews indicated that there existed a negative inverse relationship between liquidity and profitability.

Hadad (2013) in Ghana conducted a study whose main objective was to determine the factors that affected the financial performance of the Naara rural banks in the upper east region of the country. The researcher used the annual financial statements that covered an 11-year long period between 2000 and 2010. Multiple regression analysis was used as the main statistical tool to analyze the data collected from the bank under the study. The research sought to establish empirical relationship that existed between Naara rural banks financial performance on one hand and its credit portfolio, liquidity, non-performing loan and total assets on the other hand. The findings of the research indicated that liquidity and size were positively and related considerably to the performance of the bank.

In Kenya Tesfai.A (2015) studied the relationship between liquidity, capital adequacy and non- performing loans on financial performance of Habib bank AG Zurich. The researcher used regression analysis to investigate on the relationship between the independent variables and the dependent variables. The study revealed that there exist a

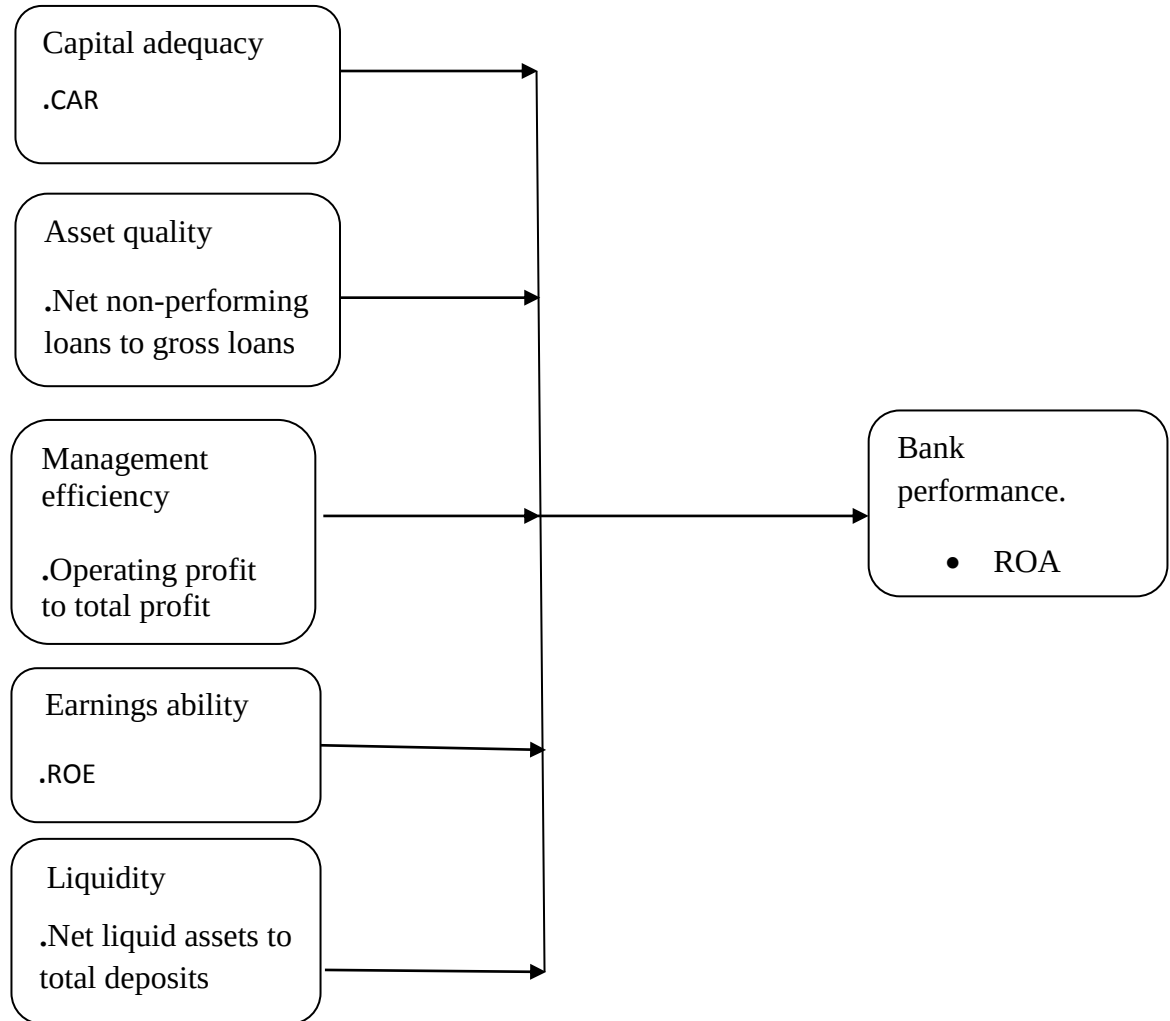
positive relationship between profitability and liquidity for commercial banks. Liquidity was one of the factors that determine profitability of commercial banks. Liquidity was found to influence the measures of financial performance of Habib Bank AG Zurich. The study recommended that the bank should enhance their liquidity management through identifying, measuring, monitoring, and controlling liquidity risk in their bank. In addition finance managers should identify all the factors that influence the liquidity of their banks with an aim of developing strategies to minimize their effect. In addition, the study recommended that investors should invest more in commercial banks with a high liquidity as their financial performance is expected to increase.

2.5 Literature overview and Research gaps

The review of the literature above reveals the existence of many knowledge gaps with respect to the determinants of commercial banks profitability especially in the context of Kenya. This is because most of the reviews of the literature are empirical researches done on determinants of profitability and financial performance of non-African and specifically non-Kenyan banks. Most of the studies conducted concentrated on emerging markets such as Philippines and Greece. In addition, the literature review shows the existence of non-conclusive studies with varying results on the determinants. There exists a small number of studies done to investigate the determinants of profitability and financial performance in commercial banks in Kenya. This has left a significant knowledge gap of available materials to refer and provide secondary data for comparison purposes. Limited research in this area does not exhaust explanations of the effects of the named factors and their relationship with the commercial banks. Additional research is required to explain the relationship between inflation and profitability in commercial banks operations.

2.6 Conceptual framework.

A conceptual framework is a model of presentation where a researcher conceptualizes or represents the relationships between variables in the study and shows the relationship graphically or diagrammatically. The purpose of a conceptual framework is to help the reader to quickly see the proposed relationships. Figure 2.1 shows the conceptual framework identifying the various variables and their effects on the financial performance of commercial banks in Kenya.



Independent Variables

Dependent Variable

Figure 2.1 Conceptual framework

Source (Author, 2017)

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This chapter details the general methodology used to conduct the study. The chapter comprises of the research design, target population, sample design, data collection method and data analysis.

3.2 Research Design

Research design outlines how the research was undertaken. It specifies the methods and procedures that were used to collect and analyze data (Borg, 2007). The study adopted panel data and descriptive research design to meet its research objectives. According to Groves (2004) descriptive technique gives accurate information of persons, events or situations.

A panel data set is one that follows a given sample of individuals over time and thus provides multiple observations of each individual in the sample. The reasons for using Empirical research methods is that empirical research method help integrating research and practice, and also educational process needs to progress, Mugenda and Mugenda, (2007). One of the main advantages of Panel data is that it enables the researcher to control for unobserved heterogeneity, and secondly since panel data have both cross-sectional and time series dimensions, it provides the researcher with sufficient data points to reduce the likelihood of biasness in the parameter estimators.

3.3 Target Population

Population refers to the total collection of elements about which one wishes to make some inference (Cooper and Schindler, 2003) and an element represents each member of the population. The target population was all the 11 commercial banks listed in the

Nairobi securities exchange (NSE) in Kenya as at the end of 2015 as shown in Appendix I.

3.4 Sampling Frame

The sample comprised all commercial banks listed in the Nairobi Securities Exchange as at the end of 2015. Therefore all the eleven banks listed constituted the sample.

3.5 Data Collection Instruments And Procedures

The study used secondary data constituting the income statements and balance sheet sourced from the banks audited annual reports and financial statements for the five year period, between 2011 and 2015, available from the CBK, individual banks websites and CMA websites. The period was chosen because it offers recent time series observations and it constitutes a period of major developments in the Kenyan Banking system. Data for each of the bank specific factors will be collected namely; capital adequacy, asset quality, management efficiency, earnings ability and liquidity. Data on ROA to measure performance for the commercial banks will also collected over the study period. The data collection sheet was used to collect the data as shown in Appendix II.

3.6 Data Analysis

The data collected was analyzed using SPSS software version 20. Descriptive statistics was used such as mean, standard deviation, median, maximum, minimum values. To test for the effect of bank specific variables on the bank performance a multiple linear regression model was employed and the computer package SPSS (Statistical Package for the Social Sciences) version 20 will be employed to solve the multiple regression equation used in this study.

The ROA will be measured as indicated below:

$$\text{ROA} = \text{PBT} / \text{Total assets} \dots\dots\dots 1$$

Hence we estimate the following regression model.

$$ROA = \alpha + \beta_1 C_{it} + \beta_2 AQ_{it} + \beta_3 Mgt_{it} + \beta_4 Ea_{it} + \beta_5 Liq_{it} + \varepsilon_i \dots\dots\dots 2$$

Where:

ROA = performance of bank I at time t

α = constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = regression coefficients

C_{it} = Total capital / Total risk weighted assets of bank i at time t (Capital adequacy)

AQ_{it} = (NPI-Provision)/Gross advances of bank i at time t (Asset quality)

Mgt_{it} = Total operating revenue/total profit of bank i at time t (Mgt efficiency)

Ea_{it} = Net profits /Total assets of bank i at time t (Earnings ability)

Liq_{it} = Net liquid assets/Total deposits of bank i at time t (Liquidity)

ε_i = Error term

Coefficients $\beta_1, \beta_2, \beta_3$ and β_4 and β_5 were used to measure the sensitivity of the dependent variable (ROA_{it}) to unit changes in the five explanatory variables. F-statistic and t - statistic were used to carry out tests of significance for the overall fit of the model (R^2) and the independent variables respectively. Pearson and spearman correlation coefficients will be used to test for multi col-linearity.

CHAPTER FOUR

3.0 RESULTS

4.1 Introduction

This chapter presents the results of the study on the effect of bank specific factors that determine the financial performance of commercial banks in Kenya. The data was collected on the eleven commercial banks listed in the Nairobi Securities Exchange as at the end of 2015 for the period ranging from 2011 to 2015. The Financial Performance of commercial Banks in Kenya over time is measured by ROA (Return on Assets).

4.2 Descriptive Statistics

4.2.1 Commercial Banks ROA

The researcher sought to investigate trends in ROA (PBT/total assets) in commercial banks of Kenya from 2011 to 2015. From the findings, it can be noted that the year 2011 recorded the highest value for the ROA as shown by a mean of value of 0.0497 while the year 2015 recorded the lowest value for the ROA as shown by a mean value of 0.0314. In addition, the values for standard deviation depict variability in the ROA during the five-year period with the highest deviation of 0.0207 in the year 2015 and the lowest 0.0148 in the year 2011. The findings revealed that there has been a significant decrease in ROA during the five-year period. The results are displayed on table 4.1 below.

Table 4.1 Banks ROA from 2011 to 2015

	2011	2012	2013	2014	2015
Mean	0.0497	0.0466	0.0476	0.0453	0.0314
Median	0.0479	0.0485	0.0490	0.0447	0.0379
Standard Deviation	0.0148	0.0188	0.0163	0.0153	0.0207
Range	0.0430	0.0570	0.0580	0.0536	0.0634
Minimum	0.0290	0.0170	0.0190	0.0190	0.0167
Maximum	0.0720	0.0740	0.0770	0.0726	0.0500

4.2.2 Commercial Banks Capital adequacy

The researcher sought to investigate trends in capital adequacy in commercial banks of Kenya from 2011 to 2015. From the findings, it can be noted that the year 2012 recorded the highest value for capital adequacy as shown by a mean of value of 0.2328 while the year 2015 recorded the lowest value for capital adequacy as shown by a mean value of 0.1701. In addition, the values for standard deviation depict variability in the capital adequacy during the five-year period with the highest deviation of 0.0512 in the year 2012 and the lowest 0.0249 in the year 2015. The findings revealed that there has been a significant decrease in capital adequacy during the five-year period. The results are displayed on table 4.2

Table 4.2 Banks' Capital adequacy from 2011 to 2015

	2011	2012	2013	2014	2015
Mean	0.1908	0.2328	0.2062	0.1895	0.1701
Median	0.1776	0.2380	0.2100	0.1890	0.1770
Standard	0.0435	0.0512	0.0271	0.0259	0.0249
Deviation					
Range	0.1350	0.1398	0.0930	0.0810	0.0700
Minimum	0.1430	0.1612	0.1480	0.1390	0.1400
Maximum	0.2780	0.3010	0.2410	0.2200	0.2100

4.2.3 Commercial Banks Asset quality

The researcher sought to investigate trends in Asset quality in commercial banks of Kenya from 2011 to 2015. From the findings, it can be noted that the year 2013 recorded the highest value for Asset quality as shown by a mean of value of 0.2898 while the year 2014 recorded the lowest value for asset quality as shown by a mean value of 0.0376. In addition, the values for standard deviation depict variability in the asset quality during the five-year period with the highest deviation of 0.7608 in the year 2013 and the lowest 0.0313 in the year 2014. The findings revealed that there has been a decrease in asset quality from 2011 to 2012, this was followed by an increase in 2013. Asset quality then decreased in 2014 then increased in 2015. The results are displayed on table 4.3 below.

Table 4.3 Banks Asset quality from 2011 to 2015

	2011	2012	2013	2014	2015
Mean	0.2644	0.0403	0.2898	0.0376	0.0568
Median	0.0137	0.0215	0.0337	0.0220	0.0509
Standard	0.7189	0.0521	0.7608	0.0313	0.0487
Deviation					
Range	2.1772	0.1574	2.4450	0.0884	0.1129
Minimum	0.0028	0.0066	0.0050	0.0016	0.0071
Maximum	2.1800	0.1640	2.4500	0.0900	0.1200

4.2.4 Commercial Banks' management efficiency

The researcher sought to investigate trends in management efficiency in commercial banks of Kenya from 2011 to 2015. From the findings, it can be noted that the year 2012 recorded the highest value for management efficiency as shown by a mean of value of 2.5949 while the year 2015 recorded the lowest value for management efficiency as shown by a mean value of 1.5004. In addition, the values for standard deviation depict variability in the management efficiency during the five-year period with the highest deviation of 2.9451 in the year 2015 and the lowest 0.4570 in the year 2011. The findings revealed that there has been a significant decrease in management efficiency from 2012 to 2015. The results are displayed on table 4.4 below.

Table 4.4 Banks management efficiency from 2011 to 2015

	2011	2012	2013	2014	2015
Mean	2.1322	2.5949	2.4428	2.2243	1.5003
Median	2.1900	2.4400	2.2700	2.2765	2.5650
Standard	0.4570	1.5852	0.8547	0.6157	2.9451
Deviation					
Range	1.6400	5.2500	3.1700	1.9650	9.0700
Minimum	1.2900	1.3800	1.5800	1.0150	-5.620
Maximum	2.9300	6.6300	4.7500	2.9800	3.4500

4.2.5 Commercial Banks' earnings ability

The researcher sought to investigate trends in earnings ability in commercial banks of Kenya from 2011 to 2015. From the findings, it can be noted that the year 2011 recorded the highest value for earnings' ability as shown by a mean of value of 0.0965 while the year 2015 recorded the lowest value for Earnings' ability as shown by a mean value of 0.0221. In addition, the values for standard deviation depict variability in the earnings' ability during the five-year period with the highest deviation of 0.1646 in the year 2011 and the lowest 0.0157 in the year 2014. The findings revealed that there has been a significant decrease in earnings' ability over the five year period. The results are displayed on table 4.5 below.

Table 4.5 Banks earnings ability from 2011 to 2015

	2011	2012	2013	2014	2015
Mean	0.0965	0.0410	0.0446	0.0396	0.0221
Median	0.0359	0.0450	0.0470	0.0395	0.0251
Standard	0.1646	0.0161	0.0160	0.0157	0.0177
Deviation					
Range	0.4740	0.0510	0.0548	0.0460	0.0595
Minimum	0.0290	0.0170	0.0192	0.0190	-0.0094
Maximum	0.5030	0.0680	0.0740	0.0650	0.0501

4.2.6 Commercial Banks' Liquidity

The researcher sought to investigate trends in liquidity in commercial banks of Kenya from 2011 to 2015. From the findings, it can be noted that the year 2012 recorded the highest value for Liquidity as shown by a mean of value of 0.4617 while the year 2015 recorded the lowest value for Liquidity as shown by a mean value of 0.3479. In addition, the values for standard deviation depict variability in the liquidity during the five-year period with the highest deviation of 0.2683 in the year 2014 and the lowest 0.0951 in the year 2015. The findings revealed that there has been a significant decrease in liquidity over the five year period. The results are displayed on Table 4.6.

Table 4.6 Banks' Liquidity from 2011 to 2015

	2011	2012	2013	2014	2015
Mean	0.4225	0.4617	0.4557	0.4443	0.3479
Median	0.3570	0.3737	0.3560	0.3470	0.3100
Standard	0.2090	0.2401	0.2349	0.2683	0.0951
Deviation					
Range	0.6680	0.7440	0.7810	0.8854	0.2930
Minimum	0.2720	0.3000	0.3060	0.3076	0.2470
Maximum	0.9400	1.0440	1.0870	1.1930	0.5400

4.3 Inferential statistics

The inferential statistics involved the use of correlation and multiple linear regression analysis. Correlation analysis shows the relationships between the different variables considered in the study. Pearson and spearman correlation coefficients were used to test for multi col-linearity. The regression analysis was done using Ordinary Least Squares (OLS) method. F-statistic and t -statistic was used to carry out tests of significance for the overall fit of the model (R^2) and the independent variables respectively.

4.3.1 Correlation analysis

In this study, the Pearson correlation coefficient was used to test the presence of association between the variables. Values between 0 and 0.3 (0 and -0.3) indicate no correlation (variables not associated), 0.3 and 0.5 (-0.3 and -0.5) a weak positive (negative) linear association, Values between 0.5 and 0.7 (-0.5 and -0.7) indicate a moderate positive (negative) linear association and Values between 0.7 and 1.0 (- 0.7 and -1.0) indicate a strong positive (negative) linear association. The significance of the relationship is tested at 95% level with a 2-tailed test where a statistically significant

correlation is indicated by a probability value of less than 0.025. This means that the probability of obtaining such a correlation coefficient by chance is less than 2.5 times out of 100, so the result indicates the presence of an association. The correlation analysis results are presented in Table 4.7.

Table 4. 7: Correlation Results

		Capital adequacy	Asset quality	Mgt efficiency	Earnings ability	Liquidi ty	ROA
Capital adequacy	Pearson	1					
	correlation						
	Sig.(2 tailed)	*					
Asset quality	Pearson	.33*	1				
	correlation						
	Sig.(2 tailed)	.002	*				
Manageme nt efficiency	Pearson	.388*	0.11*	1			
	correlation						
	Sig.(2 tailed)	.477	.904	*			
Earnings ability	Pearson	.199*	.121*	.367*	1		
	correlation		-.340				
	Sig.(2 tailed)	.602	.406	.016	*		
Liquidity	Pearson	.217*	.232*	.188*	.199*	1	
	correlation						
	Sig.(2 tailed)	.004	.003	.227	.102	*	
ROA	Pearson	.733*	.389*	.310*	.340*	.351*	1
	correlation						
	Sig.(2 tailed)	.054	.007	.028	.006	0.001	*

From the finding in the table above, the study found a strong positive association between the capital adequacy of commercial banks and ROA as shown by correlation coefficient of 0.733, this too was also found to be significant at 0.054 level.

The study found that there was weak positive association between capital adequacy of commercial banks and asset quality as shown by correlation factor of 0.33, this weak association was found to be statistically significant as the significant value was 0.002 which is less than 0.05, the study also found weak positive association between ROA of commercial banks and asset quality as shown by correlation coefficient of 0.389, this too was also found to be significant at 0.007 level. The study also found weak positive association between ROA of commercial banks and earnings ability as shown by correlation coefficient of 0.34 at 0.006 level of confidence. The study also found weak positive association between ROA of commercial banks and liquidity as shown by correlation coefficient of 0.351 at 0.001 level of confidence. The study also found weak positive association between management efficiency of commercial banks and ROA as shown by correlation coefficient of 0.310 at 0.028 level of confidence which is less than 0.5.

The study also found weak positive association between earnings ability of commercial banks and management efficiency as shown by correlation coefficient of 0.367 at 0.016 level of confidence. The study also found weak positive association between management efficiency of commercial banks and capital adequacy as shown by correlation coefficient of 0.388 at 0.477 level of confidence which is less than 0.5. There were other correlations between the independent variables but they were not significant to the study since their confidence levels were above the 0.5 set limit.

4.3.2 Regression analysis

The objective of this study was to determine the effect of bank specific factors on the financial performance of commercial banks in Kenya. To accomplish this, the study conducted a regression analysis which gives the relationship between the independent variables used in the study including the capital adequacy, asset quality, management efficiency, earnings' ability, liquidity and the dependent variable performance (measured by the ROA). The data used was collected for 5 years thus giving a 5 year period data which facilitated linear regression analysis. The regression results are presented in tables below.

4.3.3 Model summary

Table 4.7 gives the regression model summary results. It presents the R value which is the measure of association between the dependent and the independent variables, the R Square which is the coefficient of determination measuring the extent at which the independent variables influence the dependent variable as well as the Adjusted R Square which measures the reliability of the regression results.

Table 4.8 Model summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.774 ^a	.749	.709		.04384
a. Predictors: (Constant), x1, x2, x3,x4,x5					

The findings show that *R* which is the multiple correlation coefficients that shows quality of the prediction of the dependent variable by the independent variable is 0.774. This is a good indication since it points to a strong correlation. The *R-Square* which is the coefficient of determination shows that the five independent variables in the model explain 74.9% of performance of commercial banks. Subsequently from the Adjusted *R-Squared* it is evident that after adjusting the model for inefficiencies the independent variables can explain 70.9% of performance of commercial banks.

4.3.4 Regression coefficients

In order to answer the proposed model for the relationship between performance and the independent variables, the regression coefficients were calculated and presented in table 4.9 below. These with their significance values (also given in the table) measures the effect of each independent variable on performance (dependent variable) and the effect that would occur to performance in an attempt to changing (increasing/decreasing) these variables.

Table 4.9 Coefficients (a)

Model		Standardized Coefficients Beta	T	Sig.
1	(Constant)	0.425		
	Capital adequacy	.354	3.454	0.000
	Asset quality	.461	2.554	0.004
	Management efficiency	.454	2.299	0.003
	Earnings ability	.349	2.413	0.002
	Liquidity	.343	2.464	0.002

a. Dependent Variable: ROA

As per the SPSS generated output as presented in table above the coefficients were used to answer the following regression model which relates the predictor variables (independent variables) and the dependent variables.

$$ROA = \alpha + \beta_1 C_{it} + \beta_2 AQ_{it} + \beta_3 Mgt_{it} + \beta_4 Ea_{it} + \beta_5 Liq_{it} + \varepsilon_i \dots \dots \dots 2$$

Where:

ROA = performance of bank I at time t

α = constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = regression coefficients

C_{it} = Total capital / Total risk weighted assets of bank i at time t (Capital adequacy)

AQ_{it} = (NPI-Provision)/Gross advances of bank i at time t (Asset quality)

Mgt_{it} = Total operating revenue/total profit of bank i at time t (Mgt efficiency)

Ea_{it} = Net profits /Total assets of bank i at time t (Earnings ability)

Liq_{it} = Net liquid assets/Total deposits of bank i at time t (Liquidity)

ϵ_i = Error term

Based on these coefficients, the regression model therefore becomes;

$$ROA = .425 + .354 C_{it} + .461 AQ_{it} + .454 Mgt_{it} + .349 Ea_{it} + .343 Liq_{it}$$

From the regression model obtained above, Constant = 0.425, shows that if all the independent variables (capital adequacy, asset quality, management efficiency, earnings' ability, liquidity) all rated as zero, ROA would rate 0.425. While holding the other factors constant a unit increase in capital adequacy of the bank led to 0.354 increase in ROA. A unit increase in asset quality while holding the other factors constant would lead to an increase in ROA of banks by a factor of 0.461, a unit change in management efficiency while holding the other factors constant would lead to an increase of 0.454 in ROA of the banks.

A unit increase in earnings ability while holding the other factors constant would lead to an increase in ROA of banks by a factor of 0.349, a unit change in liquidity while holding the other factors constant would lead to an increase of 0.343 in ROA of the banks. This implied that asset quality had the highest influence on ROA of banks (p - value .004). The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and $\alpha = 0.05$. If the probability value was less than α , then the predictor variable was significant otherwise it wasn't. All the predictor variables were significant in the model as their probability values were less than $\alpha = 0.05$

4.3.5 Significance level

Analysis of the variance (ANOVA) was used to make simultaneous comparisons between means; thus, testing whether a significant relation exists between dependent and independent variables. ANOVA indicates a significant F statistics implying that the model was fit for the estimation.

The results presented in table 4.10 gives the ANOVA results which shows the reliability of the model developed in explaining the relationship between the study variables. The significance of the model was tested at 5% level with a 2-tailed test.

Table 4.10 ANOVA (b) table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.268	3	.08934	3.436	.015(a)
	Residual	.026	1	.026		
	Total	.294	4			

a. Predictors: (Constant), capital adequacy, Asset quality, management efficiency, earnings ability, liquidity

b. Dependent Variable: ROA

From the table 4.10, the F statistic is 3.436 with a distribution $F(3,1)$, and the probability of observing a value greater than or equal to 3.436 is less than 0.001 as given by the significance value of 0.015 which is less than the critical value at 5% level in a 2-tailed test. This therefore reveals that the regression model developed is statistically significant and the variation in the results is insignificant that cannot result to a much difference in case of a change in the study units (population) and therefore the model can be relied upon to explain the effect the specific factors on performance of commercial banks in Kenya.

4.4 Summary of results

On descriptive statistics the findings established that the year 2011 recorded the highest value for the ROA as shown by a value of 0.049738 while the year 2015 recorded the lowest value for the ROA as shown by a mean value of 0.0314. From the findings the year 2012 recorded the highest value for capital adequacy as shown by a mean of value of 0.232836 while the year 2015 recorded the lowest value for capital adequacy as shown by

a mean value of 0.170143. From the findings, the year 2013 recorded the highest value for Asset quality as shown by a mean of value of 0.28984 while the year 2014 recorded the lowest value for capital adequacy as shown by a mean value of 0.037622. From the findings, the year 2012 recorded the highest value for management efficiency as shown by a mean of value of 2.594889 while the year 2015 recorded the lowest value for management efficiency as shown by a mean value of 1.500375. From the findings, the year 2011 recorded the highest value for earnings' ability as shown by a mean of value of 0.096463 while the year 2015 recorded the lowest value for Earnings' ability as shown by a mean value of 0.02208. From the findings, the year 2012 recorded the highest value for Liquidity as shown by a mean of value of 0.461675 while the year 2015 recorded the lowest value for Liquidity as shown by a mean value of 0.347857.

On the correlation of the study variable, the researcher conducted a Pearson moment correlation. From the finding in the table above, the study found that there was weak positive correlation between capital adequacy of commercial banks and asset quality as shown by correlation factor of 0.33, this weak relationship was found to be statistically significant as the significant value was 0.002 which is less than 0.05, the study also found weak positive correlation between ROA of commercial banks and asset quality as shown by correlation coefficient of 0.389, this too was also found to be significant at 0.028 level. The study also found weak positive correlation between ROA of commercial banks and earnings ability as shown by correlation coefficient of 0.34 at 0.006 level of confidence. The study also found weak positive correlation between ROA of commercial banks and liquidity as shown by correlation coefficient of 0.351 at 0.001 level of confidence.

The study also found weak positive correlation between earnings ability of commercial banks and management efficiency as shown by correlation coefficient of 0.367 at 0.016 level of confidence. The study also found weak positive correlation between management efficiency of commercial banks and capital adequacy as shown by correlation coefficient of 0.388 at 0.477 level of confidence which is less than 0.5.

From ANOVA statistics, the F statistic was 3.436 with a distribution $F(3,1)$, and the probability of observing a value greater than or equal to 3.436 is less than 0.001 as given by the significance value of 0.015 which is less than the critical value at 5% level in a 2-tailed test. This therefore reveals that the regression model developed is statistically significance and the variation in the results is insignificant that cannot result to a much difference in case of a change in the study units (population) and therefore the model can be relied upon to explain the effect the specific factors on performance of commercial banks in Kenya.

CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

This chapter presents the discussion of the results in chapter four on the study of the effect of bank specific factors that determine the financial performance of commercial banks in Kenya.

5.2 Summary of Findings

5.2.1 Effects of capital adequacy on financial performance

The researcher sought to establish the trends in capital adequacy commercial banks in Kenya and how they affect ROA of the banks. From the findings, it can be noted that the year 2012 recorded the highest value for capital adequacy as shown by a mean of value of 0.2328 while the year 2015 recorded the lowest value for capital adequacy as shown by a mean value of 0.1701. In addition, the values for standard deviation depict variability in the capital adequacy during the five-year period with the highest deviation of 0.0512 in the year 2012 and the lowest 0.0249 in the year 2015. The findings revealed that there has been a significant decrease in capital adequacy during the five-year period.

On the correlation of the study variable, the researcher conducted a Pearson moment correlation. The study found a strong positive association between the capital adequacy of commercial banks and ROA as shown by correlation coefficient of 0.733, this too was also found to be significant at 0.054 level. From the regression model obtained, a unit increase in capital adequacy while holding the other factors constant would lead to an increase in ROA of banks by a factor of 0.354.

These findings are in line with those of Bhunia, (2010) who found that banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to

bank runs. Capital is the amount of own funds available to support the bank's business and act as a buffer in case of adverse situation. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000).

According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

5.2.2 Effects of asset quality on financial performance

The researcher sought to establish the trends in Asset quality of commercial banks in Kenya and how they affect ROA of the banks. From the findings, it can be noted that the year 2013 recorded the highest value for Asset quality as shown by a mean of value of 0.2899 while the year 2014 recorded the lowest value for asset quality as shown by a mean value of 0.0376. In addition, the values for standard deviation depict variability in the capital adequacy during the five-year period with the highest deviation of 0.7608 in the year 2013 and the lowest 0.0313 in the year 2014. The findings revealed that there has been a decrease in capital adequacy from 2011 to 2012; this was followed by an increase in 2013. Capital adequacy then decreased in 2014 then increased in 2015.

On the correlation of the study variable, the researcher conducted a Pearson moment correlation the study also found weak positive association between ROA of commercial banks and asset quality as shown by correlation coefficient of 0.389, this too was also found to be significant at 0.028 level. From the regression model obtained, a unit increase in asset quality while holding the other factors constant would lead to an increase in ROA of banks by a factor of 0.461.

The findings are in line with Sangmi and Nazir (2010) who found that asset quality affects profitability and the financial performance of banks. These assets include the current and fixed assets, credit portfolio and other investments. Loans are a major asset in

Kenya's commercial banks that generates a large portion of a banks income. However, the loans also expose the banks to latent losses derived from delinquent loans.

5.2.3 Impact of management efficiency on financial performance

The researcher sought to establish the trends in Management efficiency of commercial banks in Kenya and how they affect ROA of the banks. From the findings, it can be noted that the year 2012 recorded the highest value for management efficiency as shown by a mean of value of 2.5949 while the year 2015 recorded the lowest value for management efficiency as shown by a mean value of 1.5004. In addition, the values for standard deviation depict variability in the management efficiency during the five-year period with the highest deviation of 2.9451 in the year 2015 and the lowest 0.4570 in the year 2011. The findings revealed that there has been a significant decrease in management efficiency from 2012 to 2015.

On the correlation of the study variable, the researcher conducted a Pearson moment correlation the study found a weak positive association between management efficiency of commercial banks and capital adequacy as shown by correlation coefficient of 0.388 at 0.477 level of confidence which is less than 0.5. The study also found weak positive correlation between management efficiency of commercial banks and ROA as shown by correlation coefficient of 0.310 at 0.028 level of confidence. From the regression model obtained, a unit increase in management efficiency while holding the other factors constant would lead to an increase in ROA of banks by a factor of 0.454.

The findings are in line with Athanasoglou et al, (2008) who identifies management efficiency as a factor that affects the financial performance and the profitability of commercial banks in Kenya. The management efficiency is represented by various financial ratios such as total asset growth, earning growth rate and so on. Management quality can also be measured by the efficiency in managing banks operating expenses. The ability of the management of commercial banks to deploy its resources efficiently, income maximization, reducing operating costs can be determined using financial ratios.

The quality of management exhibited by the finance departments of commercial banks determines the levels of operating expenses and in turn affects profitability and financial performance.

5.2.4 Impact of earnings ability on financial performance

The researcher sought to establish the trends in earnings ability of commercial banks in Kenya and how they affect ROA of the banks. From the findings, it can be noted that the year 2011 recorded the highest value for earnings' ability as shown by a mean of value of 0.0965 while the year 2015 recorded the lowest value for Earnings' ability as shown by a mean value of 0.0221. In addition, the values for standard deviation depict variability in the earnings' ability during the five-year period with the highest deviation of 0.1646 in the year 2011 and the lowest 0.0157 in the year 2014. The findings revealed that there has been a significant decrease in earnings' ability over the five year period. On the correlation of the study variable, the researcher conducted a Pearson moment correlation the study found a weak positive association between ROA of commercial banks and earnings ability as shown by correlation coefficient of 0.34 at 0.006 level of confidence. From the regression model a unit increase in earnings ability while holding the other factors constant will lead to increase in ROA by a factor of 0.349.

5.2.5 Effects of liquidity on financial performance

The researcher sought to establish the trends in liquidity of commercial banks in Kenya and how they affect ROA of the banks. From the findings, it can be noted that the year 2012 recorded the highest value for Liquidity as shown by a mean of value of 0.461675 while the year 2015 recorded the lowest value for Liquidity as shown by a mean value of 0.347857. In addition, the values for standard deviation depict variability in the liquidity during the five-year period with the highest deviation of 0.268337 in the year 2014 and the lowest 0.095137 in the year 2015. The findings revealed that there has been a significant decrease in liquidity over the five year period. On the correlation of the study variable, the researcher conducted a Pearson moment correlation the study found a weak

positive correlation between ROA of commercial banks and liquidity as shown by correlation coefficient of 0.351 at 0.001 level of confidence. From the regression model a unit increase in liquidity while holding other factors constant will lead to increase in ROA by a factor of 0.343.

The current findings are in line with Dang (2011) findings that liquidity is a factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfill its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related with bank profitability.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter presents conclusions made from the study and the recommendations for policy and for further research. The researcher conducted the study on effects of bank specific factors on financial performance of commercial banks in Kenya. Secondary data was collected on the independent and dependent variables and analysed, the results were presented in chapter Four.

6.2 Conclusion

The study objective was meant to examine the effect of bank specific factors on financial performance of commercial banks in Kenya. The conclusions are made from the study findings from the analyzed data.

6.2.1 Effects of capital adequacy on financial performance

The study concludes that capital adequacy affects the financial performance of commercial banks. The study concludes that there exists a positive and significant association between capital adequacy and financial performance. Further an increase in capital adequacy would lead to a positive and significant increase in financial performance of the commercial banks. This shows that capital adequacy has an effect on financial performance.

6.2.2 Effects of asset quality on financial performance

The study concludes that asset quality has a positive and significant association with the financial performance of commercial banks in Kenya. The study found that asset quality had the highest influence in financial performance of commercial banks compared to the

other independent variables .Increase in asset quality would lead to a significant increase in financial performance of the commercial banks.

6.2.3 Effects of management efficiency on financial performance

The study concludes that management efficiency has a positive and significant association with financial performance of commercial banks .The study found that an increase in management efficiency would lead to a significant increase in financial performance of commercial banks in Kenya.

6.2.4 Effects of earnings ability on financial performance

The study concludes that earnings ability has a positive and significant association with financial performance of commercial banks .The study found that an increase in earnings ability would lead to a significant increase in financial performance of commercial banks in Kenya.

6.2.5 Effects of liquidity on financial performance

The study concludes that liquidity has a positive and significant association with financial performance of commercial banks .The study found that an increase in liquidity would lead to a significant increase in financial performance of commercial banks in Kenya. From the regression model obtained, all the independent variables (capital adequacy, asset quality, management efficiency, earnings' ability, liquidity) all rated as zero, ROA would rate at 0.425. Therefore it can be concluded that only 42.5% of ROA variation in banks can be explained by capital adequacy, asset quality, management efficiency, earnings' ability and liquidity. Based on the findings it can be concluded that the Asset quality of the bank had the highest influence on ROA of banks.

6.3 Recommendations for policy

From the findings and conclusions an increase in capital adequacy leads to a significant increase in bank's financial performance therefore the study recommends that bank capitalization should be encouraged in all commercial banks and other financial institutions so that performance can be enhanced. Institutions should strive to retain earnings to boost up capital rather than paying inflated bonuses. Well capitalized institutions have lower financial risk and thus are more likely to survive financial crisis thus, a well-capitalized banking system will ensure financial stability and make the industry more resilient against external shocks and risk.

From the findings increase in asset quality causes a significant increase in bank performance the study therefore recommends that banks keep their amount of non-performing loans to low levels since such loans affect the profitability of the banks and in turn affect financial performance of the banks. From the findings increase in management efficiency causes a significant increase on financial performance of commercial banks, the study therefore recommends that efficient and effective management should be adopted by bank managers to ensure that banks do not become insolvent.

From the findings increase in earnings ability has a positive and significant increase in bank performance. The study recommends that the banks should also strive to remain competitive so as to increase their earnings ability. This can be achieved by continuous product innovation and leveraging on technology.

From the findings increase in liquidity causes a significant increase in bank performance the study therefore recommends that banks continue to keep the recommended liquidity levels to be able to meet customer demand for their deposits to avoid bank runs and panic in the market. Since banks are less profitable when less liquid, bank managers should be encouraged to invest in more liquid assets. This will not only improve bank profitability but it will also enable banks meet their short term obligations as they fall due. It is

possible that liquid bank assets are more profitable due of some market inefficiency. Further empirical study will be required to establish this.

6.4 Recommendations for Further Study

From the findings 42.5 % of the variation in banks performance can be explained by the independent variables in the study therefore the study recommends that further studies be conducted to determine the effect of economic factors that affect bank performance.

The study therefore suggests a similar study should be carried in micro finance institutions and Saccos in Kenya. Further studies should also be done and focus on the factors independently to cover more grounds, for example, effect of asset quality on financial performance of commercial banks in Kenya. In future research work also, it might be useful to understand the factors that impact on effectiveness of monetary policy of the Central Bank since money supply significantly and negatively relate to bank profitability. This is because the Central bank can have the right policy objectives but certain prevailing factors in the industry can be an impediment to the realization of these objectives.

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APPENDICES

Appendix I . Permission to collect data



SOUTH EASTERN KENYA UNIVERSITY

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Date: Monday, July 27, 2015

Kamande Eric Gicharu
Reg. No. D61/MAC/20015/2011
Master of Business Administration
C/O Dean, School of Business and Economics

Dear Kamande,

RE: PERMISSION TO PROCEED FOR DATA COLLECTION

This is to acknowledge receipt of your Master Proposal document.

Following a successful presentation of your Master Proposal, the School of Business and Economics in conjunction with the Directorate, Board of Post graduate Studies (BPS) have approved that you proceed on and carry out your research data collection in accordance with your approved proposal.

During your research work, you will be closely supervised by Dr. Paul K. Sang and Mr. Zablon Evusa. You should ensure that you liaise with your supervisors at all times. In addition, you are required to fill in a Progress Report (**SEKU/ARSA/BPS/F-02**) which can be downloaded from the University Website.

The Board of Postgraduate Studies wishes you well and a successful research data collection as a critical stage in your Master of Business administration.

Dr. Josphert Kimatu
Ag. Director, Board of Postgraduate Studies

APPENDIX II: List of Commercial banks

List of commercial banks listed in the Nairobi Securities Exchange as at 31st December 2015.

1. Barclays Bank Ltd
- 2 CFC Stanbic Holdings Ltd
3. Co-operative Bank of Kenya Ltd
4. Diamond Trust Bank Kenya Ltd
5. Equity Bank Ltd
6. Housing Finance Co Ltd
7. I&M Holdings Ltd
8. Kenya Commercial Bank Ltd
9. National Bank of Kenya Ltd
10. NIC Bank Ltd
11. Standard Chartered Bank Ltd

Appendix III: Data collection sheet

I. ROA

YEAR		2011	2012	2013	2014	2015
SNO	NAME					
1	Barclays bank					
2	CFC Stanbic					
3	Co-operative bank					
4	Diamond trust bank					
5	Equity bank					
6	Housing finance					
7	I&M					
8	Kenya commercial bank					
9	National bank					
10	Nic bank					
11	Standard chartered bank					

Source: (Author, 2017)

II. Independent variables for each bank

YEAR		2011	2012	2013	2014	2015
SNO	VARIABLES					
1	Capital adequacy					
2	Asset quality					
3	Management Efficiency					
4	Earning Ability					
5	Liquidity					

Source: (Author, 2017)