DETERMINANTS OF PROFITABILITY OF COMMERCIAL BANKS IN KENYA

BY

LUCY WANGARI GITONGA

D61/70471/2009

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF THE MASTER OF BUSINESS ADMINISTRATION, UNIVERSITY OF NAIROBI.

OCTOBER 2013.

DECLARATION

I hereby declare that the presented project is my original work and has never been presented either in whole or in part to any other examining body for the award of certificates, diploma or degree.

Name: Lucy Wangari Gitonga

Reg. No D61/70471/2009

Signature……………………….. Date………………………….

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

Supervisor:

Signed ………………… Date………………………….

Name: Mr. Herrick Ondigo

Lecturer, Department of Finance and Accounting,

School of Business,

University of Nairobi.

ACKNOWLEDGEMENTS

I take this opportunity to thank the almighty God for enabling me to undertake the Master of Business Administration course and guiding me through to the end of this project. Special thanks and appreciation goes to my supervisor Mr. Herrick Ondigo for the support, advice, guidance, encouragement and tireless effort he gave to me during this entire research period. I also acknowledge my lecturers and fellow students for their contributions towards this research.

Finally I am grateful for the invaluable support offered by anyone else that may have been directly or indirectly involved and formed a basis for which this research was conducted. To all may God bless you.

DEDICATION

I dedicate this work tomy dear husband Gideon Nzioki Mutala and my children Mercy Mumbua Nzioki, Isaac Mutala Nzioki and Grace Wanjiru Nzioki. For my husband I say thank you for your love, understanding, encouragement and invaluable support. Thank you for believing in me.

To God be the glory and honor.

TABLE OF CONTENTS

DECLARATION ..... **i**

ACKNOWLEDGEMENTS ..... **iii**

DEDICATION ..... **iv**

LIST OF TABLES ..... **viii**

LIST OF FIGURES ..... **ix**

LIST OF ABBREVIATIONS ..... **x**

ABSTRACT ..... **xi**

CHAPTER ONE **1**

INTRODUCTION **1**

1.1 Background of the Study 1

1.1.1 Profitability 3

1.1.2 Determinants of Profitability 3

1.1.3 Commercial Banks in Kenya 5

1.2 Research Problem 5

1.3 Research Objectives. 7

1.4 Value of the Study 7

1.4.1 Investors 8

1.4.2 Individual Commercial Banks 8

1.4.3 The Regulators 8

1.4.4 Academicians and Researchers 9

1.4.5 Government 9

CHAPTER TWO **10**

LITERATUREREVIEW **10**

2.1. Introduction 10

2.2 Theoretical Review 10

2.2.1 Market Power Theory 10

2.2.2 Efficient Structure Theories 11

2.2.3 The Portfolio Theory 11

2.3 Factors that Influence Profitability of Commercial Banks 12

2.3.1 Information Technology 12

2.3.2 Human Resource Management Practices 13

2.3.3 Ownership Structure of the Bank 14

2.3.4 Diversification of Income 15

2.3.5 Market Concentration 16

2.3.6 Risk Management 17

2.3.7 Liquidity Management 17

2.3.8 Management Efficiency 19

2.3.9 Deposit Composition 19

2.3.10 Earning Performance 20

2.4 Empirical Review 21

2.5 Summary of Literature Review. 22

CHAPTER THREE 24

RESEARCH METHODOLOGY 24

3.1 Introduction 24

3.3 Population 24

3.5 Data Collection 25

3.6 Data Analysis 25

CHAPTER FOUR 28

DATA ANALYSIS, RESULTS AND DISCUSSION 28

4.1 Introduction 28

4.2 Data Analysis and Presentation 28

4.2.1 Descriptive Statistics 28

4.2.2 Regression Analysis 37

4.3 Interpretation of Findings 39

CHAPTER FIVE 42

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 42

5.1 Introduction 42

5.2 Summary 42

5.3 Conclusion 45

5.4 Recommendations for Policy and Practice 46

5.5 Limitations of the Study 47

5.6 Suggestions for Further Studies 47

REFERENCES 48

APPENDICES 53

LIST OF TABLES

Table 4.1Model Summary 37

Table 4.2 ANOVA 37

Table 4.3 Regression Coefficients 38

LIST OF FIGURES

Figure 4.1 Information Technology 29

Figure 4.2 HRM Practices 30

Figure 4.3 Ownership Structure.. 31

Figure 4.4 Diversification of Income 32

Figure 4.5 Market Concentration 33

Figure 4.6 Risk Management.. 34

Figure 4.7 Liquidity Management 34

Figure 4.8 Management Efficiency 35

Figure 4.9 Deposit Composition.. 36

Figure 4.10 Earning Performance.. 36

LIST OF ABBREVIATIONS

ATM- Automatic Teller Machines

ICT-Information Communication Technology

CBK-Central Bank of Kenya

SCP-Structure Conduct Performance

MP- Market Power

RMP-Relative Market Power

ES- Efficiency Structure

ROA-Return on Assets.

CMA – Capital Markets Authority

ABSTRACT

With the recognition that profitability is the major force that drives the entire organization, banks are according top priority to a company-wide profitability management process based on planning and control. The top financial institutions worldwide are developing profitability management systems that feature the creation of quantitative objectives, the careful monitoring of progress against these goals, tighter expense control, and more aggressive pricing and collection procedures. This research sought to establish the determinants of commercial banks in Kenya. To achieve this objective, the study employed a descriptive research design. Forty commercial banks were considered but researcher managed to obtain information from 35 commercial banks representing an 87.5 response rate. This research also relied on secondary data which was obtained from banks' annual reports and financial statements over a period of eight years between 2005-2012.

The collected data was edited, coded and entered for analysis using the Statistical Package for Social Sciences (Version 17.0) computer package. Both descriptive and inferential statistics were used. The research findings revealed that there was a very strong positive relationship (R= 0.852) between the variables. The study also revealed that 72.7% of commercial banks profitability in Kenya could be explained by the ten factors under study. From this study it was evident that at 95% confidence level, the variables produced statistically significant values and can be relied on to explain commercial banks profitability in Kenya. However, increased management efficiency, adoption of internet banking and increased customer deposits explained commercial banks profitability to a great extent.

Based on the research findings the following policy recommendations were proposed: The management of commercial banks should ensure that electronic banking is embraced in all their transactions to increase efficiency and effectiveness in their service delivery; effective practices on human resource management should also be embraced; there is need to diversify the income generating activities of the banks so as to improve the stability of the bank. Operational expenses and proper risk management strategies need to be embraced by commercial banks so as to reduce their risk exposure more specifically on loan management.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Like all businesses, banks make profit by earning more money than what they pay in expenses. The major portion of a bank's profit comes from the fees that it charges for its services and the interest that it earns on its assets (Young and Rice, 2004) while the major expense is the interest paid on its liabilities (Rasia, 2010).

The major assets of a bank are its loans to individuals, businesses, and other organizations and the securities that it holds, while its major liabilities are its deposits and the money that it borrows, either from other banks or by selling commercial paper in the money market. With the recognition that profitability is the major force that drives the entire organization, banks are according top priority to a company-wide profitability management process based on planning and control. The top financial institutions worldwide are developing profitability management systems that feature the creation of quantitative objectives, the careful monitoring of progress against these goals, tighter expense control, and more aggressive pricing and collection procedures Baral, (2005).

The global financial crisis of 2007/2009 demonstrated the importance of the performance of banks in both local and international economies. As a result, the performance of banks should be monitored at all times to ensure smooth running of the economy. More attention should be given to developing countries because in these economies, the financial markets are underdeveloped hence more reliance on the banking sector to provide finance for majority of the firms (Athanasoglou et al, 2006).

Olweny and Shipho (2011) noted that the importance of the profitability of banks can be appraised at the micro and macro levels of the economy. At the micro level, profit is considered to be very important to competitive banking and also the cheapest source of funds. It is essential for successful banking in a period of growing competition on financial markets. Hence management of all banks aims at maximizing profit as an essential requirement for conducting business.

The growth of information technology has led to great development in the banking industry. For the banks, technology has emerged as a strategic resource for achieving higher efficiency, control of operations, productivity and most importantly, profitability. Internet can be used as a delivery mode for the provision of services like opening a deposit account, electronic bill payments, and online transfers. These services can either be provided by banks having physical offices and by creating a website and providing services through that or services can be provisioned through a virtual bank as well. Internet is used as a strategic and differentiating channel to offer high valued financial services complex products at same or improved quality at lower costs without physical boundaries and to cross sell products like credit cards and loans (Furst et al, 2002).

Oloo (2009) described the banking sector in Kenya as the bond that holds the economy together. Major sectors such as transport, manufacturing, and agriculture depend on the banking sector for their survival and growth. The financial sector in Kenya is dominated by banks and as such the process of financial intermediation in the country depends heavily on commercial banks (Kamau, 2009). Mwega (2009) noted that the performance of banks has improved over the years though not all the banks

have been profitable. The difference in terms of profitability between large banks and small and medium banks is an indication that there are some significant factors that influence profitability of commercial banks in Kenya.

1.1.1 Profitability

The main objective for existence of many organizations is to make profits. Banks are not exempted from this and hence the need for the banks to make profits. Banks that are profitable are more stable since they are better able to meet their operational expenses and other investments. The profitability performance of commercial banks is very important to many stakeholders such as investors, government, and the individual commercial banks among others. These stakeholders are interested in the profitability performance to see if the banks will be able to meet their specific needs. Investors are interested in the profitability to make sure their investment does not go into drain while the government is interested for the purposes of revenue collection. The managements of the banks must therefore work extremely hard to ensure they run organizations that are profitable. The studies done on bank profitability have focused both on developed and developing countries. The studies that have focused on developing countries like Kenya include Naceur (2003), Flamini et al (2009) and Sufian and Chong (2009).

1.1.2 Determinants of Profitability

The profitability of a bank is influenced by both internal and external factors. Internal factors are specific to the bank and are influenced to a great extent by the decisions made by the management. Such decisions include the human resource management practices, adoption of information technology, the level of liquidity, management of expenses, deposit composition, risk management and the level of diversification of

income generating activities. The external factors are influenced by market forces and include industry concentration and ownership structure of the bank.

Molyneux and Thornton, (1992) concluded that there exist a positive relationship between efficiency and profitability. Where banks are run efficiently, the operational costs are reduced leading to increase in the profits that are realized by the banks. A bank should be liquid enough to be able to meet its short term obligations on a short notice. However, Kamau (2009) argues that banks holding high liquidity do so at the opportunity cost of some investments which would generate high returns. Hence the banks should strike a balance between holding liquid assets and investing in activities that generate financial returns.

Wan et al. (2002) noted that there is a positive relationship between effective human resource management practices and firms financial performance. Sumra et al (2011) concluded that the profitability of banks has increased to a large extent by incorporating electronic means in provision of their products and services. Kosmidou (2008) showed a negative impact of asset quality to bank profitability. Ndung'u (2003) concluded that sound asset and liability management had a significant influence on profitability. Increase in interest rate was found to reduce the profits earned by banks as a result of reduced borrowings whereas increased market share improved the profitability of the banks (Molyneux and Thornton, 1992). Olweny and Shipho (2011) found that income diversification had a positive impact on profitability. A study done by Miller and Noulas (1997) concluded a negative relationship between credit risk and profitability.

1.1.3 Commercial Banks in Kenya

Commercial banks in Kenya generate most of their income from lending activities. This income is generated from interest charged on loans and also the loan processing fees. As banks strive to lend more and more so as to increase their profitability, they face the risk of default of both principal and interest. According to (Kibe 2003), commercial banks should manage their operating costs, other expenses as well as other noninterest income in order for them to realize profits. In order for the banks to make profits, the banks pay very little on customer deposits while they charge high interest rates on loans given to customers. Njihia (2005) noted that despite the disparity in interest rate spread, the banks continue to make huge losses. He therefore argued that bank profitability is determined by the management efficiency.

Commercial banks in Kenya are regulated by Central Bank of Kenya. This means that CBK is charged with the mandate of controlling the interest rates charged by the banks. Whenever CBK put interest rate ceilings, the profits for individual commercial banks are affected. Hence the management of commercial banks in Kenya cannot ignore interest rate issue as it directly affects the profits reported by the banks. Other guidelines issued by the CBK include cash ratio, liquidity, capital adequacy among other reporting requirements.

1.2 Research Problem

In developing countries, commercial banks play a very important role in the growth of the economy. This is because major sectors such as manufacturing, agriculture and transport mostly depend on banks for their survival and growth. Banks also facilitate savings, wealth distribution and employment generation. Hence financial performance of

commercial banks is a major concern to various stakeholders who have various interests in these commercial banks.

A study done by Athanasoglou et al, (2006), concluded that performance of banks is influenced by factors that are both internal and external to the bank. While internal factors are influenced by decisions made by management, external factors are influenced by market forces and the management has no control whatsoever. The factors that are internal to the bank include; information technology, human resource management practices, liquidity, operation cost management, deposit composition whereas factors external to the bank include industry concentration and ownership structure of the bank.

Njihia (2005) did a study on determinants of profitability of commercial banks in Kenya and found the most critical factors influencing profitability of commercial banks in Kenya to be customer deposits, market share percentage measured by total deposits, interest income from loans and advances to customers, interest expense on customer deposits, non interest income, non interest expense, provision for bad and doubtful debts, non performing loans, total assets net of loans and advances to customers, shareholders' funds, liquid assets and loans to deposit ratio.

There are forty three registered commercial banks comprising of thirty seven small and medium banks and six large banks in Kenya. These banks are spread all over the country. The banking sector has provided employment to many people in the country hence assisting in poverty alleviation.

In Kenya, no other study has been done on determinants of profitability of commercial banks after the study done by Njihia. However, the banking environment has since changed and has become more competitive. There has been decline in interest margins forcing many banks to explore alternative sources of revenues as noted by Uzhegova (2010).Information technology has become very significant in determining profitability of the commercial banks making the banks which are compliant to be more profitable as concluded by De Young et al (2007).Efficient utilization of human resource management practices has been found to have a high positive effect on the financial performance of banks as noted by Quresh, et al (2010). The ownership structure of the banks has been

seen to make a difference in profitability as noted by Kamau (2009).Tregenna (2009) in his study found strong evidence that concentration increased profitability in USA banks.

While most of the studies on bank profitability are based on developed countries especially the USA and Europe, a few studies focusing on developing countries.

This research seeks to answer the question; Can human resource management practices, information technology, bank ownership, income diversification, market concentration, risk management, liquidity, operation cost efficiency, deposit composition and earning performance be used as explanatory variables of profitability of commercial banks in Kenya?

1.3 Research Objectives.

The general objective of this study was to identify and analyze the determinants of profitability of commercial banks in Kenya

The following were the specific objectives of the study:-

1. To identify the internal determinants of profitability of Commercial banks in Kenya.
2. To identify the external determinants of profitability of Commercial banks in Kenya.

1.4 Value of the Study

This study will be important to many parties, such as investors, regulators of banks, individual commercial banks, government as well as academicians and researchers.

1.4.1 Investors

In a competitive financial market bank performance provides signal to depositors whether to invest or withdraw funds from the bank. Depositors need to know previous performance of banks in order to determine whether it is beneficial to deposit their extra money to earn profit. Depositors often look at the interest rate that the banks offer for deposits. By analyzing bank performance they will be able to get more and reliable information about the strength of the banks. So, the findings of this study will guide on the best performing institutions that they can invest their money in for them to get higher returns.

1.4.2 Individual Commercial Banks

The results of my study are important for managers of the banks since they are the ones charged with design and implementation of procedures and policies related to investment strategies. The studies are also important because the performance of the bank can be compared to the overall banks' performance. This would be a good indicator for them to understand their banks' performance against the industry.

1.4.3 The Regulators

Regulators are interested to know in order to enhance regulation and monitoring function. The findings would be important in the issue of prudential guidelines on profitability that can be used in policy formulation. The Central Bank of Kenya could employ the findings of this study in formulating guidelines that will enhance profitability in the banking sector while protecting those who rely on bank credit.

1.4.4 Academicians and Researchers

Students of finance will find this study helpful in analyzing the factors affecting profitability of commercial banks; it will also form a basis for further research.

1.4.5 Government

The government would be interested in this study to be able to come up with good policies of revenue collection in order to maximize its revenue. The remainder of the paper is organized as follows. A review of the relevant literature regarding the determinants of banking profitability is given in Section2.Section 3 presents the data and methodology to be applied while Section 4 contains the empirical results. Lastly, the conclusion will be given in Section5.

CHAPTER TWO

LITERATUREREVIEW

2.1. Introduction

The factors that explain profitability of commercial banks can be divided into both internal and external factors. The internal factors are specific to the bank and are influenced to a large extent by the management decisions. The external factors consider both macroeconomics and industry characteristics (Athanasoglou et al, 2006). External factors are influenced to a large extent by the market forces. They include ownership structure of the bank and industry concentration.

2.2 Theoretical Review

Several studies have been done on the performance of banks beginning from the late 1980s and early 1990s.Olweny and Shipho (2011) identified the following theories that have been applied in the study of bank profitability. These include Market power theory, efficient structure theories and portfolio theory.

2.2.1 Market Power Theory

The performance of bank is influenced by the market structure of the industry according to the MP theory. The theory uses two distinct approaches; the Structure -Conduct-Performance (SCP) and the Relative Market Power hypothesis (RMP). The SCP approach argues that the level of concentration in the banking market gives rise to potential market power by banks, which may raise their profitability. Banks in more concentrated markets are most likely to make abnormal profit by their ability to lower interest rates on deposits and to charge higher interest rates on loans as a result of

monopolistic reasons, than firms operating in less concentrated markets, irrespective of their efficiency (Tregenna, 2009). On the other hand, the RMP hypothesis argues that bank profitability is influenced by market share. It assumes that only large banks with differentiated products can influence prices and increase profits. As a result, they are able to exercise market power and earn non-competitive profits.

2.2.2 Efficient Structure Theories

The ES hypothesis argues that banks earn high profits because they are more efficient than others. The theory also uses two distinct approaches; the X-efficiency and Scale–efficiency hypothesis. The X-efficiency approach argues that firms can make more profits if they are more efficient. This is because they are able to lower their costs of operations hence increasing their profitability. Such firms tend to gain larger market shares, which may manifest in higher levels on market concentration, but without any causal relationship from concentration to profitability (Athanasoglou et al, 2006). The scale approach emphasizes economies of scale rather than efficiency in production. Larger firms can obtain their raw materials in bulk at lower costs since they are able to get quantity discounts. This enables them to produce goods at lower costs and hence make high profits. As a result, the large firms are able to acquire market shares, which may manifest in higher concentration and then profitability.

2.2.3 The Portfolio Theory

According to (Nzongang and Atemnkeng, 2006), portfolio theory plays an important role in bank performance studies. It is the most relevant theory when it comes to studying profitability of banks. The optimum holding of each asset in a wealth holder's portfolio is determined by the expected rate of return and also the risks associated with the portfolio

as well as the size of the portfolio. The bank management is the one designated with decision making role on portfolio diversification and the desired portfolio composition of commercial banks. For the banks to maximize on the profits, the management should come up with a feasible set of assets and liabilities. The unit cost of producing each component of assets also determines the profits to be made by the bank. The lower the unit cost, the higher the profitability (Nzongang and Atemnkeng, 2006).

The above theoretical analysis shows that the ES and Portfolio theory largely assume that bank performance is influenced by internal efficiencies and managerial decisions, while the MP theory assumes bank profitability is a function of external market factors. Bakar and Tahir (2009) evaluated the performance of the multiple linear regression technique with a goal to find a powerful tool in predicting bank performance. They used data of thirteen banks in Malaysia for the period 2001-2006 for their study. ROA was used as a measure of bank performance and seven variables including liquidity, credit risk, cost to income ratio, size, concentration ratio, were used as independent variables.The method provides significant explanatory variables to bank performance and explains the effect of the contributing factors in a simple, understandable manner. This study will adopt this approach to determine the effects of internal and external factors on bank profitability in Kenya.

2.3 Factors that Influence Profitability of Commercial Banks.

2.3.1 Information Technology

Onay et al (2008) in their study, the impact of internet banking on bank profitability for commercial banks in Turkey concluded that internet banking had a positive effect on the performance of the banking systems in Turkey in terms of return to equity only with a lag

of two years. They provided evidence that investment in e-banking is a gradual process. According to their study, internet had changed the dimensions of competition in the retail banking sector. It also provided opportunities for emerging countries to build up their financial intermediation infrastructure.

Hernado and Nieto (2006) showed that internet banking is perceived as an additional channel to compliment traditional banking. They estimated the effect of adopting of a transactional websites on over 70 Spanish banks between 1994 and 2002 and found that overhead and staff expenses declined gradually as a result of adoption and this improved profitability for the banks. Sumra et al (2011) in their study, the impact of E- banking on the profitability of banks in Pakistan also concluded that the profitability of banks has increased to a large extent by incorporating electronic means in provision of their products and services.

In their research, De Young et al (2007) analyzed the effect of e-banking on the performance of banks by studying US community banks markets. Their findings concluded that e-banking improved the profitability of banks hence increasing their revenues. Cicretti et al (2009) in their latest study examined the performance of an Italian bank. They showed a strong positive impact of internet banking on banks performance stating that the analysis is strong under different description of the internet banking adoption variable.

2.3.2 Human Resource Management Practices

Human resource management is linked with all the managerial functions involved in planning for recruiting, selecting, developing, utilizing, rewarding, and maximizing the

potential of the human resources in an organization. Cascio (1991) concluded that financial returns associated with investments in progressive HRM practices are generally substantial. Wan et al. (2002) examined the relationship between HRM practices and firm performance.HRM practices were creating positive effect on organizational performance. Results calculated through regression suggested that effective implementation of key HRM practices increases organizational performance. Deepak et al (2003) concluded that organizational performance and competitiveness can be enhanced by utilizing high performance work system. Huselid (1995), identified a positive link between HRM practices and firm performance.

Arthur (1994) found that steel mills that use HRM 'Commitment System' have higher productivity levels than those that do not. Schmidt et al. (1979) explored that increasing one unit of employee performance is equivalent to 40% of salary increase. Quresh, et al (2010) concluded that four independent variables namely selection, training, compensation and employee participation have a high positive effect on the financial performance of banks. Few studies, however, did not find clear effects of HRM practices on productivity (Delaney et al., 1989). Batt (2002) found that HRM practices do not pay off in small organizations that operate in local markets. Cappelli and Newmark (2001) identified that HRM practices may raise productivity slightly, but they also raise labour costs.

2.3.3 Ownership Structure of the Bank

Banks can be owned by local investors or foreigners who come to invest in the country. The government can also have a major shareholding in a bank. It is therefore important to know whether the ownership status of a bank is related to its profitability.

Kamau (2009) argued that foreign owned banks are more profitable than local banks because they are able to import technical capacity from their countries of origin thus making them more efficient as compared to the local banks. The foreign owned banks provide more stability to the financial system because they are able to draw on liquidity resources from their parents' banks and provide access to international markets. Foreign owned banks are associated with lower costs of operation because they are able to import experts who are highly skilled and knowledgeable. Olweny and Shipho (2011) concluded a positive relationship between foreign ownership and bank profitability.

Short (1979) concluded that there is a strong negative relationship between government ownership and bank profitability. Banks owned by the government have been known to make huge losses due to political interference. In contrast, Bourke (1989) and Molyneuxand Thornton (1992) did not find any relationship between profitability and ownership status of the banks they studied. A study done by Kang'ethe (1999) on government ownership on the share price volatility of companies quoted at the Nairobi stock exchange found that there is a significant difference in the share stock volatility between the companies in which the government has shareholding and the market index.

2.3.4 Diversification of Income

For a long time, commercial banks' source of income had been net interest income, upfront loan fees, fees charged to customers' accounts and also fees charged on credit card facility. The main source was net interest income which accounted for more than 50% of the banks profit in a given year.

Uzhegova (2010) concluded that banks that have diversified their financial activities have reported higher profits as compared to banks that focused on their core activities. This is

because the banks that diversified their activities were able to share costs among several products which translated to improved profitability. Olweny and Shipho (2011) in their study on effects of banking sectoral factors on profitability of commercial banks in Kenya concluded that income diversification had a positive impact on profitability. A study done by Choi and Kotrozo (2006) also concluded that activity diversification has a positive impact on profitability of banks due the resulting economies of scale and scope.

Banks that diversify their activities enjoy many benefits. However diversification may lead to increased agency costs which may affect the profitability performance of the bank.

2.3.5 Market Concentration

According to Tregenna (2006), increase in market concentration is positively related with increased profitability. This is because as market concentration is increased; competition is reduced hence leading to high profits. Lack of competition often leads high levels of profits at the expense of efficiency and effectiveness (Nzongang and Atemnkeng, 2006).

Olweny and Shipho (2011) concluded that although market concentration had an overall negative effect on profitability, it had a positive effect when a sample of large banks was taken and a negative result when small and medium banks were taken. Hence market concentration was only beneficial to large banks.

Flamini et al (2009) concluded that banks with high market power made high returns not because they are more efficient in the provision of financial services but because they experienced a lower degree of competition. Northoctt (2004) noted that banks with high market power experienced high profits leading to more stability for the banks. Nzongang

and Atemnkeng (2000) also concluded that market concentration is positively related to commercial banks profitability. Tregenna (2009) concluded that the high profits earned by USA banks before the 2007/2008 financial crisis was not due banks being run efficiently but the high market power that these banks experienced. The banks did not reinvest the high profits that were earned hence the resulting financial crisis. Naceur (2003) reported that there exist a negative relationship between market concentration and profitability of commercial banks.

2.3.6 Risk Management

The nature of business carried out by banks involves taking a lot of risks. Poor asset quality and low levels of liquidity are the major risks faced by banks. Banks may decide to increase their liquid holdings or they may diversify their portfolio in order to reduce their risks. Risk can be divided into credit and liquidity risk. Credit risk is measured by provisions for loans. It is the ratio of provisions for loans losses over total loans. Bank managers should be thoroughly trained on how to screen the credit risk because failure to do so can lead to defaulting in payment of either principal or interest which in return can have adverse effect on the profitability of the bank.

Molyneux and Thornton (1992) in their study found a negative and significant relationship between the level of liquidity and profitability. In contrast, Bourke (1989) reports an opposite result.

2.3.7 Liquidity Management

Liquidity is the availability of funds, or assurance that funds will be available, to honor all cash outflow commitments as they fall due. These commitments are generally met

through cash inflows, supplemented by assets readily convertible to cash or through the institution's capacity to borrow. The risk of illiquidity may increase if principal and interest cash flows related to assets, liabilities and off-balance sheet items are mismatched.

One of the major decisions undertaken by the managements of commercial banks is to ensure that liquidity is well managed at all times. This ensures that all cash outflow commitments are met on a timely basis which leads to smooth operations in the banking system. According to CBK (2009),a liquidity problem in one bank has the ability to negatively affect the entire banking system. It should however be noted that any cash held by the banks is at the expense of investment because if that money was invested it would bring some financial returns to the bank (Kamau, 2009).Banks management should therefore strike a balance between holding high liquidity and carrying out some investment activities .According to (Hempel et al, 1994), there exists a tradeoff between return and liquidity risk.

The management of any bank is therefore faced with the dilemma of choosing between whether to invest the liquid cash and make some financial gains or to hold the cash for meeting the cash outflow commitments.

In Kenya, the statutory minimum liquidity requirement is 20% according to CBK Bank Supervision Annual Report (2009). However studies done show that banks often hold higher than the minimum requirements. The CBK attributes this to the banking industry's preference to invest in the less risky government securities.

2.3.8 Management Efficiency

In the literature on bank performance, operational expense efficiency is usually used to assess managerial efficiency in banks. The main contributor to poor profitability is poor management of expenses (Sufian and Chong, 2008).According to Mathuva, (2009), the local banks have reported operational costs that are much higher compared to other countries. For these banks to compete globally there is need for them to reduce their operational costs.

Beck and Fuchs, (2004) noted overhead costs were the major contributors of the high interests rate spreads. On analyzing the overhead, he realized that these overheads were driven by staff wage costs which were much higher than other banks in the SSA countries. Naceur (2003) found a positive relationship between overhead costs and profitability of the commercial banks. This is an indication that the costs were passed on to depositors and lenders in terms of lower deposits rates or higher lending rates.

Although the relationship between expenditure and profits appears straightforward implying that higher expenses mean lower profits and the opposite, this may not always be the case. Flamini et al, (2009) argues that higher amounts of expenses may be associated with higher volume of banking activities and therefore higher revenues. Where banks enjoy high market power due to low competition, the costs is passed on to customers leading to a positive relationship between overhead costs and profitability.

2.3.9 Deposit Composition

The largest source of funds for many banks is customer deposits. According to Demirgue-Kunt (1999), banks that rely largely on deposits for their funding are less

profitable. This is because soliciting for deposits entails high branching and other expenses. Further, variation in overheads and other operating costs are reflected in variations in bank interest margins. Ochung (1999) concluded that there is a positive relationship between deposit portfolio and profitability firms. His study involved an investigation whether deposit portfolio of public quoted banks and financial institutions in Kenya had any impact on their profitability performance. He emphasized for the banks to realize profits, a proper investment plan of deposits should be put in place.

2.3.10 Earning Performance

The main reason for existence of any organization is profit maximization. Banks that are profitable will attract investor confidence to continue investing in them. The management of commercial banks should thus strive to ensure that the banks are profitable at all times.

While banks that are unprofitable risk insolvency, unusually high profits reported by banks indicate excessive risk taking by the bank in question. There are different indicators of profitability. These include return on assets, return on equity, gross margin, earning spread ratio, interest spread ratio, operating profit margin and gross profit margin. According to Rasia (2010), interest income provides the largest source of operating revenue to majority of the banks. Thus loans are the highest yielding assets the bank can add to its balance sheet. A higher volume of loans leads to higher interest income which in return boosts the overall profitability of the bank. While banks that issue huge volume of loans make high returns, they are also faced with liquidity risks. The management of commercial banks therefore need to strike a balance between liquidity and profitability. It is good to note also that a higher volume of loans in itself is not a guarantee of high profitability. This is because there exist chances of customers

defaulting on payment of interest, principal or both which can lead to a bank incurring huge losses. To improve on the quality of loans, the managers of commercial banks should do a thorough screening of prospective borrowers so as to minimize potential losses. Rasia (2010) concluded that non performing loans should also be taken into consideration since they have an impact on net interest income which in turn affects bank profitability.

2.4 Empirical Review

The determinants of bank profitability have been widely studied with the studies being usually split into two main categories. The first category is for those studies that focus on a specific country.These studies include Ochung(1999) which analyzed the relationship between deposit portfolio and profitability of quoted banks and financial institutions in Kenya, Naceur (2003) which did study on the determinant of profitability of the Tunisian Banks, Njihia ,(2005) who did a study of determinants of profitability of commercial banks in Kenya, Oney et al (2008) studied the impact of internet banking on bank profitability in turkey, Elyor(2009) studied factors affecting the performance of foreign banks in Malasia and Aburime(2009) who studied determinants of bank profitability in Nigeria.

The second category is for those studies that factor in different countries. These studies include; Bourke, (1989) which studied concentration and other determinants of bank profitability in Europe, North America and Australia; Molyneux and Thornton, (1992), which looked at determinants of European bank profitability, Demirguc-Kunt and Huizinga ,(1998) who studied the determinants of commercial bank interest rate margin and profitability among other studies.

Njihia, (2005) did a study on determinants of profitability of commercial banks in Kenya. In his study he focused on factors such as interest rates, noninterest expenses, non interest income, asset composition, deposit composition, liquidity, bank capitalization market share and financial management as the main determinants of profitability of commercial banks in Kenya. Since the study done by Njihia, the banking industry has grown tremendously and other factors have become very key contributors to the profitability of commercial banks in Kenya. Such factors include human resource management practices, information technology, market concentration, income diversification among others. This study will attempt to fill such a vacuum.

2.5 Summary of Literature Review.

The studies done on bank profitability have shown that bank profitability can be influenced by internal as well as external factors. Multiple linear regressions method was the most used in modeling the relationship between bank profitability and its factors.

Studies done on bank profitability in various countries have shown a similar trend in comparing the effect of profit determinants on profitability of commercial banks. In general, incorporation of information communication technology and effective implementation of human resource management practices have increased the profitability of commercial banks. Foreign owned banks are known to be more profitable due to their technical capacity and efficiency in operations. Income diversification increases profitability due to economies of scale and scope while increased industry concentration leads to increased monopolistic power hence also increasing profitability of commercial banks. A negative relationship is expected between operating expenses and bank profits. High levels of liquidity imply low profitability since the money is kept by the bank at the

expense of investments. Increased credit risks associated to loans leads to higher levels of loan loss provisions hence reducing the profits of a bank. The risk return relationship is expected to be positive and linear which is consistent with the normal market condition.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology of the study. It comprises of the research design, the type and source of data to be collected, sampling techniques used, and how data will be analyzed and presented.

3.2 Research design

The study used descriptive research design. Descriptive research design was used to obtain information concerning current status of the phenomena and to describe what existed with respect to variables or conditions in a situation.

3.3 Population

A population is an entire group of individuals, events or objects having common characteristics that conform to a given specification (Mugenda and Mugenda, 2003). According to Sanders et al. (2003), the population is the full set of cases from which a sample was taken. The target population for this study comprised of all commercial banks registered and licensed under the banking Act Chapter 488 of the laws of Kenya and were in existence on 31 December 2012(CBK Records). As at 31 December 2012, there were 43 registered commercial banks comprising of 6 large banks and 37 small and medium banks. The choice of study period of 8 years is considered reasonable because ratios shift over time and also because of availability of necessary data.

3.4 Population Sample

All commercial banks in Kenya were included in this study. However, commercial banks which discontinued or started their operations in the middle of the period under

review were not considered. As a result, out of the 43 commercial banks, 40 (93%) of the banks formed the population of the study. The 40 commercial banks comprised of 6 large and 34 small and medium banks.

3.5 Data Collection

The study employed secondary data obtained from the financial statements of individual commercial banks in Kenya as well primary data in form of questionnaires to heads of human resources and information technologies of various banks. The human resource questionnaire addressed effective human resource management practices such as employee selection, training, job description, performance appraisal, compensation system; career planning and employee participation. The questionnaire sought to find out how these practices affected profitability of commercial banks. The information technology questionnaire assessed efficiency levels in employees, level of customer satisfaction based on the number of complaints, customer loyalty to the bank and also whether information technology has saved costs to the bank which translates to profits.

Secondary data was collected from the annual reports and financial statements of commercial banks obtained online from their websites and the CMA library. The data required from the financial statements includes shareholders equity, total assets, total loans, total nonperforming loans, total operating costs, interest income, interest expenses, liquid assets, customer deposits, non operating income and total liabilities among other variables.

3.6 Data Analysis

The collected data was analyzed using multiple linear regression analysis. Regression analysis is used when a researcher is interested in finding out whether an independent

variable predicts changes in a given dependent variable. Multiple regressions on the other hand attempts to determine whether a group of variables together predict a given dependent variable.

3.6.1 Analytical Model

A typical multiple regression modelwas of the form;

$Y=\beta_0+\beta_1x_1+ \beta_2x_2+ .... +\beta_nx_{n+}+ €$

Where;

Y is the dependent variable.

X_{1-n} are the independent variables

$\beta_0$is a constant, the value of Y when all X is zero.

$\beta_{1-n}$is the regression coefficient or change induced in Y by each X.

€ is an error term.

In this study:-

Y was a commercial banks annual profit before taxation

X_1 is Information communication technology.

X_2 is Human resource management practices.

X_3 is Ownership structure of the bank.

X_4 is Income diversification.

X_5 is Industry concentration.

X_6 is Risk management.

X_7 is Liquidity. This is the ratio of liquid assets to total liability deposits.

$X_8$is Management efficiency. This is the ratio of operating costs to net income.

Higher ratio indicates inefficiency.

X_9 is Deposit composition

$X_{10}$is Earning Performance. This is the ratio of net interest income to total assets. Higher ratio indicates good performance.

The data was analyzed using Statistical Package for Social Sciences (SPSS)software.The study used coefficient of determination (R^2), ANOVA and F testto assess the significance of the relationship between the variables and the strength of the relationship.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis of data collected from the financial statements and annual reports of commercial banks in Kenya. The researcher managed to obtain information from 35 banks out of the targeted 40 hence a response rate of 87.5%. The research sought to establish the determinants of commercial banks profitability in Kenya.

4.2 Data Analysis and Presentation

The researcher extracted the published annual reports and financial statements of the commercial banks in Kenya from their respective websites and from the CBK data bank. Comprehensive information was obtained from 35 banks out of the targeted 40 banks. The financial statements and annual reports disclosed information on shareholder equity, total assets, total loans advanced, total non-performing loans, total operating costs, interest income, interest expenses, liquid assets, customer deposits, non-operating income and total liabilities. These information was used establish the ownership structure of the banks, diversification of income, bank market concentration, bank risk management levels, liquidity management of banks, management efficiency, bank deposit levels and earning performance. The information was coded and entered into the Statistical Package for Social Sciences for analysis. Both descriptive statistics and inferential statistics were run to establish the determinants of profitability of commercial banks in Kenya.

4.2.1 Descriptive Statistics

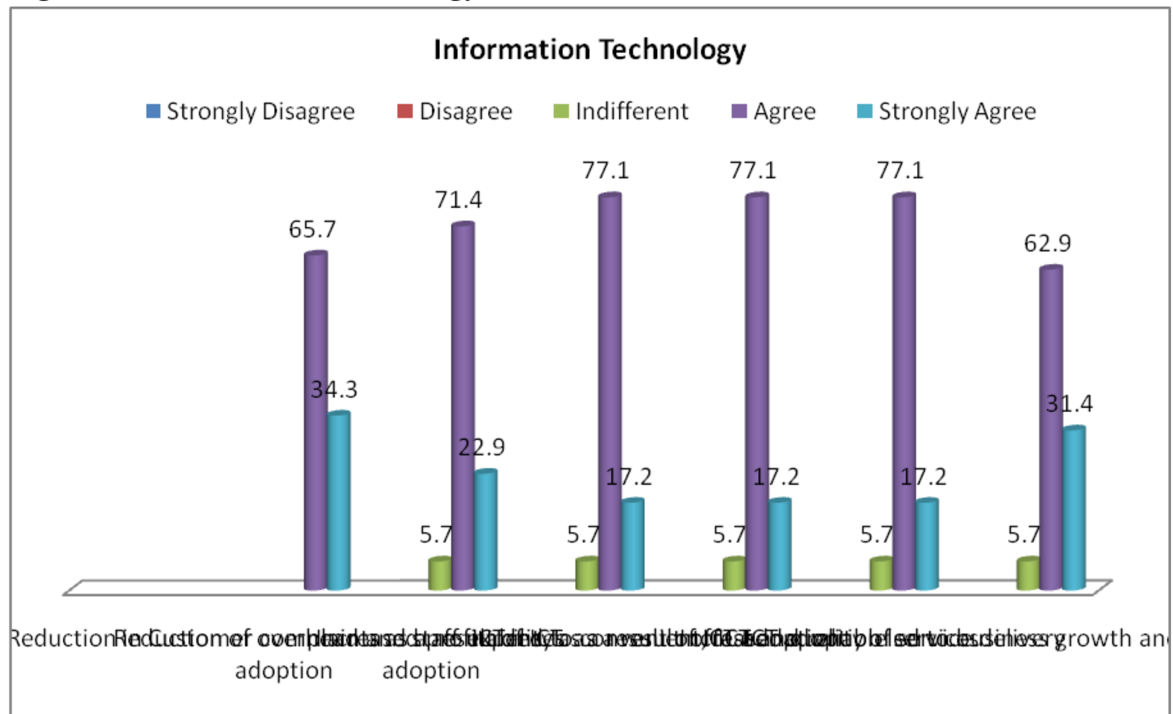
Frequencies, percentages and means for the variables under study were run. Analysis was

done for both the composite variables and individual variables respectively.

4.2.1.1 Information Technology

The researcher administered some questionnaires to the respondents to obtain information on various aspects with regards to information technology and human resources management practices in their banks. Majority (65.7%) of the respondents agreed that there was a reduction in customer complaints as a result of ICT adoption. 71.4% of them agreed that there was a reduction of overhead and staff expenses as a result of ICT adoption. Another 77.1% of them each also agreed that ICT adoption led to increased profitability; convenient, fast and reliable services; and increased quality services. Finally, 62.9% of them were of the opinion that ICT adoption led to business growth and expansion. The findings are as shown in Figure 4.1.

Figure 4.1Information Technology

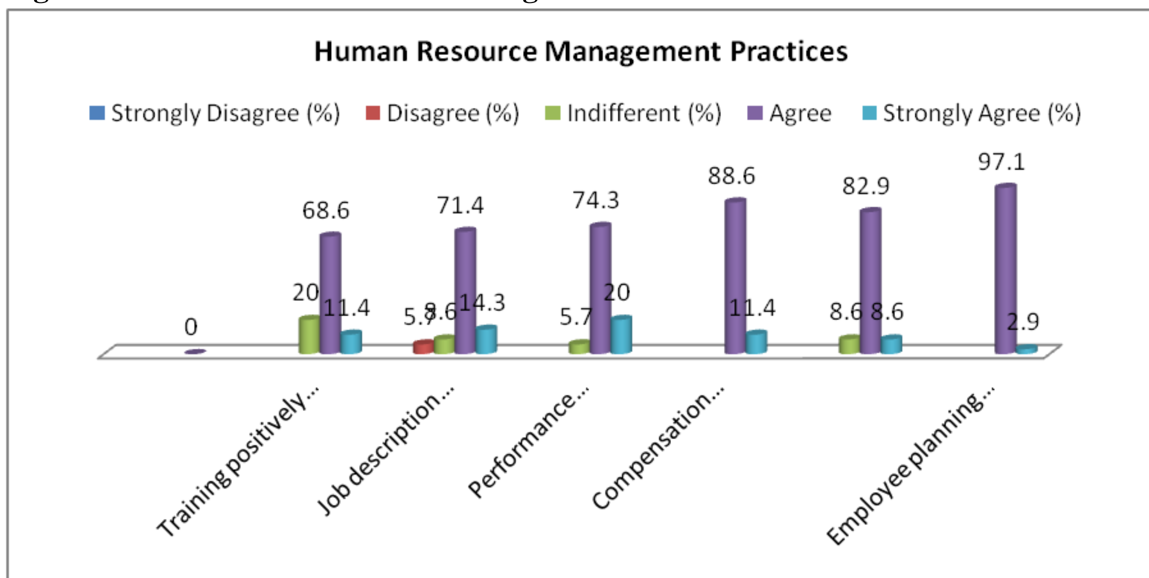


Source: Research Findings

4.2.1.2 Human Resources Management Practices

Respondents were further required to indicate their level of agreement with various aspects on human resource practices in their banks. Majority (68.6%) of them agreed that Training positively affected the financial performance of their banks. However, 20% of them were indifferent on this aspect. 71.4% of the respondents also agreed that employee job description positively impacted on the banks financial performance. 74.3% of them further indicated that employee performance appraisal also positively affected the financial performance of their banks. 88.6% of the respondents categorically agreed that the employee compensation system in place in their banks impacted their financial performance. Another 82.9% of them were of the opinion that employee career planning system affected the banks financial performance. Finally, 97.1% of the respondents agreed that employee planning practices affected the financial performance of commercial banks in Kenya. The findings are as presented in Figure 4.2.

Figure 4.2 Human Resource Management Practices

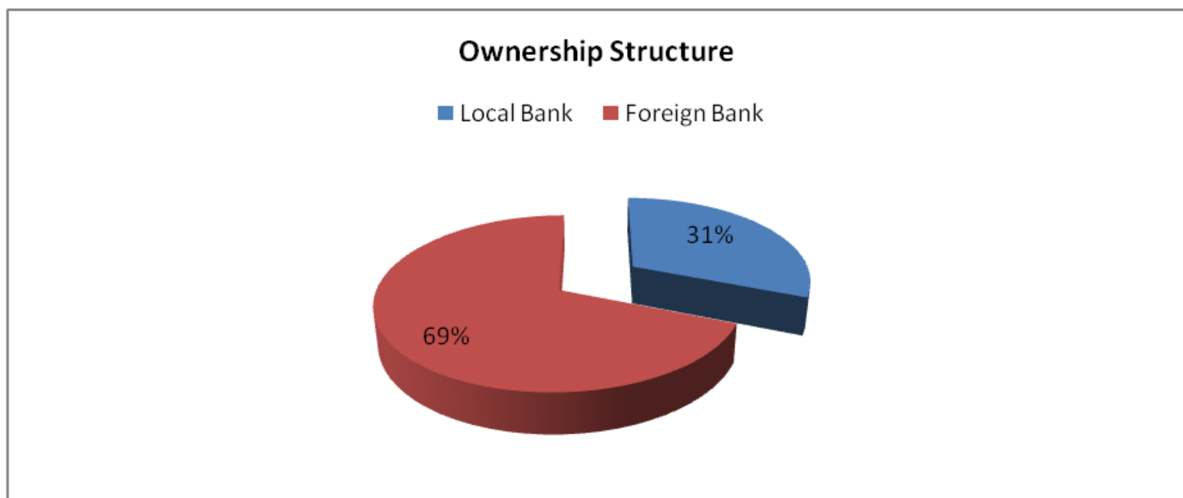


Source: Research Findings

4.2.1.3 Ownership Structure of Banks

Commercial banks in Kenya are either owned by Kenyan citizens or foreigners. The research findings revealed 31% of the banks under study were majorly owned by Kenyans whereas the remaining 69% of them were owned by foreigners. Further, the financial performance of foreign owned banks was found to be stable than that of locally owned banks. This was attributable to the fact that foreign banks usually bring with them better know-how and technical capacity, which then spills over to the rest of the banking system. This make the foreign owned banks more profitable than local banks due to their technical capacity and efficiency of operations. The findings are as presented in Figure 4.3.

Figure 4.3 Ownership Structure



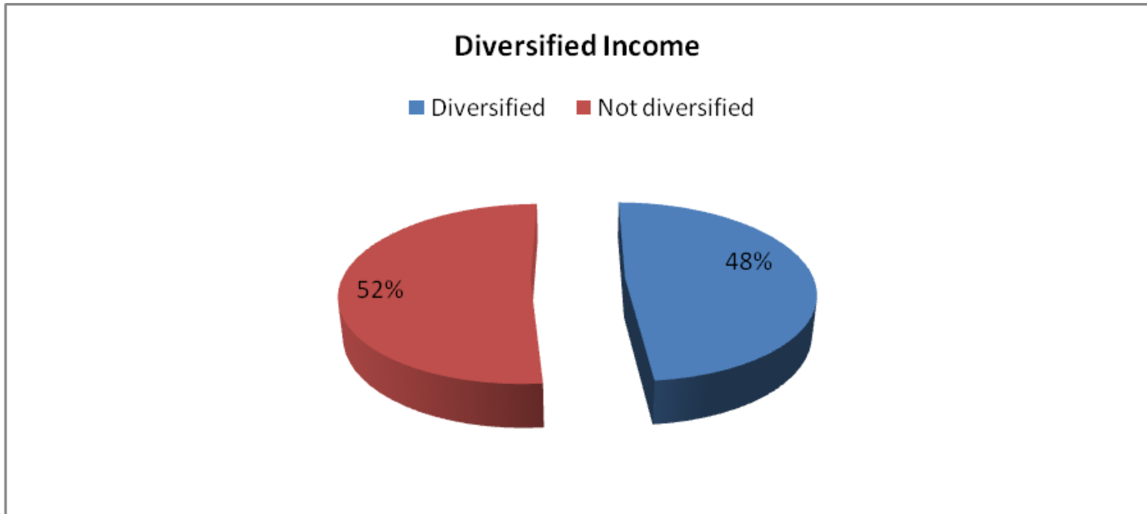
Source: Research Findings

4.2.1.4 Diversification of Income

The research further sought to establish whether the main source of income for the banks was interest income. It was established that 48% of the commercial banks under study

had diversified their main source of income whereas the remaining 52% of them still relied on interest income as their main source of income. The findings are as presented Figure 4.4.

Figure 4.4 Diversification of Income

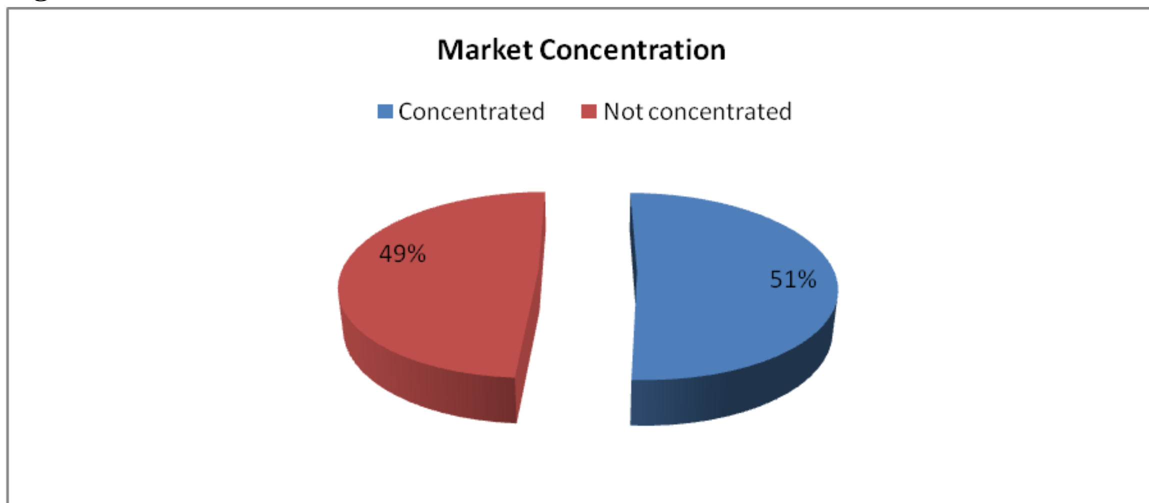


Source: Research Findings

4.2.1.5 Market Concentration

The research further sought to establish how the market concentration of commercial banks affected their profitability. The research findings revealed that 51% of the commercial banks were in concentrated markets. On the other hand the remaining 49% of them were in less concentrated markets. The findings are as shown in Figure 4.5.

Figure 4.5 Market Concentration



Source: Research Data

4.2.1.6 Risk Management

The average levels of non-performing loans for the commercial banks under study were used to establish their risk exposure. Means of between Kshs. 20,438,000 - 6,210,187,000 were registered. A notable increasing trend in levels of non-performing loans was noticed for a majority of the banks under study. The higher the level of non-performing loans the greater the risk exposure of the bank hence need for risk mitigation strategies. The findings are as presented in Figure 4.6.

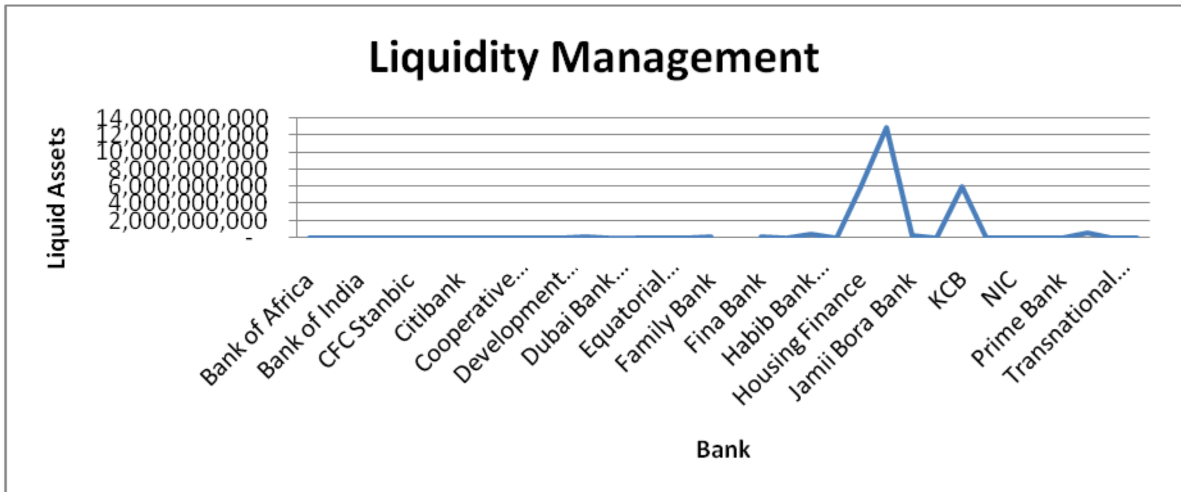
Figure 4.6 Risk Management

Source: Research Findings

4.2.1.7 Liquidity Management

The average total number of liquid assets for the commercial banks during the period of study was used to establish the liquidity management level of the banks. Means of betweenKshs. 4,383,000- 12,875,666,029 were registered. Banks which had more liquid assets were considered to have embraced better liquidity management practices as shown in Figure 4.7.

Figure 4.7 Liquidity Management

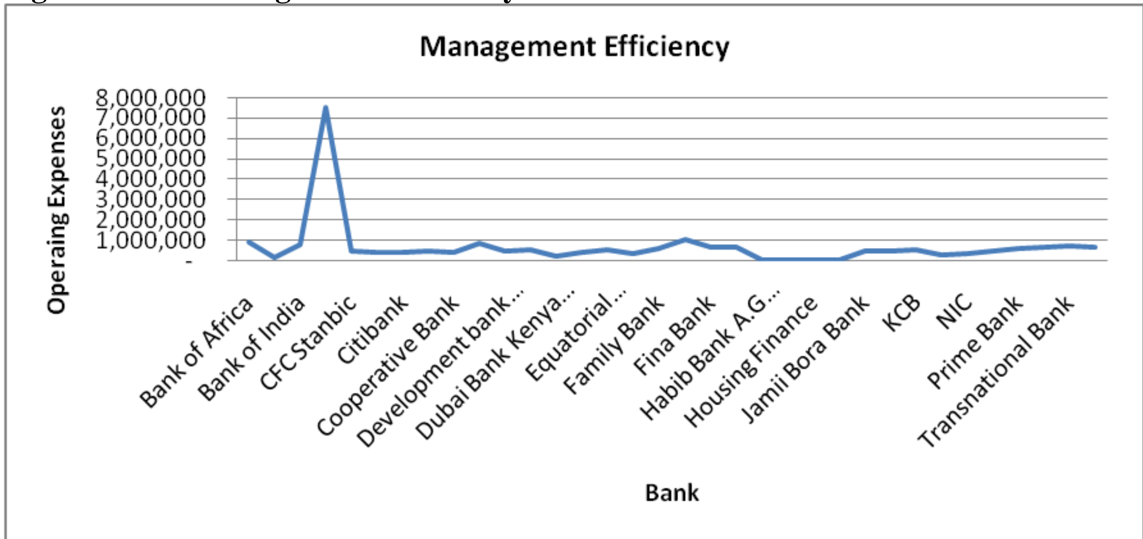


Source: Research Findings

4.2.1.8 Management Efficiency

The total operational expenses for the commercial banks over the eight year period were used to evaluate management efficiency. A notable increase in operational expenses was registered for a majority of the banks under study. However some of the banks registered a decline in operational expenses over the study period. Banks which registered a decline in operational expenses were found to perform better financially than their counterparts who registered high operational expenses. This was attributable to the fact that a reduction in operational expenses is an indication of increased management efficiency. The findings are as shown in Figure 4.8.

Figure 4.8 Management Efficiency



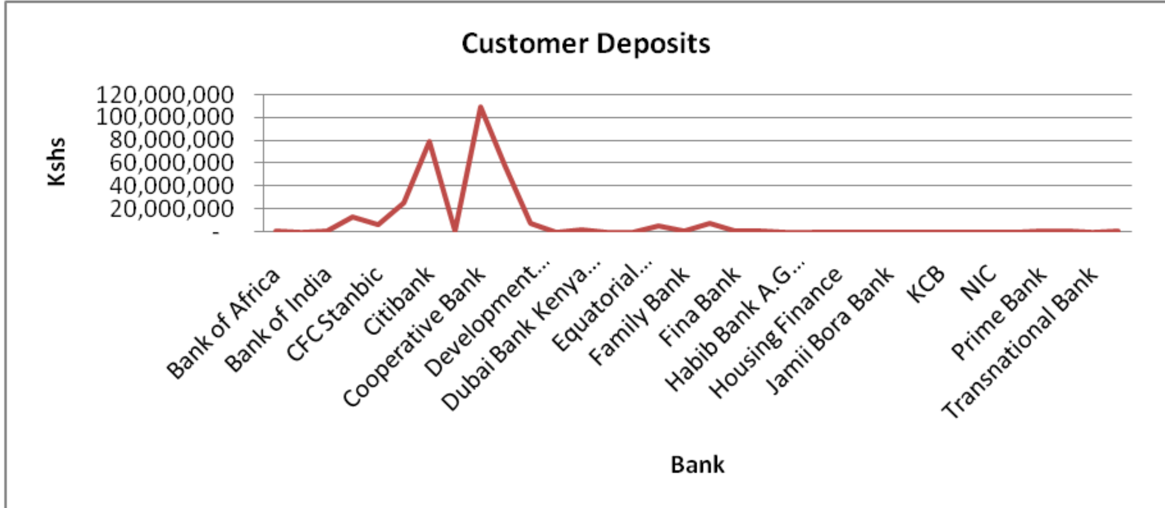
Source: Research Findings

4.2.1.9 Deposit Composition

The average level of customer deposits of the eight year period was used to establish the deposit composition of commercial banks under study. The research findings revealed that lows of Ksh. 4,254,000 and highs of Ksh. 108,937,433 were registered. The research

findings further revealed that the customer deposit base for a majority of the banks under study kept increasing from one financial year to another during the period under study. High customer deposit base is a recipe for bank profitability. The findings are as presented in Figure 4.9.

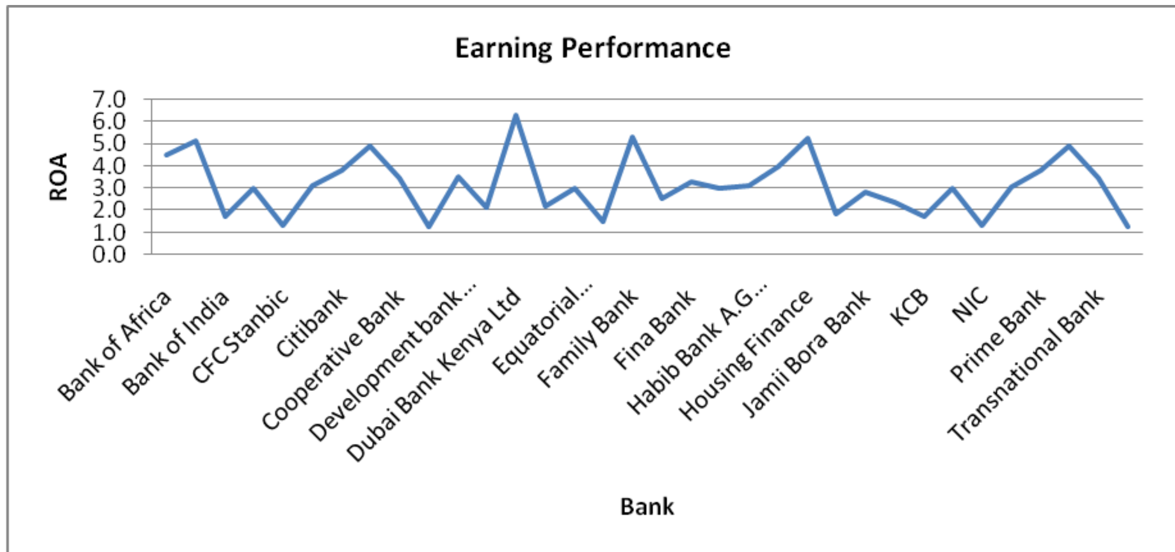
Figure 4.9 Deposit Composition



4.2.1.10 Earnings Performance

Return on Assets (ROA) ratio was used to calculate the earnings performance of the commercial banks under study. A notable fluctuation in earning performance was noticed over the eight year period for a majority of the banks. ROAs of between 1.2- 5.3 were registered. The high ROAs revealed the investment of banks in assets gave high returns hence high profits realized.

Figure 4.10 Earning Performance



Source: Research Findings

4.2.2 Regression Analysis

The research study wanted to establish the determinants of profitability of commercial banks in Kenya for the period 2005 -2012.

Table 4.1 Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.852	.727	.398	.95469

Source: Research Findings

The research findings indicated that there was a very strong positive relationship (R= 0.852) between the variables. The study also revealed that 72.7% of commercial banks profitability could be explained by the factors under study. From this study it is evident that at 95% confidence level, the variables produce statistically significant values and can be relied on explain to profitability of commercial banks in Kenya as shown in Table 4.1.

Table 4.2 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.518	34	.138	.746	.003
Residual	.185	1	.185		
Total	1.702	35			

Source: Research Findings

Table 4.2 reveals that the composite effect of the ten determinants is statistically significant. This is revealed by the low p vales (0.003)i.e. less than 0.05 and high F values.

Table 4.3 Regression Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	584,915.795	1014.358		0.562	.029
Information Technology	.799	.232	.258	1.289	.016
HRM Practices	.253	.244	.323	1.039	.047
Ownership structure	.136	.232	.157	.587	.053
Income diversification	.147	.358	.172	.410	.049
Market concentration	.266	.254	.310	.048	.034
Risk management	.136	.290	.126	.471	.058
Liquidity management	.425	.211	.650	2.016	.001
Management efficiency	.880	.198	.069	.403	.031
Deposit composition	.648	.131	.192	.123	.029
Earning performance	.223	.231	.225	.039	.035

Source: Research Findings

From Table 4.3 it was evident that at 95% confidence level, the variables produce statistically significant values for this study (high t-values, $p < 0.05$. The results of the regression equation below shows that for a 1- point increase in the independent variables, commercial banks profitability financing by commercial banks in Kenya is predicted to increase by 584,915.795, given that all the other factors are held constant. The equation for the regression model is expressed as:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + £$$

$$Y = 584,915.795 + 0.799X_1 + 0.253X_2 + 0.136X_3 + 0.147X_4 + 0.266X_5 + 0.136X6 + 0.425X7 + 0.88X_8 + 0.648X_9 + 0.223X_{10}$$

Where

$\beta 1 – \beta_{10}$ are correlation coefficients

Y= Annual profits before tax

X_1= Information Technology

X_2= HRM practices

X_3= Ownership structure of the bank

X_4= Diversification of income

X_5= Market concentration

X_6= Risk Management

X_7= Liquidity management

X_8= Management efficiency

X_9= Deposit composition

X_{10}= Earnings performance

4.3 Interpretation of Findings

This research sought to establish the determinants of commercial banks profitability in Kenya. Ten major determinants of commercial banks profitability were considered. They comprised of: Use of information technology, HRM practices in place, ownership structure of the banks, diversification of income, market concentration, risk management, liquidity management, management efficiency, deposit composition and earnings performance.

The research findings revealed that majority of the respondents tended to agree on all the aspects pertaining to use of information technology and human resource management

practices in their organizations. However, increased profitability, increased quality in service delivery and convenient and reliable services were rated highly as pertains to IT application at 77.1% each. On the other hand employee planning, compensation system in place and employee career planning were rated the highest as pertains to HRM practices at 97.1%, 88.6% and 82.9 respectively.

The research findings revealed 31% of the banks under study were majorly owned by Kenyans whereas the remaining 69% of them were owned by foreigners. The research findings further revealed that foreign owned banks were found to be more profitable than locally owned banks attributable to the fact that foreign banks usually bring with them better know-how and technical capacity, which then spills over to the rest of the banking system.

The research findings further established that 48% of the commercial banks under study had diversified their main source of income whereas the remaining 52% of them still relied on interest income as their main source of income. Income diversification leads to increased profitability due to a spread of the revenue base.The research findings further revealed that 51% of the commercial banks were in concentrated markets. On the other hand the remaining 49% of them were in less concentrated markets. The more concentrated the market, the less the degree of competition. Lack of competition often leads high levels of profits at the expense of efficiency and effectiveness (Nzongang and Atemnkeng, 2006).Majority of the banks had weak risk management strategies in place hence the high levels of non-performing loans of between Kshs. 20,438,000 - 6,210,187,000. The higher the level of non-performing loans the greater the risk exposure of the bank hence need for risk mitigation strategies.

Majority of the banks had better liquidity levels of between Kshs. 4,383,000-12,875,666,029. Banks which had more liquid assets were considered to have embraced better liquidity management practices.A notable increase in operational expenses was registered for a majority of the banks under study. However some of the banks registered a decline in operational expensed over the study period. Banks which registered a decline in operational expenses were found to perform better financially than their counterparts who registered high operational expenses. This was attributable to the fact that a reduction in operational expenses is an indication of increased management efficiency.

The research findings further revealed that the customer deposit base for a majority of the banks under study kept increasing from one financial year to another during the period under study. Lows of Ksh. 4,254,000 and highs of Ksh. 108,937,433 were registered. High customer deposit base is a recipe for bank profitability. A notable fluctuation in earning performance was noticed over the eight year period for a majority of the banks. ROAs of between 1.2- 5.3 were registered. The high ROAs revealed the investment of banks in assets gave high returns hence high profits realized.

The inferential statistics revealed that there was a very strong positive relationship (R= 0.852) between the variables. The study also revealed that 72.7% of commercial banks profitability could be explained by the factors under study. From this study it was evident that at 95% confidence level, the variables produce statistically significant values and can be relied on explain profitability of commercial banks in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the study, discussions and conclusions. The researcher then presents the major limitations of the study and the recommendations for both the research and for the policy and practice.

5.2 Summary

This research sought to evaluate the determinants of commercial banks profitability in Kenya. A descriptive research design was adopted where all banks commercial banks which were registered by between the period 2005-2012 formed the population. This population was given importance due to easy accessibility of information. This research relied on secondary data which was collected from the commercial banks financial statements and annual reports from their websites and the CBK database. Information on information technology and human resource management aspects was obtained by use of a questionnaire. The questionnaires were filled by IT and HR managers of the respective banks. The researcher managed to obtain information from 35 out of the 40 banks targeted which represented a response rate of 87.5%.

Ten major determinants of commercial banks profitability were considered. They comprised of: Use of information technology, HRM practices in place, ownership structure of the banks, diversification of income, market concentration, risk management, liquidity management, management efficiency, deposit composition and earnings performance. The research findings revealed that majority of the respondents tended to agree on all the aspects pertaining to use of information technology and human resource

management practices in their organizations. However, increased profitability, increased quality in service delivery and convenient and reliable services were rated highly as pertains to IT application at 77.1% each. These research findings complement the findings of Onay et al (2008) who concluded that internet banking had a positive effect on the performance of the banking systems. On the other hand employee planning, compensation system in place and employee career planning were rated the highest as pertains to HRM practices at 97.1%, 88.6% and 82.9 respectively. Cascio (1991) also concluded that financial returns associated with investments in progressive HRM practices are generally substantial.

The research findings revealed 31% of the banks under study were majorly owned by Kenyans whereas the remaining 69% of them were owned by foreigners. The research findings further revealed that foreign owned banks were found to be more profitable than locally owned banks attributable to the fact that foreign banks usually bring with them better know-how and technical capacity, which then spills over to the rest of the banking system (Kamau, 2009).

The research findings further established that 48% of the commercial banks under study had diversified their main source of income whereas the remaining 52% of them still relied on interest income as their main source of income. Income diversification leads to increased profitability due to a spread of the revenue base. According to Choi and Kotrozo (2006), activity diversification provides economies of scale and scope.The research findings further revealed that 51% of the commercial banks were in concentrated markets. On the other hand the remaining 49% of them were in less concentrated

markets. The more concentrated the market, the less the degree of competition. Lack of competition often leads high levels of profits at the expense of efficiency and effectiveness (Nzongang and Atemnkeng, 2006).

Majority of the banks had weak risk management strategies in place hence the high levels of non-performing loans of between Kshs. 20,438,000 - 6,210,187,000. The higher the level of non-performing loans the greater the risk exposure of the bank hence need for risk mitigation strategies. Bourke (1989) reports an opposite result.Majority of the banks had better liquidity levels of between Kshs. 4,383,000- 12,875,666,029. Banks which had more liquid assets were considered to have embraced better liquidity management practices. It is argued that when banks hold high liquidity, they do so at the opportunity cost of some investment, which could generate high returns (Kamau, 2009).

A notable increase in operational expenses was registered for a majority of the banks under study. However some of the banks registered a decline in operational expensed over the study period. Banks which registered a decline in operational expenses were found to perform better financially than their counterparts who registered high operational expenses. This was attributable to the fact that a reduction in operational expenses is an indication of increased management efficiency. These research findings are similar to Naceur (2003) who found a positive and significant impact of overheads costs to profitability indicating that such cost are passed on to depositors and lenders in terms of lower deposits rates or higher lending rates.

The research findings further revealed that the customer deposit base for a majority of the banks under study kept increasing from one financial year to another during the period under study. Lows of Ksh. 4,254,000 and highs of Ksh. 108,937,433 were registered. High customer deposit base is a recipe for bank profitability. Elsewhere, Ochung (1999) indicated a significant correlation between deposit portfolio and profitability of the firms. A notable fluctuation in earning performance was noticed over the eight year period for a majority of the banks. ROAs of between 1.2- 5.3 were registered. The high ROAs revealed the investment of banks in assets gave high returns hence high profits realized.

The inferential statistics revealed that there was a very strong positive relationship (R= 0.852) between the variables. The study also revealed that 72.7% of commercial banks profitability could be explained by the factors under study. From this study it was evident that at 95% confidence level, the variables produce statistically significant values and can be relied on explain profitability of commercial banks in Kenya.

5.3 Conclusion

From the study findings, it would be safe to conclude that determinants under study profitability have a positive effect on commercial banks profitability in Kenya. The conclusion is supported by the study findings which showed that there was a very strong positive relationship (R= 0.852) between the variables. The study also revealed that 72.7% of commercial banks profitability in Kenya could be explained by the ten determinants under study. From this study it is evident that at 95% confidence level, the variables produce statistically significant values and can be relied on to explain commercial banks profitability in Kenya.

However, management efficiency and application of information technology in commercial banks impact more on commercial banks profitability than the other eight factors. This is supported by their high correlation coefficients.

5.4 Recommendations for Policy and Practice

With due regard to the ever increasing desire to have better commercial banks profitability for in Kenya, there is need to invest in proper strategies so as to meet these expectations. This should be done in a manner in which all the stakeholders are happy. This therefore calls for embracing proper practices which are acceptable, accessible, ethically sound, have a positive perceived impact, relevant, appropriate, innovative, efficient, sustainable and replicable.

The management of commercial banks should ensure that ICT is embraced in all their transactions to increase efficiency and effectiveness in their service delivery. Proper Human resource management practices should also be embraced. For example recruitment and promotions should be done in a transparent manner. Employees need to be motivated by various incentives and succession planning should be in place to reduce employee turnover.

There is need to diversify the income generating activities of the banks so as to meet the ever increasing operational expenses. Proper risk management strategies need to be embraced by commercial banks so as to reduce their risk exposure more specifically on loan management.

5.5 Limitations of the Study

Since the research was to rely mostly on secondary data, obtained online, from published end of year accounts of financial statements, the researchers encountered many challenges particularly during the process of data collection. Most of the financial statements were obtained online from the various reliable search engines such as Google and Yahoo. The search for the information was a bit time consuming due to slow network on the search sites such as google.co.ke.

The information posted by some banks was insufficient enough to facilitate the research. It even required the researchers to calculate some of the data. This is because some banks never disclosed the actual figures on some items like non-performing loans as they feared that the information might be used by competitors to their disadvantage.

The study findings were also limited to the research approach used. If another research design would have been adopted the findings would have been different.

5.6 Suggestions for Further Studies

Arising from this study, the following directions for further research in finance are as follows: First, this study focused on commercial banks and therefore generalizations cannot adequately extend to other non-bank organizations.

Future research should therefore focus on all organizations bothin the public and private sector.

A broad based study on determinants of the financial performance of both private and public institutions should also be carried out to give a broader picture on the same.

REFERENCES

Abu Bakar, N. &Tahir, I. M (2009).Applying Multilinear Regression and Neutral Network to predict Bank performance. International Business Research, (2):4.

Aburime, U. (2009). Determinants of Bank Profitability: Company-Level Evidence from Nigeria.

Arthur JB (1994). Effects of human resources systems on manufacturing performance and turnover. Acad. Manage. J, 37: 670-687.

Athansasoglou, P., Brissimis, S. & Delis, M. (2006). Bank -Specific, Industry - specific and macroeconomic: Determinants of bank profitability: *Journal of International Financial Markets, Institutions and Money.*

Baral, K. (2005). Health Check-up of Commercial Banks in the Framework of CAMEL: A Case Study of Joint Venture Banks in Nepal: The Journal of Nepalese Business Studies.

Batt, Rosemary (2004). "Who Benefits from Teams? Comparing the Outcomes for Managers, Supervisors, and Workers."Ind. Relat. 43(1): 183-213.

Beck, T. & Fuchs, M. (2004). Structural Issues in the Kenyan Financial System: Improving Competition and Access.

Bourke, Philip (1989). Concentration and Other Determinants of Bank Profitability in Europe, North America and Australia: *Journal of Banking and Finance*, 13, 65-79.

Cappelli P, Newmark D (2001)."Do 'high-performance' work practices improve establishment-level outcomes?" Industrial.Labor.Relat. Rev. 54(4): 75-737.

Cascio WF (1991). Costing human resource: The financial impact of behavior in organization. PWS-Kent, Boston.

Central bank of Kenya (CBK) publications:

i) Bank supervision annual reports (2003, 2006, and 2007)

ii)Monthly economic reviews (2005, 2007 and 2009)

CeylanOnay et al (2008). The impact of internet banking on bank profitability: The case of Turkey.

Choi, S. &Kotrozo, J. (2006).Diversification, Bank Risk and Performance.A cross–Country Comparison.

Ciciretti, R., Hasan,I.,Zazzara, C.(2009). Do Internet Activities Add Value? Evidence from the Traditional Banks.JFinanServ Res 35, 81-98.

Deepak KD, James PG, Patrick MW (2003). HRM and firm productivity:Does industry matter?. National Academy of Management Meetings, Seattle, WA.

Delaney JT, Lewin D, Ichniowski (1989). Human resources policies and practices in American firms. US Department of Labor: US Government Printing Office.

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

DevinagaRasia (2010). Theoretical Framework of Profitabilityas Applied to Commercial Banks in Malaysia. *European Journal of Economics, Finance and Administrative Sciences.*ISSN 1450-2275 Issue 19 (2010).

DeYoung, R., Lang, W.W. and Nolle, D.L., (2007), How the internet affects the output and performance of community banks: *Journal of Banking & Finance* 31 1033-1060.

Elyor, S. (2009).Factors affecting the Performance of Foreign Banks in Malaysia. A Thesis Submitted in Partial Fulfillment of the Requirements of Universiti Utara Malaysia for the Degree of Master of Science (Banking).

Flamini,V.,McDonald, C. & Schumacher, L.(2009):The Determinants of Commercial Bank Profitability in Sub-Saharan Africa.

Furst, Karen, William W. Lang, and Daniel E.Nolle, (2002).Internet Banking. Development and Prospects: Program on Information Resources Policy Research, Harvard University.

Havrylchyk, Olena, and Emilia Jurzyk (2006): Profitability of foreign banks in Central and Eastern Europe. Does the entry mode matter? .Bank of Finland. BOFIT Discussion papers 5.

Hempel, G, Simonson, G and Coleman, A. (1994): Banking Management: Text and Cases, John Wiley and Sons Inc., 4th Ed., USA.

Hernando, I., Nieto, M.J. (2007), Is the Internet delivery channel changing banks' performance? The case of Spanish banks. Journal of Banking and Finance 31 1083-1099.

Huselid MA (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academic Manage Jounal.*, 38: 635-672.

Kamau, A.W. (2009): Efficiency in the Banking Sector: An Empirical Investigation of Commercial Banks in Kenya. A thesis submitted in partial fulfillment of the Requirements of Nairobi University for the Degree of Doctor of Philosophy. Nairobi: University of Nairobi.

Kang'ethe, P.K (1999): The Effect of Government Ownership on the Share Price Volatility of Companies Quoted at the Nairobi Stock Exchange, Unpublished MBA Dissertation, University of Nairobi.

Kibe M.M (2003): The Relationship Between Interest Rate Spread and Profitability of Commercial Banks in Kenya, Unpublished MBA Dissertation, University of Nairobi.

Kosmidou, K. (2008): The determinants of banks profit in Greece during the period of EU Financial Integration. *Journal of Managerial Finance.*

Mathuva, D. (2009): Capital Adequacy, Cost Income Ratio, and the Performance of Commercial Banks: The Kenyan Scenario. *International Journal of Applied Economics and Finance.*

Molyneux, Phillip and Thornton, John (1992): Determinants of European Bank Profitability: A Note, *Journal of Banking and Finance,*18 (6): 1173-1178.

Mwega, F.M. (2009): Global Financial Crisis: Kenya: Discussion series. Paper 7.

Naceur,S. (2003).The Determinants of the Tunisian Banking Industry Profitability: Panel Evidence

Ndung'u, C.W (2003): Determinants of Commercial Banks Profitability in Kenya: The Case study of Kenya quoted Banks, Unpublished MBA Dissertation, University of Nairobi.

Njihia J.K. (2005). Determinants of Banks Profitability: The Case of Commercial Banks in Kenya. Unpublished MBA Dissertation, University of Nairobi.

Northcott, C. (2004). Competition in Banking: Review of Literature. WP 2004-24

Nzongang, T. &Atemnkeng, J. (2006). Market Structure and Profitability Performance in the Banking Industry of CFA countries: The Case of Commercial Banks in Cameroon.

Ochung D.O (1999): An Empirical Analysis of the Relationship between Deposit Portfolio and Profitability: The case of Publicly Quoted Banks and Financial Institutions in Kenya, Unpublished MBA Dissertation, University of Nairobi.

Oloo, O. (2009): The banking survey 2009. Think Business. Nairobi.

Olweny and Shipho (2011) Economic and Finance Review 1(5): 01-30.

Robert DeYoung and Tara Rice (2004). How do banks make money? A Variety of Business Strategies. 4Q/2004, Economic Perspectives

Sana HaiderSumra (2011).The impact of E-Banking on the Profitability of Banks: A study of Pakistan Banks. Journal of Public Administration and Governance.1,1.

Short, B.K. (1979) "The Relation between Commercial Bank Profit Rates and Banking Concentration in Canada, Western Europe and Japan".*Journal of Banking and Finance*, 3, 209-219.

Sufian, F. & Chong, R.R (2008).The Determinants of Bank Profitability in a Developing Economy: Empirical Evidence from Philippines. Asian *Academy of Management Journal of Accounting and Finance.*

Tregenna, F. (2009), The fat years: The structure and profitability of the US banking sector in the pre-crisis period. *Cambridge Journal of Economics* 33(10) 609-63.

Uzhegova, O. (2010).The Relative importance of Bank-Specific Factors for Bank Profitability in Developing Economies/ P 2010/02.

Wan D, Kok V, Huat C (2002). Strategic human resource management and organizational performance in Singapore: Compens. Benefits Rev. Saranac, 34(4): 10-33.

APPENDICES

Appendix I: List of Commercial Banks

	NAME OF BANK	PEER GROUP	DATE LICENCED
1.	African Banking Corporation Ltd	Small	1984
2.	Bank of Africa Kenya Ltd	Medium	1980
3.	Bank of Baroda (K) Ltd	Medium	1953
4.	Bank of India	Medium	1953
5.	Barclays Bank of Kenya Ltd	Large	1953
6.	CFC Stanbic Bank Ltd	Large	1955
7.	Charterhouse Bank Ltd	Small	1996
8.	Chase Bank (K) Ltd	Medium	1991
9.	Citibank N.A Kenya	Medium	1974
10.	Commercial Bank of Africa Ltd	Medium	1967
11.	Consolidated Bank of Kenya Ltd	Small	1989
12.	Cooperative Bank o Kenya Ltd	Large	1965
13.	Credit Bank Ltd	Small	1986
14.	Development Bank of Kenya Ltd	Small	1973
15.	Diamond Trust Bank Kenya Ltd	Medium	1946
16.	Dubai Bank Kenya Ltd	Small	1982
17.	Ecobank Kenya Ltd	Medium	2005
18.	Equatorial Commercial Bank Ltd	Small	1995
19.	Equity Bank Ltd	Large	2004
20.	Family Bank Ltd	Medium	1984
21.	Fidelity Commercial Bank Ltd	Small	1992
22.	Fina Bank Ltd	Small	1986
23.	Giro Commercial Bank Ltd	Small	1992
24.	Guardian Bank Ltd	Medium	1992
25.	Habib Bank A.G Zurich	Small	1978
26.	Habib Bank Ltd	Small	1956
27.	Imperial Bank Ltd	Medium	1992
28.	Jamii Bora Bank Ltd	Small	1984
29.	Kenya Commercial Bank Ltd	Large	1896
30.	K-rep Bank Ltd	Small	1999
31.	Middle East Bank (K) Ltd	Small	1980
32.	National Bank of Kenya Ltd	Medium	1968
33.	NIC Bank Ltd	Medium	1959
34.	Oriental Commercial Bank Ltd	Small	1991
35.	Paramount Universal Bank Ltd	Small	1993
36.	Prime Bank Ltd	Medium	1992
37.	Standard Chartered Bank Kenya Ltd	Large	1910
38.	Trans-National Bank Ltd	Small	1985
39.	Victoria Commercial Bank Ltd	Small	1987

40.	Housing Finance Ltd	Medium	1965

Appendix II: Introduction Letter

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 04/10/2013

TO WHOM IT MAY CONCERN

The bearer of this letter LUCY WANGARI GITONGA

Registration No. D61/70471/2009

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

Appendix III: Information Technology Questionnaire

The impact of information technology on profitability of commercial banks in Kenya

Name of the bank -------------------------------------

The questionnaire should be filled by the head of IT department or his/her deputy. In case none of them is available, a senior person in the department can fill the same. Please tick appropriately for each of the question.

1. Age of the respondent
   - ☐ Below 20 years
   - ☐ 20-30 years
   - ☐ 31-40 years
   - ☐ 41-50 years
   - ☐ Above 50 years
2. Gender
   - ☐ Male
   - ☐ Female
3. Highest academic qualification of the respondent
   - ☐ High school
   - ☐ Degree
   - ☐ Masters
   - ☐ Doctorate
   - ☐ Other
4. Marital status of the respondent
   - ☐ Single
   - ☐ Married
   - ☐ Widow
   - ☐ Widower
   - ☐ Separated
   - ☐ Divorced
5. The number of customer complaints to the bank has reduced as a result of adoption of ICT.
   - ☐ Strongly agree
   - ☐ Agree
   - ☐ Indifferent
   - ☐ Disagree

- Strongly disagree

6. Adoption of ICT has led to reduction of overhead and staff expenses.
    - Strongly agree
    - Agree
    - Indifferent
    - Disagree
    - Strongly disagree
7. Adoption of ICT has led to improvement of the profits made by the bank.
    - Strongly agree
    - Agree
    - Indifferent
    - Disagree
    - Strongly disagree
8. Adoption of ICT has led to provision of convenient, fast and reliable services.
    - Strongly agree
    - Agree
    - Indifferent
    - Disagree
    - Strongly disagree
9. Adoption of ICT has increased the quality of services offered by the bank.
    - Strongly agree
    - Agree
    - Indifferent
    - Disagree
    - Strongly disagree
10. Adoption of technology has led to business growth and expansion for the bank.
    - Strongly agree
    - Agree
    - Indifferent
    - Disagree
    - Strongly disagree

Thank you for Participation

Appendix IV: Human Resource Questionnaire

The impact of Human Resource Management Practices on profitability of commercial banks in Kenya

Name of the bank -------------------------------------

The questionnaire should be filled by the head of Human Resources' department or his/her deputy. In case none of them is available, a senior person in the department can fill the same. Please tick appropriately for each of the question.

11. Age of the respondent
    - ☐ Below 20 years
    - ☐ 20-30 years
    - ☐ 31-40 years
    - ☐ 41-50 years
    - ☐ Above 50 years
12. Gender
    - ☐ Male
    - ☐ Female
13. Highest academic qualification of the respondent
    - ☐ High school
    - ☐ Degree
    - ☐ Masters
    - ☐ Doctorate
    - ☐ Other

4. Comprehensive and transparent selection system positively affects s the financial performance of the bank.

- ☐ Strongly agree
- ☐ Agree
- ☐ Indifferent
- ☐ Disagree
- ☐ Strongly disagree

5. Training positively affects the financial performance of the bank.

- ☐ Strongly agree
- ☐ Agree
- ☐ Indifferent
- ☐ Disagree

- Strongly disagree

6. Job description positively affects the financial performance of the bank.

- Strongly agree
- Agree
- Indifferent
- Disagree
- Strongly disagree

7. Performance appraisal positively affects the financial performance of the bank

- Strongly agree
- Agree
- Indifferent
- Disagree
- Strongly disagree

8. Compensation system positively affects the financial performance of the bank.

- Strongly agree
- Agree
- Indifferent
- Disagree
- Strongly disagree

9. Career planning system positively affects financial performance of the bank.

- Strongly agree
- Agree
- Indifferent
- Disagree
- Strongly disagree

10. Employee participation positively affects the financial performance of the bank.

- Strongly agree
- Agree
- Indifferent

- ☐ Disagree
- ☐ Strongly disagree