

**REVENUE DIVERSIFICATION AND FINANCIAL PERFORMANCE OF
COMMERCIAL BANKS IN KENYA**

BY

MUTISYA A. WANDIA

D61/76072/2012

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

DECEMBER 2017

DECLARATION

This research project is my original work and, to the best of my knowledge, has not been submitted for examination in any other university or institution of higher learning.

Signature.....Date.....

Mutisya A. Wandia

D61/76072/2012

This research project has been submitted for examination with my approval as the university lecturer.

Signature.....Date.....

Dr. Mirie Mwangi

ACKNOWLEDGEMENT

I thank the almighty God for enabling me complete the work that culminated in writing this research project. I wish to express my acknowledgement to Dr. Mirie Mwangi, my supervisor for ably providing the needed guidance throughout the time I was working on this project. I express my deep felt gratitude to the management of the various commercial banks whose data I used in this study. I thank scholars in finance at the School of Business at the University of Nairobi whose literature I used when studying and writing this project. I also thank scholars elsewhere whose research literature I used in the project. Lastly, but never the least, I thank my family. It is with their unrelenting support that I was able to press forward to complete this project. Thank you.

DEDICATION

To my family whose support I will cherish forever.

TABLE OF CONTENTS

	Page
DECLARATION	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	vi
LIST OF TABLES	vii
ABBREVIATIONS AND ACRONYMS	viii
ABSTRACT	ix
CHAPTER ONE	1
INTRODUCTION	1
1.1. Background of the Study	1
1.2. Research Problem	8
1.3. Research Objective	10
1.4. Value of the Study	10
CHAPTER TWO	12
LITERATURE REVIEW	12
2.1. Introduction.....	12
2.2. Review of Theories	12
1.2.1. Modern Portfolio Theory	12
1.2.2. Agency Theory.....	14
1.2.3. Resource Based Theory	16
2.3. Determinants of Financial Performance in Commercial Banks	18
2.4. Review of Empirical Literature	20
2.5. Summary of Literature and Research Gap.....	23
2.6. Conceptual Framework	24
CHAPTER THREE	25
RESEARCH METHODOLOGY	25
3.1. Introduction.....	25
3.2. Research Design.....	25

3.3.	Population	26
3.4.	Sample Design	26
3.5.	Data Collection	26
3.6.	Data Analysis	27
CHAPTER FOUR.....		29
DATA ANALYSIS, RESULTS AND DISCUSSION.....		29
4.1.	Introduction.....	29
4.2.	Data Presentation	29
4.2.1.	Descriptive Analysis	29
4.2.2.	Revenue Diversification and the Financial Performance.....	35
4.2.3.	Discussions of Findings	37
CHAPTER FIVE		40
SUMMARY, CONCLUSION AND RECOMMENDATIONS		40
5.1.	Introduction.....	40
5.2.	Summary of Findings.....	40
5.3.	Conclusions.....	42
5.4.	Recommendations.....	43
5.5.	Limitations	44
5.6.	Suggestions for Further Research	44
REFERENCES.....		46
APPENDICES.....		54
	Appendix I: Annual Summary of Total Assets.....	54
	Appendix II: Annual Summary of Net Operating Income (NOI).....	57
	Appendix III: Annual Summary of Net Interest Income (NIT).....	60
	Appendix IV: Annual Summary of Non-Interest Income (NON)	63
	Appendix V: Annual Summary of Variables.....	66

LIST OF FIGURES

	Page
Figure 2.1 Conceptual Framework	24
Figure 4.1 Trends of variables	34

LIST OF TABLES

Table 4.1 Descriptive Findings on Total Assets for the 40 banks	30
Table 4.2 Descriptive Findings on Net Operating Income for the 40 banks	31
Table 4.3 Findings on Net Interest Income for the 40 banks	32
Table 4.4 Descriptive Results on Non-Interest Income for the 40 banks	33
Table 4.5 Variable Trends.....	34
Table 4.6 Model Summary for Revenue Diversification and Performance.....	35
Table 4.7 ANOVA for Revenue Diversification and Performance Relationship	36
Table 4.8 Coefficients of Regression.....	36

ABBREVIATIONS AND ACRONYMS

ANOVA	-	Analysis of Variance
EBIT	-	Earnings Before Interest and Tax
MPT	-	Modern Portfolio Theory
MS	-	Microsoft
NIT	-	Net Interest Income
NIM	-	Net Interest Margin
NOI	-	Net Operating Income
NON	-	Non-Interest Income
NSE	-	Nairobi Securities Exchange
RBT	-	Resource Based Theory
ROA	-	Return on Assets
SPSS	-	Statistical Packages for Social Sciences

ABSTRACT

Global market technologies and macroeconomic pressure has pushed economies in the world into liberalization and deregulation of their banking industries. The pressure has triggered enormous diversification in commercial banking across the world. However, the effects of the diversification on the profitability of the commercial banks vary. This study was conducted with the aim of establishing relationship between income diversification and the financial performance of commercial banks in Kenya. The study embraced a descriptive research design employing correlational approach in a time series manner. The target population was the 42 commercial banks operating in Kenya for the time between 2011 and 2016. Historical secondary data were collected from the audited annual reports of the commercial banks in the sample. Regression analysis was used to establish the relationship between return on total assets which was the dependent variable and the revenue diversification which was the independent variable. Results of the study indicate that the return on assets for all the banks improved from 2011 to 2013, and later decreased drastically till 2016. This was the similar case for NON/NOI and revenue diversification. However, NIT/NOI was lowest in 2013 and highest in 2015. The study concluded that the diversification had a positive effect on returns on assets. The study therefore recommended more diversification into the non-interest business given that the interest source seems to be getting saturated due to the limits being put forth by the Kenyan government in addition to competition arising from the rising importance of non-bank sources of finance for the households. Banks should focus in widening their non-interest income by improving their focus on income derived primarily from sources such as deposit fees, transaction fees and insufficient funds fees. Banks can also create products that are built around annual fees, account service charges, account inactivity fees, check and deposit slip fees, and such other types of fees.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Global market technologies and macroeconomic pressure has pushed economies in the world into liberalization and deregulation of their banking industries. The pressure has triggered enormous diversification in banking across the world (Aaker, 1980). Diversification is a mechanism commercial banks are using to manage risk and improve their financial performance given the critical role commercial banks play in the allocation of economic resources by continuously channeling funds from depositors to investors (Ongore & Kusa, 2013). Their financial performance is, therefore, an indicator of how healthy the function is performed. Any failure of commercial banks to meet financial obligations especially to stakeholders indicate difficulty of doing business in the banking industry (DeYoung & Roland, 2001).

Revenue diversification in banking takes different dimensions. The basic dimensions are the diversification of income sources and broadening within loan portfolio. More specifically, revenue diversification takes the form of interest and non-interest income. Any form of diversification of revenue sources should stabilize operating income, reduce total risk and focus on businesses with negative or imperfectly correlated income flows (Busch & Kick, 2009).

DeYoung and Roland (2001) exhibited three reasons that can make non-intrigue wage increment income unpredictability. To begin with, expense based exercises are generally more unpredictable than premium salary in light of the fact that there exists a more

grounded client bank relationship in the conventional premium based loaning business. In a significant number of the expense based exercises it is less demanding for the clients to change to another bank. Secondly, broadening into expense based administrations can impressively increase settled costs, consequently raising the level of settled expenses for a bank. At long last, charge based exercises require less administrative capital, recommending a higher level of financial use which prompts a higher income unpredictability.

Diversification of revenues is a strategy that has spread the world over. In Germany (Busch & Kick, 2009), in Turkey (Gurbuz, Yanik, & Ayturk, 2013) and in emerging markets like Ghana (Senyo, Olivia, & Musah, 2015), the banking sector banks have experienced decreasing interest margins and diminishing profitability. Further, the significance of non-interest income has considerably increased. The banks have responded by broadening processes far beyond traditional lending activities, in effect increasing the share of noninterest income in their operating profits. Working in an environment of economic liberalization policy banks anywhere in the world, including Kenya are facing stiffer competition and diminished financial performance of commercial banks leading to the collapse of some (Mulwa, Tarus, & Kosgei, 2015). This study aims at assessing whether the diversification is increasing the financial performance of the banks.

1.1.1. Revenue Diversification

Diversification is the process of investing a firm's capital in a variety of assets in order to minimize the risk exposure to any one asset. An earlier position by Reed & Luffman

(1986) indicates that the term diversification varies in meaning as research interest changes. Some scholars such as Gort (1962) defined diversification in terms of the number of products, services and markets. Others such as Hoskisson & Hitt (1990) define diversification in terms of the means and methods that enable organizations to achieve growth and reduce overall risk. According to the definition by Penrose (1959) diversification refers to the increase of the number of business lines a firm runs whether such lines are related or not.

According to Olo (2009) diversification represents a departure from the firm's existing base of operations into a separate business line either through acquisition or through expansion. A firm is diversified when it conglomerates two or more activities in its operations or operates in more than one locality. In the study by Mulwa (2013) who analysed the effects of funding diversification on credit unions' performance, a credit union was considered to be diversified when it used more than one source of financing to raise funds.

Diversification in banking is done functionally by combining activities as securities trading, insurance, commercial banking and other financial services into a conglomerate (Baele, De Jonghe, & Vennet, 2007). Banks can also diversify by forming a conglomerate of many banks through a bank holding company or banking groups (Kahloul & Hallara, 2010). Bank enhancement can be better comprehended by disaggregating the different components that constitute the operations, resources and liabilities of a business bank. In such manner, bank broadening is the aggregation of various exercises, salary sources, resources and liabilities in banking operations.

As indicated by Mercieca, Schaeck, and Wolfe (2007), enhancement in banking segment takes three measurements: money related items and administrations broadening, geographic expansion, and a blend of geographic and business line enhancement. In another perspective by Busch & Kick (2009) Diversification in banking can take on two dimensions: interest and non-interest income. Noninterest income comes from fees, net trading and other non-lending banking activities. This study will assume the interest-noninterest income approach of diversification in banking.

1.1.2. Financial Performance

Financial performance alludes to a subjective measure of how well a firm has utilized its advantages/production incomes from its essential method of business. This term likewise alludes to a general measure of an association's general financial wellbeing over a specific timeframe. It can likewise be utilized to think about comparative firms over a similar industry or to look at ventures or parts in a given nation (Ongore and Kusa, 2013).

Financial performance measures are classified into five general classes: liquidity, dissolvability, benefit, reimbursement limit and financial productivity. Liquidity measures the capacity of the business to meet financial out of this world due, without disturbing the typical, continuous operations of the business. Measures of liquidity incorporate current proportion and working capital. Dissolvability measures give a sign of the capacity of the business to reimburse all obligation if the greater part of its advantages were sold. Obligation to resource proportion and the value to-resource proportion are such measures. Gainfulness pointers measure the degree to which a

business creates a benefit from its variables of generation. They incorporate rate of profit for resources, the rate of profit for value, working overall revenue, net pay and profit for return on total assets.

Reimbursement limit assesses the limit of the business to benefit extra obligation or to put resources into extra capital in the wake of meeting all other money duties. Such measures incorporate the term obligation and capital scope proportion. Financial proficiency measures the level of effectiveness in utilizing work, administration and cash-flow to create yield. Financial productivity measures incorporate the benefit turnover proportion, working cost proportion, deterioration cost proportion, intrigue cost proportion and net ranch salary from operations ratio (Crane, 2006).

In this study financial performance will be measured by the profitability measures specifically the ROA. According to Masa'deh, Tayeh, Al-Jarrah, & Tarhini (2015) return on assets is a hard financial performance measure preferred by finance researchers. Profitability measures such as ROA demonstrate the efficiency of the firm's operations.

1.1.3. Revenue Diversification and Financial Performance

The relationship between revenue diversification and the financial performance of banks is not simple and straight forward. Theories, such as the modern portfolio theory, the agency theory and the resource based theory suggest a close relationship between diversification and the financial performance of the diversifying institution. The modern portfolio theory suggests that diversification improves returns while controlling risk (Brealey, Myers, & Allen, 2013). The agency theory suggests that there is a relationship between performance and diversification that depends on the principal-agent relationship

in the organization (Jensen & Meckling, 1976). The resource based theory suggests that the performance of an organization will depend on the resources it owns. A firm with resources that enable efficient diversification will realize improved financial performance due to the diversification.

Studies, however, give conflicting results regarding the relationship between diversification and financial performance of an organization. In a study by Vallascas, Crespi & Hagendorff (2012) the focus was on testing the impact of income diversification on the performance of Italian banks during the 2008 global financial crisis. Utilizing point by point information on the structure of bank pay, the investigation demonstrated that financial organizations that were differentiated inside their extent of movement before the emergency experienced huge decreases in performance amid the financial emergency. On the contrary, financial institutions that had diversified broadly did not have severe performance losses during the crisis. The study indicated that the relationship between diversification and firm performance is highly contextual. This study takes the position that though there might be a relationship between income diversification and firm performance, it cannot be expressly assumed that the relationship is positive or negative.

1.1.4. Commercial Banks in Kenya

Kenya has a total of 42 registered and operating commercial banks. All the commercial banks are regulated by the Central Bank of Kenya. The Capital Markets Authority plays the role of additional control over the 11 commercial banks listed on Nairobi Securities Exchange (NSE). All commercial banks adhere to set prudential regulations such as

minimum liquidity ratios and cash reserve ratios with the Central Bank. The 42 commercial banks in Kenya serve the total population of 44 million people, at a ratio lower than the 22 commercial banks serving 180 million Nigerians and the 19 commercial banks serving 55 million people in South Africa. This indicates the tough competition commercial banks face in their banking business (Cytton Investments, 2015).

According to Central Bank of Kenya (2009), the performance of commercial banks has been considerably volatile. For instance in 2002 there was a general decline in decline in pre-tax profit to the tune of 4.5 percent. This was attributed to the increase in non-performing loans. A survey conducted by FinAccess (2011) indicated that the total share of Kenyans using informal financial services did not change between 2006 and 2009. However, in the same time span, the share of Kenyans that used formal and semi-formal financial services rose from 24.3 percent to 40.5 percent. This improvement is watered down by modest growth in the use of credit which marginally rose from 1.7 percent to 2.3 percent. In 2009, 38 percent of Kenyans used both informal and formal financial services. The study seemed to indicate that banks could do better by tapping deeply into the informal banking as opposed to the formal and semi-formal banking approaches used by commercial banks.

Currently, commercial banking in Kenya is troubled. This is because the central banks introduced a cap on interest rates on loans. Commercial banks were required to charge 4.0 percent interest rate above the bank rate of 10.5 percent (Commercial Bank of Africa Limited (CBA), 2016). This led to a shrink in the interest based income since interest on deposits was lowered by banks. To mitigate the effect of the new rule commercial banks

have resorted to diversification to have both interest based and non-interest based activities in their investments portfolios.

1.2. Research Problem

Diversification in commercial banking is about commercial banks generating income from non-interest earning activities and from interest-earning activities and realigning the bank's income to include less of the traditional interest income and more of non-interest activities (Markowitz, 1952). Diversification out of the traditional interest-based activities is conducted with the aim of improving the profitability of the commercial banks where returns from interest-based activities are shrinking. According to Tregenna (2009) the financial performance of a commercial bank depends on the market structure and how the commercial bank diversifies its portfolio in response to emerging market conditions.

Commercial banks across the world have taken to non-interest diversification to compensate for the dwindling incomes received from the traditional interest-based banking business. Busch & Kick (2009) notes that banks have resorted to non-traditional banking business to maintain or improve their profitability. Vallascas, Crespi, & Hagendorff (2012) also notes that commercial banks have no other way apart from diversifying out of the congested traditional banking if they have to expand their customer base and maintain competitiveness. A similar position is reiterated by Baele, De Jonghe, & Vennet (2007) who note increasing non-interest income diversification in commercial banking.

Commercial banks in Kenya have also resorted to income diversification. The Government of Kenya, through the Central Bank capped at 4.0 percent above the 10.5 percent at which commercial banks borrow from the Central Bank (Commercial Bank of Africa Limited (CBA), 2016). To maintain their competitiveness, commercial banks have to come up with other non-interest based ways of generating income. However, diversification is not a guarantee to improved income generation since some commercial banks such as Equity Bank reported dropping revenues. The capping has limited the capacity of commercial banks to generate profit through interest-based activities. An analysis of the following studies regarding the performance of commercial banks in Kenya indicates that little is done to establish how the diversification has contributed to the performance of commercial banks in Kenya. The study by Wafubwa (2013) dwelt on establishing the factors that determined the performance of commercial banks in Kenya but did not focus on revenue diversification. The study by Ritho & Jagongo (2015) focused on assessing the effects of mobile banking on the performance of commercial banks in Kenya. The study did not focus on diversification. In the study by Nyamongo & Temesgen (2013) the aim was to establish the effect of governance on the performance of commercial banks in Kenya and did not address revenue diversification. A study conducted by Kamau & Were (2014) was done on factors that drive the performance of the banking sector leaving out revenue diversification. Clearly a research gap existed regarding how revenue diversification affects the financial performance of commercial banks in Kenya. This study addressed the gap by answering the question: what is the effect of revenue diversification on the financial performance of commercial banks in Kenya?

1.3. Research Objective

The objective of this research was to establish the relationship between income diversification and the financial performance of commercial banks in Kenya.

1.4. Value of the Study

To scholars and researchers, this study will provide a basis for future research concerning the relationship between revenue diversification and the financial performance of commercial banks. The study will contribute to the body of empirical literature on how revenue diversification is contributing to the financial performance of commercial banks especially in emerging markets like Kenya. Scholars will then find the contents and findings of this research necessary in furthering related research.

To financial institutions the study will provide useful insights into how to utilize revenue diversification as a way of improving financial performance. Given their role as drivers of economic growth and reduction of poverty, financial institutions have to tap into the financial capacities presented by its market in order to maximize the value they realize for their customers and shareholders. Given the importance of profit to shareholder, diversification should be done carefully in order to realize value while minimizing costs and risk. This research will provide the necessary insight into this approach in commercial banks.

To the policy makers in the government's ministry of finance and financial institutions this study will provide a deeper understanding of how income diversification is changing the financial market. The study will assess how effective diversification is enabling the

achievement of improved financial performance in the financial sector in Kenya. The findings may be used by policy makers and financial institutions will then moot strategies that will embed income diversification in the financial sector in Kenya for the sake of economic growth.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter reviews the literature related to this study. Three theories are reviewed. These are the Modern Portfolio Theory, the Agency Theory and the Resource Based Theory. The chapter also reviews the determinants of financial performance of commercial banks before reviewing the empirical findings regarding the relationship between income diversification and financial performance.

2.2. Review of Theories

Three theories provide the basis for this study. The theories are: Modern portfolio theory, resources based theory and agency theory. The theories are discussed in the three sub-sections below.

1.2.1. Modern Portfolio Theory

The Modern Portfolio Theory (MPT), an improvement on the traditional investment models that started with Markowitz (1952) and serves as an important advance in the mathematical modelling of finance. The MPT is a theory of investment which is focused on maximizing the expected return of a portfolio given an amount of portfolio risk. It focuses on minimizing risk for a given level of expected return through carefully choosing the proportions of various assets. The theory encourages asset diversification to hedge against market risk as well as risk that is unique to a specific company with respect to expected returns.

The MPT is an investment decision tool that aids an investor to classify, estimate, and control both the kind and the amount of expected risk and return. The most important input in the MPT is the statistical quantification of the relationship between risk and return and the assumption that investors must be compensated for assuming risk. While traditional security analysis focuses on analyzing the risk-return relationship for individual investments, the MPT focuses on the overall set of investments. As a result, the MPT fundamentally asserts that an investment portfolio should not be selected on the basis of risk-return characteristics of individual investments. It is important to assess and consider how each asset changes in price relative to how every other asset in the portfolio changes in price.

Investing is an exchange off amongst risk and expected return and, by and large, ventures with higher expected returns are more hazardous (Taleb, 2007). For a given measure of risk the MPT depicts how to choose a portfolio with the most elevated conceivable expected return. Then again, for a given expected restore, the MPT discloses how to choose a portfolio with the most reduced conceivable hazard. In the MPT the arrival of a venture is displayed as a typically circulated work while chance is demonstrated as the standard deviation of the arrival. The arrival of an arrangement of ventures is the weighted mean of the profits of every portfolio weighted upon amounts invested in each while the risk of the investments is estimated as the weighted standard deviation (Omisore, Yusuf, & Nwifo, 2012).

The MPT has been criticized for its unrealistic assumptions such as the normal distribution of risk and return. Further, though relevant, the theory has been found to have simplistic assumptions and because its model of financial markets does not match the real

world. In recent years, basic underlying assumptions of the MPT have been grossly challenged by behavioural finance (Kahneman & Tversky, 1979). However, the MPT is relevant to this study because it explains the motivation for diversification. Commercial banks will diversify to improve their returns while minimizing risk. Alternatively, they will only take on higher risk where there is a higher return. As a result, the position is that diversification should lead to better financial performance.

1.2.2. Agency Theory

Agency theory was suggested by Jensen & Meckling (1976), but its adoption in corporate governance increased after 1980 when organizations began supplanting the corporate rationale of administrative free enterprise with the impression of supervisors as specialists of the shareholders. The ensuing writing would split far from the custom of generally regarding the firm as a black box and the suspicion that the firm constantly looked to boost esteem (Jensen and Meckling, 1994). The Agency Theory tended to what had then turned into a developing worry that the administration of corporate bodies drew in additional in realm working with a general dismissal for shareholder intrigue.

In the Agency Theory, the shareholders are the principals while the managers are the agents. The shareholders hold the primacy position of being the residual claimant and main stakeholder. While shareholders have a readiness to tolerate risk, they don't really have the intrigue and time to effectively deal with the organization prompting a legally binding association with chiefs in which the operator (supervisor) will deal with the risk and control the organization in the interest of the central (shareholder) (Brealey, Myers, and Allen, 2013).

Organization issues emerge because of the partition of possession and control and the veering risk profiles of the taking part parties. It, in this manner, ends up plainly hard to expect that risk-loath directors who are the operators will act in light of a legitimate concern for the risk-nonpartisan shareholders who are the principals. This is on the grounds that acting in, for example, to boost shareholders' riches won't not be in light of a legitimate concern for the supervisor's self-premium (Bonazzi and Islam, 2007). As indicated by Jensen and Smith (1985) the three conspicuous organization issues with administration that reason the irreconcilable situation are, the decision of exertion, differential risk presentation, and differential time skyline. The organization issue in isolating possession and control separates the objectives of the main and the operator. This unavoidably builds the motivators for moral risk and sharp conduct. As a result, the advanced enterprise is diminished to a nexus of agreements amongst principals and specialists and the detachment of proprietorship and control is made.

The primary sort of office is that directors get utility from diminishing quirky risks that they confront. Administrators have undiversified positions in their own particular firms. Those with higher value confront higher quirky risks from their motivating forces and expand their organizations to bring down the risk. As was established by May (1995) chief executive officers with more wealth tied up in firm equities engaged in business activities aimed at more diversification. In the second type of agency, managers diversify because they derive private benefit from managing a more diversified firm (Stultz, 1990). The benefits arise in form of prestige and better career prospects. Their pay might also increase and they may bolster their benefit to the firm making them indispensable to the

firm. However, this assertion was disputed by Lemmon & Lins (2003) who found evidence of less diversification in firms with higher managerial equity ownership.

The benefits of revenue diversification are variant, partly, due to the agency issues within the banks. The managers may diversify out of their own interests and not those of the shareholders. The employees may not effectively manage the revenue diversification policy since the success of the policy may not be beneficial to them though it may maximize the wealth to the shareholders who are the principals. As a result the relationship between revenue diversification and financial performance of a bank will depend on the manifestation of the agency relationships.

1.2.3. Resource Based Theory

The resource based theory (RBT) is a theory whose main tenet is that the competitive advantage of a firm is based on the resources it owns and controls. The RBT emphasizes the firm's resources as the fundamental determinants of its competitive advantage and performance. This theory is based on two key assumptions. First, the theory expects that organizations inside an industry might be heterogeneous as for the heap of resources that they control. Second, it expects that resource heterogeneity may hold on after some time in light of the fact that the resources used to actualize firms' systems are not superbly portable crosswise over firms (Peteraf and Barney, 2003).

Resource heterogeneity is a vital condition for a resource package to add to an upper hand. On the off chance that all organizations in a market have comparative supplies of resources, there will be a resource that will be particularly accessible to just a single firm in the market. The RBT is a productivity based clarification of performance contrasts.

Performance differentials in firms in an industry are because of differentials inferable from resources having naturally unique levels of effectiveness to empower the organizations to convey more prominent advantages to their clients for a given cost (Peteraf and Barney, 2003). In any case, the heterogeneity and fixed status of resources are not adequate conditions for maintained upper hand.

As indicated by Barney (1991), a firm resource must, furthermore, be significant, uncommon, and defectively imitable and substitutable keeping in mind the end goal to be wellspring of a maintained upper hand. For a firm to accomplish economical upper hand, it must have predominant heterogeneous resources, ex present point of confinement on rivalry, flawed resource versatility and ex stake breaking points to rivalry. As of late, much resource-based research has concentrated on impalpable resources, for example, data, information and dynamic capacities (Teece, Pisano, & Shuen, 1997).

The RBT is relevant to this study because, the decision to diversify or not and the extent of the diversification is a matter of strategy of a commercial bank. Every bank will want to diversify away its unique risk while hedging itself against the risk in the banking industry as a whole. However, the direction of diversification will depend on the tangible and intangible resources it owns and/or controls. The competitive advantage will be realized in terms of the performance of the firm. If the resources owned by a bank are unique and not imitable by other banks, then the bank will have sustainable competitive advantage. If the resources are not unique and are imitable, then the bank may have no competitive advantage or may have short term competitive advantage as other banks imitate its diversification activities. These variations cause differences in diversification approaches and affect the financial performance of commercial banks.

2.3. Determinants of Financial Performance in Commercial Banks

When addressing the performance of commercial banks we use determinants of profitability as a benchmark. In studying the determinants of banks' profitability, much of the focus is on return on assets (ROA), return on equity (ROE), the net interest margin (NIM) and return on total assets (ROA). The usually analyzed determinants in this context are special factors of banks that determine their performance such as risk, market power, administrative expenses and the cost of the reserve requirement. Other researchers focus on the macroeconomic factors (Athanasoglou, Brissimis, & Delis, 2006).

Risk

According to Markowitz (1952) risk is the variability in returns statistically calculated as the standard deviation of returns. The statistical definition is based on the fact that returns are random variables. Banks are exposed to a wide variety of risks that cause variation in returns. Some of the risks include: credit risk, market risk, operational risk, liquidity risk, business risk, reputational risk, systemic risk and moral hazard (Aaron, Armstrong, & Zelmer, 2013). The relationship between risk and return may vary from bank to bank. However, in a market with high risk, banks will expect higher returns as a reward for the higher risk (Markowitz, 1952).

Market Power

Market power refers to the ability of a firm to profitably raise the market price of its products over the marginal cost. A firm with total market power, for instance, can raise its prices without losing a customer to competitors. On the other hand, a firm with low

market power does not have the ability to raise its prices profitably since it easily loses customers to competitors if it makes such an attempt. A firm that enjoys strong market power can individually raise its prices. A firm with stronger market power generates higher profits as opposed to firms with low market power. A firm with stronger market power has the ability to restrict output profitably, increase price and exercise its power relative to the benchmark of the competitive price level (Hussein, Manap, & Nor, 2012).

Administrative Expenses

An administrative expense is an expense incurred in controlling and directing an organization, however, it may not be directly identifiable with any specific operation in the organization. Such expenses include salaries of senior executives and costs of general services. Administrative costs are related to the organization as a whole, but not to specific departments or sections. When expenses increase, they reduce profitability of the organization (Pandey, 1999).

Cost of the Reserve Requirement

The reserve requirement is a regulation issued by the Central Bank to commercial banks that sets the minimum amount of reserves that must be held by a commercial bank. The minimum reserve is determined by the Central Bank so that commercial banks hold a specified percentage of deposits. The costs of reserves refer to the lost investment opportunities due to holding reserves. The lower the reserve, the lower the costs and the higher the profitability. The higher the reserve the higher the costs and the lower the profitability (Glocker & Towbin, 2012).

Macroeconomic Factors

A macroeconomic factor is a factor affecting the whole broad economy at the regional or national level. It affects the larger population as opposed to a few selected individuals in the economy. Such factors include economic output, employment, inflation, savings, interest rates, population, government budget balances, investment and international trade balances. They are key indicators of economic performance making them to be closely monitored by governments, businesses and consumers. The factors may either together or individually affect the profitability of commercial banks (Ongeri, 2014).

2.4. Review of Empirical Literature

In this section the discussion focuses on findings regarding the relationship between income diversification and financial performance. One of such studies was conducted by Chiorazzo, Milani, & Salvini (2008) with the aim of establishing the link between non-interest revenues and profitability in Italian banks. The study used annual data from Italian banks for the period between 1993 and 2003. The study established that income diversification increased risk-adjusted returns. The study found the relationship between non-interest revenues and profitability stronger in larger banks as compared to smaller banks. We find that the relation is stronger at large banks. Further, the study established that there were limits to diversification gains as banks got larger.

In another study by Lup (2015) purposed to examine competitiveness of non-traditional bank activities in Islamic banking and to establish whether non-traditional banking was as competitive as conventional banking. The study was done Islamic bank and conventional bank in Malaysia. The banks were grouped into less profitable banks, averagely

profitable banks and highly profitable banks. Analysis was done using quantile regression. Results showed that income generated from the existing non-traditional bank activities permissible by Shariah had no impact on the profitability of Islamic bank. However, diversification reduces profitability of Islamic bank when the bank was grouped in the less profitable category. The study concluded that the contribution of diversification on bank profitability depended on whether the bank was profitable or not.

The study by Busch & Kick, 2009 analysed the determinants of non-interest income and its impact on the financial performance and the risk profile of German banks. The study was done for the time between 1995 and 2007. The study established that for all German all inclusive banks risk-balanced profits for value and aggregate resources are emphatically influenced by higher expense wage exercises. Further, for business banks that had a solid engagement in charge producing exercises, there was higher risk.

Senyo, Olivia, & Musah (2015) analysed the relationship between non-interest income and profits of banks in Ghana from the year 2002 to 2011 and also considered the risk associated with the banks' income diversification. The study established that interest income remained the highest contributor to banks' profits in Ghana. Revenues from non-interest sources play an augmenting role when there were short falls in interest revenue.

Gamra & Plihon (2008) assessed whether the observed shift into non-interest based activities improves financial performance in commercial banks. The study was done on 714 banks across 14 East-Asian and Latin-American countries for the post 1997 global financial crisis. The study established that diversification gains were more than offset by the cost of increased exposure to the non-interest income. The offset was done

specifically by the trading income volatility. However, the diversification-performance relationship was non-linear when considering risk. The relationship was not uniform among banks and across business lines. The study established that the commercial banks could secure diversification benefits as long as they studied it well.

Kiweu (2012) investigated how diversification of income sources affected the earnings and risks in Kenyan commercial banks. The study analysed the extent to which shift toward fees income generating activities had improved bank performance and reduced revenue volatility. The study used data from 2000 to 2010. The findings of the study indicated that there are few benefits from income diversification from traditional banking although there was growing importance of non-interest income.

Teimet, Ochieng, & Aywa (2011) sought to establish the impact of income source diversification on financial performance of commercial banks in Kenya. The study was done on the 44 commercial banks in Kenya with data for the period between 2005 and 2009. Secondary data was used in the study. Correlation and Regression analysis were the analysis models used. The study revealed that all commercial banks in Kenya are diversified. The larger banks had diversified more while Islamic banks were least diversified. The diversification level had a positive influence on financial performance of commercial banks in Kenyan. The interest-based and the non-interest income streams were positively related.

Muthoni (2012) sought to establish the effect of diversification of income sources of Commercial Banks in Kenya on their financial performance. The study was done on 15 Commercial Banks for the period 2007 – 2011. Secondary data were used for analysis.

The study found that interest income, fees and commissions on loans and advances, other fees and commissions, foreign exchange trading income and other non-interest income contributed positively to financial performance.

In the study by Mulwa & Kosgei (2016) the aim was to establish the relationship between diversification and performance of commercial banks in Kenya and assess the moderating role of risk. The study used the ex post facto explanatory design on 34 commercial banks in Kenya over nine firm years. The authors established that income and asset diversification negatively affected commercial banks' ROA while geographical diversification significantly positively affected both ROA and ROE.

Kabiru (2015) conducted another study that focused on establishing the relationship between the noninterest income and the financial performances of commercial banks in Kenya. The study was a descriptive research done on the 42 commercial banks operating between 2010 and 2014. The data was reanalysed using descriptive statistics, correlation analysis, ANOVA and regression analysis. The study revealed that there was a negative relationship between increase in non-interest income and the variability in the ratio of non-interest income and net interest income. The study concluded that non-interest income contributed positively to the financial performance of commercial banks, but diminished the ratio when compared with net interest income and volatility of returns.

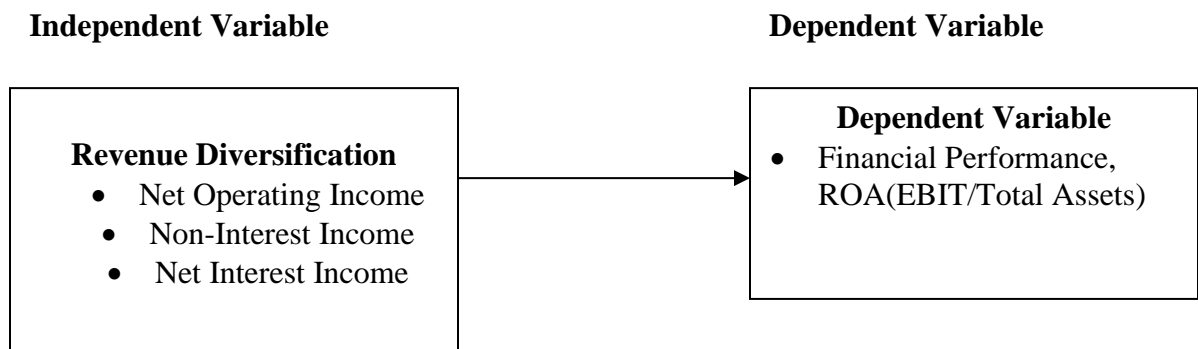
2.5. Summary of Literature and Research Gap

The literature review has presented three theories that explain why commercial banks diversify their sources of income and how the diversification is expected to increase profitability while minimizing risk. However, empirical research has mixed findings.

Some studies have shown strong positive relationship between income diversification and financial performance while others have found no strong relationship. Studies done in Kenya focused on the period before 2010 while others focused on noninterest income only. This left a research gap regarding the effect of income diversification on the financial performance of commercial banks especially after 2010. This study intends to fill this gap.

2.6. Conceptual Framework

Figure 1 below shows the conceptual framework for the relationship between revenue diversification and financial performance of commercial banks. The independent variable is revenue diversification. The dependent variable is financial performance measures by Returns on Assets (ROA). The relationship between income diversification is determined by four control variables namely: size of bank, leverage and liquidity.



Source: Researcher (2017)

Figure 2.1 Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter discusses the research methodology. It presents the research design, describes the target population and describes the sampling design. Further, the chapter describes the data collection techniques and how analysis was done.

3.2. Research Design

This research adopted the descriptive correlational design. In a descriptive study, the researcher seeks to describe phenomena as they are while in correlation, the researcher investigates one or more characteristics of a group with the aim of discovering the extent to which the characteristics co-vary. Descriptive correlational studies examine and describe variables in their natural environments and the researcher has no hand in the observations. Descriptive correlational studies display the relationships among variables using methods such as cross-tabulation and correlations. Descriptive correlational studies are also known as ex post facto studies because they are done after the events of interest have occurred naturally. The main purpose of a descriptive correlational study is to determine the nature of relationships between variables, and if any exists, an equation relating the variables is derived in order to make predictions to the population (Kothari, 2004).

In this study, the objective of the researcher was to establish the relationship between two variables. The variables were financial performance and diversification. This made it a

correlational study. Further, the study used historical data which is not under the control of the researcher but measure the variables of interest as they naturally occurred in commercial banks in Kenya. Such an approach was used by Aggarwal & Samwick (2001) in establishing the relationship between diversification and financial performance. It was also used by Gurbuz, Yanik & Ayturk (2013) when assessing income diversification and bank performance in the Turkish banking sector. This justified the use of the correlational research design.

3.3. Population

According to (Kothari, 2004) a population refers to the set of similar items or events which is of interest for some question or experiment. This study targeted the 40 commercial banks currently operating in Kenya. The 40 commercial banks made the population of this study.

3.4. Sample Design

The study was done using a census of all the 40 commercial banks in Kenya. The study covered the six years beginning 2011 to 2016. This was considered time long enough to provide plausible results regarding the relationship between revenue diversification activities in commercial banks in Kenya and the contribution of the activities to the financial performance of the banks.

3.5. Data Collection

The study utilizes secondary historical data. The data include, Net operating income (NOI), net interest income (NIT) calculated as total interest revenues less total interest

expenses, non-interest income (NON) which is sum of net commission fees, net trading profit/loss and other non-interest income. The study also required return on total assets (ROA) obtained as the net operating income per unit of book values of assets respectively. The data were obtained for each bank for the period 2012-2016. The secondary data were obtained from published annual reports of commercial banks.

3.6. Data Analysis

After obtaining the raw data, the researcher first processed the raw data into their analyzable form. ROA will be generated annually per commercial bank using the model 1 below:

$$ROA = \left(\frac{EBIT}{Book\ Values\ of\ Total\ Assets} \right) \quad (1)$$

Annual diversification measure per commercial banks was calculated as revenue diversification. The revenue diversification per bank in a given year was found by model 2 below:

$$Revenue\ Diversification = \left(\frac{NIT}{NOI} \right)^2 + \left(\frac{NON}{NOI} \right)^2 \quad (2)$$

Where NOI is the Net Operating Income for a bank in a given year, NIT is the Net Interest and NON is the Non-Interest Income.

To assess the relationship between diversification and financial performance regression analysis was done between revenue diversification and ROA. The regression model used is as shown in equations 3 below:

$$ROA = \alpha + \beta(Revenue\ Diversification) + e \quad (3)$$

Where α , and β are regression constants for each regression analysis and e the error term in each case. The regression analysis was done at 95 percent confidence level. The α and β were tested for significance using the t -statistic. The regression was tested for significance using the F -statistic. The coefficient of determination, R^2 , was used to determine how much variation in ROA was explained by variation in revenue diversification. The analysis was done using MS Excel 07 and SPSS version 20 and results are discussed in chapter four.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1. Introduction

This chapter presents the data analysis, the results and the discussion of the results. In the first part of the chapter, the presentation focuses on the descriptive analysis of the financial data obtained from the audited records of commercial banks. The second part presents results on revenue diversification. The chapter also presents the analysis of the relationship between return on total assets and revenue diversification. The chapter ends with the discussion of the findings vis-a-vis other similar research findings.

4.2. Data Presentation

This section presents the data analysis and the findings. The first part presents the descriptive analysis of the financial data used in the study. The second part presents the analysis of the relationship between return on total assets (ROA) and income diversification. The chapter also compares the findings with those of other scholars.

4.2.1. Descriptive Analysis

The study focused on Total Assets, Net Operating Income (NOI), Net Interest Income (NIT) and Non-Interest Income (NON) for the six years beginning 2011 and ending 2016. The values of the financial data were obtained from the 40 commercial banks and are as presented in this section.

To get a deeper understanding of the market, the researcher conducted a descriptive analysis of the financial data. The study findings on total assets for the six years studied

indicate that there was an increase in mean values for total assets across the six years. The mean value improved from 32,814,159,780 in 2011 to 39,281,442,680 in 2012. The increase was also seen in 2013, 2014, 2015 and 2016 with mean values of 48,095,508,950, 57,940,509,530, 76,750,168,680 and 93,987,973,010 respectively. The maximum value increased from 330,664,000,000 in 2011 to 462,819,100,000 in 2016 while the minimum value also increased from 2,286,130,000 in 2011 to 5,612,962,000 in 2016. The findings of the study on total assets are shown in Table 4.1.

Table 4.1 Descriptive Findings on Total Assets for the 40 banks

	N	Minimum (Kshs in '000)	Maximum (Kshs in '000)	Mean (Kshs in '000)	Std. Deviation (Kshs in '000)
Year 1	40	2,286,130	330,664,000	32,814,159.79	80,255,251.68
Year 2	40	2,147,779	368,019,000	39,281,442.68	89,714,804.36
Year 3	40	11,305,398	390,852,000	48,095,508.95	95,380,080.48
Year 4	40	3,020,283	390,852,000	57,940,509.53	103,312,719.32
Year 5	40	4,113,812	390,852,000	76,750,168.68	111,464,130.32
Year 6	40	5,612,962	462,819,100	93,987,973.01	142,674,130.33

The findings on Net Operating Income (NOI) indicate that there was an increase in the mean values across the years; the mean values improved from 5,030,821,740 in 2011 to 7,591,871,900 in 2016. In addition, the maximum value also increased across the years,

as shown by an increase from 39,309,082,000 in 2011 to 51,897,006,700 in 2016. However, there was no increase in minimum values across the years, as the minimum value dropped from 121,393,000 in 2011 to 89,267,190 in 2016. The findings are shown in Table 4.2.

Table 4.2 Descriptive Findings on Net Operating Income for the 40 banks

	N	Minimum (Kshs in '000)	Maximum (Kshs in '000)	Mean (Kshs in '000)	Std. Deviation (Kshs in '000)
Year 1	40	121,393	39,309,082	5,030,821.74	9,370,839.05
Year 2	40	133,789	46,257,118	5,824,269.79	11,284,172.79
Year 3	40	81,892	50,110,265	6,488,367.95	12,354,893.54
Year 4	40	120,212	50,110,265	6,709,005.84	12,700,398.51
Year 5	40	90,373	50,110,265	7,370,758.53	12,928,280.34
Year 6	40	89,267	51,897,006	7,591,871.90	17,872,827.88

The findings on Net Interest Income (NII) also indicate that there was a general increase in the mean values across the six years of study. The mean value improved from 3,344,449,790 in 2011 to 5,297,781,780 in 2016. This was a similar case for the maximum and minimum values as shown by an increase from 1,092,000 and 23,286,408,000 for minimum and maximum values for 2011 to 9,018,000 and

33,878,788,000 in 2016 for minimum and maximum values respectively as shown in Table 4.3.

Table 4.3 Findings on Net Interest Income for the 40 banks

	N	Minimum (Kshs in '000)	Maximum (Kshs in '000)	Mean (Kshs in '000)	Std. Deviation (Kshs in '000)
Year 1	40	1,092	23,286,408	3,344,449.79	5,724,249.75
Year 2	40	1,097	30,636,232	4,228,485.16	7,481,078.13
Year 3	40	1,092	30,636,232	4,480,696.37	7,381,870.23
Year 4	40	7,644	30,636,232	4,908,164.47	7,878,965.45
Year 5	40	7,608	30,636,232	5,259,800.68	8,037,195.04
Year 6	40	9,018	33,878,788	5,297,781.78	8,037,195.05

Further, the findings on Non-Interest Income (NON) indicate that the highest mean was achieved in the year 2013 with a value of 3,620,104,840 while the lowest mean was seen in 2011 with a mean value of 1,619,948,370. The maximum value increased from 16,022,674,000 in 2011 to 20,783,787,000 in 2016, similar to the minimum value which increased from -2,126,066,000 in 2011 to -1,478,272,800 in 2016. The findings are shown in Table 4.4.

Table 4.4 Descriptive Results on Non-Interest Income for the 40 banks

	N	Minimum (Kshs in '000)	Maximum (Kshs in '000)	Mean (Kshs in '000)	Std. Deviation (Kshs in '000)
Year 1	40	-2,126,066	16,022,674	1,619,948.37	3,871,910.33
Year 2	40	-2,240,127	15,620,886	1,595,784.68	3,914,923.67
Year 3	40	-1,783,108	50,110,265	3,620,104.84	11,611,550.23
Year 4	40	-2,007,569	19,474,033	1,800,841.36	4,985,807.88
Year 5	40	-1,652,713	19,474,033	2,110,957.84	5,066,157.63
Year 6	40	-1,478,272	20,783,787	2,291,819.81	5,078,187.81

The study also determined that the return on assets for all the banks improved from 2011 to 2013, and later decreased drastically till 2015, but improved in 2016. The results also indicate that NON/NOI reduced from 2011 to 2012, but improved in 2013, later dropped in 2014 but increased consistently to 2016. On NIT/NOI, the findings indicate an increase from 2011 to 2012, but a decrease in 2013, an increase in 2014, a drop in 2015 and an increase in 2016. Results for NIT/NOI indicate that the lowest value was obtained in 2013 and highest in 2016 as shown in Table 4.5 and Figure 4.1.

Table 4.5 Variable Trends

	2011	2012	2013	2014	2015	2016
ROA	0.095255	0.098248	0.095283	0.086079	0.084965	0.08784
NIT/NOI	0.655753	0.726011	0.690574	0.731579	0.713604	0.75892
NON/NOI	0.322005	0.273989	0.557938	0.268421	0.286396	0.30928
Revenue Diversification	0.533699	0.602162	0.788186	0.607257	0.591253	0.62891

The variable trends were also presented in a figure as shown in Figure 4.1.

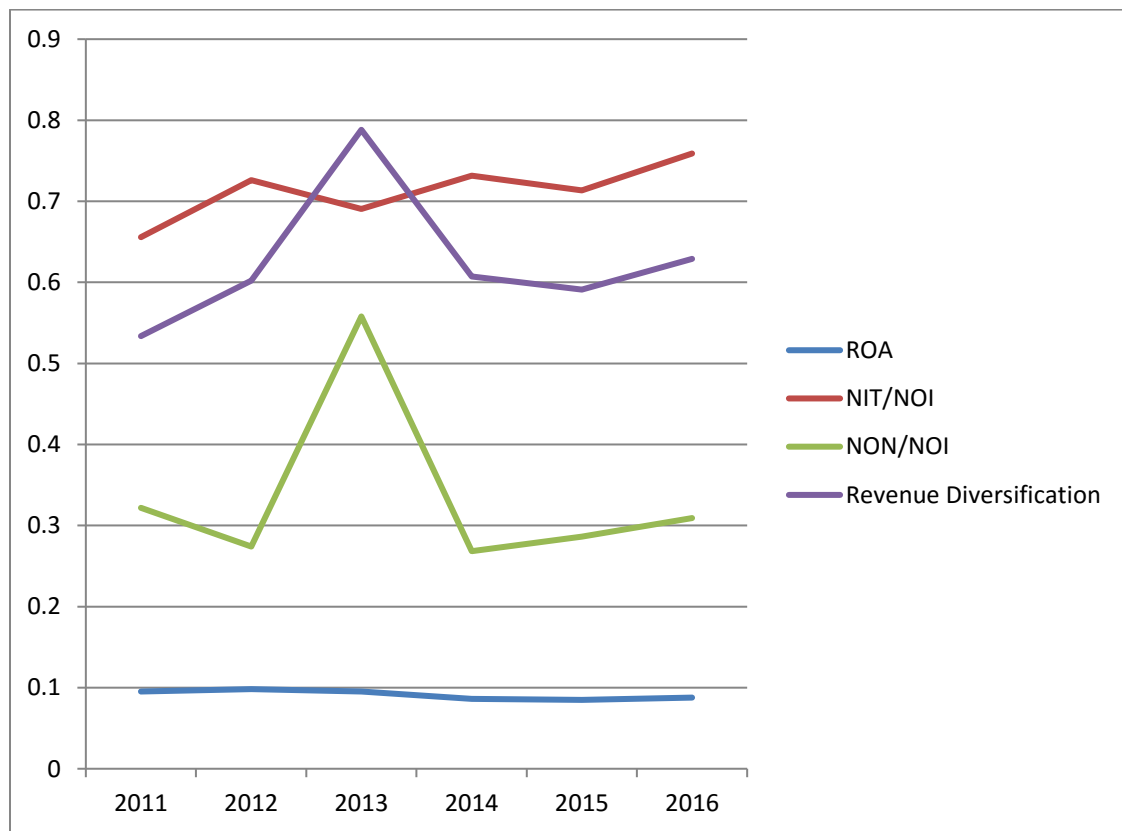


Figure 4.1 Trends of variables

4.2.2. Revenue Diversification and the Financial Performance

The study carried out regression analysis to determine the relationship between the dependent variable and the independent variables of the study. The independent variable of the study was revenue diversification. The dependent variable of the study was financial performance, measured by return on assets.

The study found that revenue diversification explained a significant proportion of variance in financial performance of commercial banks in Kenya, $R^2 = .511$. This implies that 51.1% of the proportion in performance of commercial banks can be explained by revenue diversification in the commercial banks in Kenya. Other factors not covered by this study therefore contribute to 48.9%. Findings are as shown in Table 4.6.

Table 4.6 Model Summary for Revenue Diversification and Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.511	.435	.23759

a. Predictors: (Constant), Revenue Diversification

The findings indicate that the significance value in testing the reliability of the model for the relationship between revenue diversification and financial performance (ROA) of commercial banks $F(1, 238) = 1.825, p = .005$. Therefore the model is statistically significant in predicting the relationship between the study variables. Results are as presented in Table 4.7.

Table 4.7 ANOVA for Revenue Diversification and Performance Relationship

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.022	1	1.022	1.825	.005 ^b
	Residual	.960	238	.056		
	Total	.982	239			

a. Dependent Variable: Return on Assets

b. Predictors: (Constant), Revenue Diversification

The study found that revenue diversification significantly predicted financial performance of commercial banks in Kenya, $\beta = .151$ $t(18) = 4.630$, $p = .005$ since the p value was less than $<.05$ set by the study. The study therefore concluded that revenue diversification significantly influences financial performance of commercial banks in Kenya. The results are presented in Table 4.8.

Table 4.8 Coefficients of Regression

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.149	.062		2.390	.029
	Revenue Diversification	.612	.019	.651	4.630	.005

a. Dependent Variable: Return on Assets

Based on the regression model adopted by the study;

$$ROA = \alpha + \beta(\text{Revenue Diversification}) + e$$

The model of the study therefore becomes; **ROA = 0.149 + 0.612 Revenue Diversification + 0.062**. The findings of the study imply that for every unit change in revenue diversification in commercial banks in Kenya, ROA increases by 61.2%.

4.2.3. Discussions of Findings

The study findings on total assets for the six years studied indicate that there was an increase in mean values for total assets across the six years. This was also seen for Net Interest Income (NIT). However, the findings on Non-Interest Income (NON) indicate that the highest mean was achieved in the year 2013 while the lowest mean was seen in 2011.

The study also determined that the return on assets for all the banks improved from 2011 to 2013, and later decreased drastically till 2016. This was the similar case for NON/NOI and revenue diversification. However, NIT/NOI was lowest in 2013 and highest in 2015. Though the return on total book values of assets was basically constant at levels below 10 % with only marginal drops, the revenue diversification was highly erratic and on an upward trend with values above 50 percent. This was similar for NIT/NOI.

The high values of above 50 % indicate lower levels of income diversification so that interest income is still the large source of income for the commercial banks. The regression analysis shows that the diversification had a positive effect on returns on assets. The study, therefore, finds that diversification improves financial performance of commercial banks in Kenya.

The findings are similar to those of Chiorazzo, Milani, & Salvini (2008) who established that income diversification increased returns though the effect was stronger in the larger

banks in Italian banks. The findings are also similar to those of Gamra & Plihon (2008) who assessed whether the shift of banks toward non-interest income generating activities improved financial performance. Gamra & Plihon (2008) also established that diversification of income generation activities into non-interest sources improved the performance of the commercial banks.

However, the findings of this study do not agree with those of Lup (2015) who examined the relationship between diversification and bank profitability in Malaysian commercial banks and established that the relationship was contextual. In profitable banks, the relationship diversification improved return. In loss making bank, however, diversification worsened returns. The findings also disagree with those of Kiweu (2012) who studied commercial banks in Kenya using data from 2000 to 2010 and established few benefits of diversification. In the study, diversification did not contribute much to the profitability of commercial banks due to the inability to offset the costs of interest income.

The findings also agree with the findings posited by Teimet, Ochieng and Aywa (2011) who revealed that all commercial banks in Kenya are diversified and that diversification level had a positive influence on financial performance of commercial banks in Kenya. Muthoni (2012) further agrees that diversification resulted in easing competition hence improving financial performance.

The regression analysis conducted established that income contributed positively to and had strong positive correlation with financial performance. In addition, the findings of the study however do not align with those of Mulwa & Kosgei (2016) established that

income and asset diversification negatively affected commercial banks' ROA while geographical diversification significantly positively affected both ROA and ROE.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Introduction

This chapter presents the summary of the study in which the focus is on highlighting the key findings of the study. The chapter also presents the conclusions made basing on the findings. In the section of recommendation, the study makes suggestion on how the findings can be used for policy improvements in commercial banks in Kenya. The chapter ends by identifying the limitations of the study and making suggestions for further research.

5.2. Summary of Findings

This study set out to establish the effect of income diversification on the performance of commercial banks in Kenya. The study findings indicated that there was an increase in mean values for total assets over the six years.

The study findings on total assets for the six years studied indicated that there was also an increase in mean values for total assets across the six years as well. This was also seen for Net Interest Income (NIT). However, the findings on Non-Interest Income (NON) indicate that the highest mean was achieved in the year 2013 while the lowest mean was seen in 2011.

The study also determined that the return on assets for all the banks improved from 2011 to 2013, and later decreased drastically till 2016. This was the similar case for NON/NOI and revenue diversification. However, NIT/NOI was lowest in 2013 and highest in 2015.

The study found that 51.1% of the proportion in performance of commercial banks can be explained by revenue diversification in the commercial banks in Kenya. The study found that revenue diversification significantly predicted financial performance of commercial banks in Kenya. The study therefore concluded that revenue diversification significantly influences financial performance of commercial banks in Kenya.

Specifically, the findings on Net Operating Income (NOI) indicated that there was an increase in the mean values across the years; the mean values improved from 2011 to 2016. In addition, the maximum value also increased across the years, as shown by an increase from 2011 to 2016. However, there was no increase in minimum values across the years, as the minimum value dropped from 2011 to 2016.

The findings on Net Interest Income (NIT) as well indicated that there was a general increase in the mean values across the six years of study. The mean value improved from 2011 to 2016. This was a similar case for the maximum and minimum values as shown by an increase from 2011 to 2016 for minimum and maximum values.

In addition, the findings on Non-Interest Income (NON) indicated that the highest mean was achieved in the year 2013 while the lowest mean was seen in 2011. The maximum value increased from 2011 to 2016, similar to the minimum value which increased from 2011 to 2016.

5.3. Conclusions

Based on the findings, this study concludes that banks are steadily but increasingly diversifying into sources of income to improve their financial performance. As regards this direction of diversification the net operating income of commercial banks is on steady increase. The revenue diversification is highly erratic, on an upward trend, but with values above 50 percent indicating low diversification levels. Though commercial banks are diversifying, the diversification is still at low levels.

The study has been able to establish the relationship between diversification and return on assets. It has been established that diversification causes an improvement on return on assets. Based on the findings, the study concluded that for every unit change in revenue diversification in commercial banks in Kenya, ROA increases by 61.2%. The study further concludes that banks need to widen their operations far beyond traditional lending activities, in effect increasing the share of noninterest income in their operating profits.

The study concluded that the return on assets for all the banks improved across the first three years, and later decreased drastically for the last three years. This was the similar case for NON/NOI and revenue diversification. However, NIT/NOI was lowest in 2013 and highest in 2015, showing an irregular trend as opposed to other measures of diversification.

The study also concluded that 51.1% of the proportion in performance of commercial banks could be explained by revenue diversification in the commercial banks in Kenya. The study also concluded that revenue diversification significantly predicts financial performance of commercial banks in Kenya.

The study further concluded that Net Operating Income (NOI) increased in the mean values across the six years studied. In addition, the maximum value also increased across the years; nevertheless the trend was not shown in minimum values across the years, as the minimum value dropped from the first year to the sixth year.

The study also concluded that Net Interest Income (NIT) had a general increase in the mean values across the six years of study. This was a similar case for the maximum and minimum values as shown by an increase from 2011 to 2016 for minimum and maximum values.

The study finally concluded that Non-Interest Income (NON) was highest in 2013 while it was lowest 2011. The study concluded that maximum value however increased from 2011 to 2016, similar to the minimum value which increased from 2011 to 2016.

5.4. Recommendations

While there are indications that diversification positively affects the financial performance of commercial banks, diversification only contributed to 51.1% of the proportion in financial performance of commercial banks in Kenya. This study recommends more diversification into the non-interest business given that the interest source seems to be getting saturated due to the limits being put forth by the Kenyan government in addition to competition arising from the rising importance of non-bank sources of finance for the households.

Banks should focus in widening their non-interest income by improving their focus on income derived primarily from sources such as deposit fees, transaction fees and insufficient funds fees. Banks can also create products that are built around annual fees,

account service charges, account inactivity fees, check and deposit slip fees, and such other types of fees. The only challenge is making the customer like the financial products with many such fees while remaining in the banking business.

5.5. Limitations

Though the study focused on the relationship between diversification and financial performance of commercial banks in Kenya, the study has not shown how each income diversification method contributes to return on assets. For instance, some diversification methods can contribute positively to return on assets while others can lower it. This study has combined all diversification methods into an aggregate variable that does not shed light into the specific diversification methods of income.

The study also faces the limitation of generalizability across time. The findings of the study are true only for the six years covered in the study. Given the dynamic nature of the banking business, changes can arise any time causing change in the way banks will do their business. The findings may not apply for the period before 2011 and may not apply for the period after 2016.

The study further faces limitation in terms of coverage. The study has only focused on commercial banks in Kenya, but has not looked into other commercial banks in emerging economies. Kenya also being a developing country implies that the findings cannot be used for generality in developed countries.

5.6. Suggestions for Further Research

Regarding the issue of the causality relationship between diversification and return on assets, this study recommends that a study is conducted with the aim of establishing the

nature of the causality between them in other industries such as the insurance industry, hospitality, education sector or the health sector.

A study can be done to address the issue of how the various methods of income diversification for the commercial banks affect return on assets. This will go a long way in advising commercial banks about which diversification method of revenue is efficient for their adoption in order to attain maximum profits. Regarding generalizability across time, a study should be conducted to generally assess the diversification policy in Kenyan commercial banks.

The study should also be done for a longer period of time by going back beyond 2012 and after 2016. Further, financial performance in the study was measured using return on assets. The study recommends a similar study to be undertaken but performance to be measured using other methods such as market share.

REFERENCES

- Aaker, P. (1980). *Advertising Exploration: Private and Open Division Choices*. New York: Wiley.
- Aaron, U., Armstrong, R., & Zelmer, Y. (2013). An Outline of Hazard Administration at Canadian Banks. *Financial Framework Audit*, 7(4), 9-17.
- Acharya, W. W. (2009). Hypothesis of fundamental hazard and outline of prudential bank direction. *Journal of Financial Steadiness*, 3(9), 23– 25.
- Aggarwal, E. Z., & Samwick, T. C. (2001). For what reason do danagers broaden their organizations? office reevaluated. *National Department of Monetary Exploration (Working Paper)*, (1), 1-52.
- Akamavi, V. S. (2005). An exploration plan for examination of item advancement in the financial administrations segment. *Journal of Administrations Promoting*, 9(3), 39-78.
- Alam, T. K., Raza, T., & Akram, V. (2011). Financial Execution of Renting Division. The Instance of China. *Interdisciplinary Journal of Contemporary Exploration in Business*, 2(2), 39-45.
- Alexanderson, Y. B. (2006). Euler and Konigsberg's Scaffolds: A Chronicled View. *American Scientific Culture*, 8(3), 56-61.
- Allen, W., & Carletti, U. (2011). *Foundational Hazard and Macroprudential Control*. Pennsylvania, USA: University of Pennsylvania and European University Organization,.
- Arnaboldi, U., & Claeys, Y. (2010). Development and execution of European banks in European Banks. *Place for Banking Exploration, Cass Business college, City University London , WORKING PAPER Arrangement (WP 04/10)*, 3-11.
- Athansasoglou, D., Brissimis, T., & Delis, T. (2006). Bank-Particular, Industry-Particular and Macroeconomic Determinants of Bank Gainfulness. *Bank of Greece: Working Paper 5*, 23-54.
- Ayiekoh, R. (2013). Banking Industry, Related Dangers and Alleviation Systems: Contextual investigation Kenya Business Bank. *University of Nairobi*, 4-7.
- Baele, T., De Jonghe, V., & Vennet, Y. K. (2007). Does The stock exchange Esteem Bank Enhancement? *Journal of Banking and Finance*, 1, 109-123.
- Bagorogoza, U., & Waal, E. H. (2010). The Part of Information Administration in Making and Supporting Elite Associations the Instance of Financial Organizations in Uganda. *World Journal of Business Administration and Feasible Improvement*, 2(5), 7-13.

- Barney, D. (1991). Firm Assets and Managed Upper hand. *Journal of Administration*, 17 (1), 99-120.
- Basel Committee on Banking Supervision. (2010). *Basel III: A worldwide administrative structure for stronger banks and banking frameworks*. Basel, Switzerland: Bank for Worldwide Settlements.
- Battilana, R., & Dorado, B. (2010). Building manageable cross breed associations: The instance of business microfinance associations. *The Institute of Administration Journal* , 53(6), 19-34.
- Bonazzi, G., & Islam, T. (2007). Office hypothesis and corporate administration: An investigation of the viability of board in their checking of the Chief. *Journal of Demonstrating in Administration*, 2 (1), 7 – 23.
- Brealey, R., Myers, V., & Allen, Y. (2013). *Standards of Corporate Finance (eleventh Version ed.)*. McGraw-Slope Advanced education.
- Busch, R., and Kick, T. (2009). Wage broadening in the German banking industry. Deutsche Bundesbank .
- Central Bank of Kenya. (2009). Expansion. *Month to month Financial Audit*.
- Chen, Q. (1993). Financial Development and arbitrage estimating in frictional economies. *Journal of Monetary Hypothesis*, 2(1), 13-20.
- Chiorazzo, K., Milani, U., & Salvini, A. (2008). Salary enhancement and bank execution: confirm from Italian banks. *Journal of Financial Administrations Exploration*, 3, 11– 23.
- Commercial Bank of Africa (CBA). (2016). Open Notice: Amended CBA Financing costs. Recovered July 04, 2017, from cbagroup: http://www.08092016_Public Notice_Revised CBA Intrigue Rates_A5.
- Crane, C. F. (2006). *Measuring financial execution: a basic Key to overseeing hazard*. National Product Protection Administrations, Inc.
- Cytton Investments. (2015). Kenya Recorded Business Banks: Cytonn Q1 Banking Division Report.
- Demirgüç-Kunt, P., Laeven, H., & Levine, O. (2004). Directions, Market Structure Foundations, and the Cost of Financial Intermediation. *NBER Working Paper No. 9890*, 1-23.
- Desai, Y., & Low, N. (1987). Measuring the open door for item advancement. In M. Cecco, *Evolving Cash: Financial Advancement in Created Nations*. Basil Blackwell: Oxford.

- DeYoung, I., & Roland, J. C. (2001). Item blend and procuring unpredictability at business banks: confirm from a level of aggregate use demonstrate. *Journal of Financial Intermediation*, 1, 4– 8.
- Diamond, J. N., & Dybvig, H. (1983). Bank runs, store protection, and liquidity. *Journal of Political Economy*, 5(3), 41-49.
- Elsinger, K., Lehar, B., & Summer, Y. (2006). Hazard Appraisal for Banking Frameworks. *Journal of Administration Science*, 2(8), 131– 138.
- FinAccess. (2011). *Financial Consideration in Kenya, Study Results and Examination from FinAccess*. FinAccess.
- Financial Services Authority. (2011). *The Disappointment of the Illustrious Bank of Scotland*. Dublin.
- Franks, A. (2010). *Money Road Change and Shopper Insurance Act*. Washington: U.S. Congress.
- Gama, H., & Salah, T. (2011). Step by step instructions to measue hierarchical creativity. *Innovation, Development and Business enterprise Center (TIEC)*.
- Gamra, G. C., & Plihon, R. (2008). Income broadening in developing business sector banks: suggestions for financial execution. *Unpublished MBA Task, CEPN, High Organization of Administration of Sousse, Tunisia*.
- Gitau, I. F. (2009). The connection between financial development and execution of business banks in Kenya. *Unpublished University of Nairobi Venture*.
- Glocker, C., and Towbin, P. (2012). Save Prerequisites for Cost and Financial Strength: When Are They Powerful? *Global Journal of Focal Banking*, 8 (1), 65-113.
- Glynn, H. S. (2013). An Audit of the Institutional Rationales Point of view: Another Way to deal with Culture, Structure And Process. *Managerial Science Quarterly*, 8(5), 49-55.
- Gort, Y. (1962). Enhancement and Combination in American Industry. *Princeton University Press* (Issue 77).
- Gurbuz, G. D., Yanik, F., & Ayturk, E. (2013). Salary enhancement and bank execution: confirm from turkish banking segment. *BDDK Bankacılık ve Finansal Piyasalar*, 3(4), 67-76.
- Heffernan, B., Xiaoqing, V., & Fu, Q. (2008). Financial Development in the UK. *University of Oxford, Staff of Finance, Working Paper No 4*.
- Heffernan, R. (2005). *Current Banking*. London: Wiley Finance.
- Henggeler-Muller, T. (2006). The Potential for Infection in the Swiss Interbank Market. *Unpublished Undertaking, Universitat Basel*.

- Honahan, R. (2010). The Irish Banking Emergency Administrative and Financial Solidness Approach 2003-2008: An answer to the Pastor for Finance by the Legislative head of the National Bank. Dublin: Service of Finance.
- Hoskisson, U. A., & Hitt, W. R. (1990). Predecessors and Execution Results of Broadening: An audit and Scrutinize of Hypothetical Points of view. *Journal of administration, 1*, 46-59.
- Hughes, A. (1936). The natural part of establishments. *American Sociological Audit, 4*(2), 180-189.
- Hussein, Y. V., Manap, V. S., & Nor, F. S. (2012). Market Definition and Market Power as Instruments for the Assesmentt of Rivalry. *Global Journal of Business and Society, 2* (5), 16-22.
- Independent Commission on Banking. (2011). *Final Report - Recommendations*.
- Ingves, I. (2004). *Financial Area Direction: Issues and Holes—Foundation Paper*. New York, USA: Universal Financial Store.
- International Monetary Fund. (2014). *Worldwide Financial Strength Report: Hazard Taking, Liquidity, and Shadow Banking, Controlling Overabundance while Advancing Development*. Washington, DC: Global Financial Store.
- Jensen, A., & Meckling, E. (1976). Hypothesis of the firm: Administrative conduct, office costs and possession structure. *Journal of Finance, 2*(4), 35-40.
- Jensen, A., & Meckling, E. (1994). The Idea of Man. *Journal of Connected Corporate Finance, 3*(5), 13-22.
- Jensen, M., & Smith, T. (1985). Investor, Administrator, and Bank Premiums: Utilizations of Organization Hypothesis. In *E. and. Altman, Late Advances in Corporate Finance* (pp. 93-131). Homewood, USA: Irwin Proficient Distributing.
- Johnson, A., & Kwak, R. (2012). Is Financial Advancement Useful For The Economy? In *e. Josh Lerner and Scott Stern, Development Approach and the Economy* (pp. 1-15). Chicago: University of Chicago Press.
- Kabiru, N. M. (2015). The connection between non-premium wage and financial execution of business banks in Kenya. *Unpublished MBA Undertaking, University of Nairobi*.
- Kahloul, R., & Hallara, S. (2010). The effect of diversification on firm execution and hazard: an empirica prove. *Universal Exploration Journal of Finance and Financial aspects, EuroJournals Distributing, Inc.* (5), 121-131.
- Kahneman, T., & Tversky, E. (1979). Prospect Hypothesis: An Investigation of Choice under Hazard. *Econometrica, 4*(1), 23-29.

- Kamau, N., & Were, N. (2014). What drives banking division execution in Kenya? *Worldwide Business and Financial matters Exploration Journal*, 2 (4), 45-59.
- Kane, B. W. (1981). Quickening Swelling, Mechanical Advancement, and the Diminishing Viability of Banking Direction. *Journal of Finance*, 3(3), 25-39.
- Kiweu, Y. C. (2012). Pay enhancement in the banking area and income instability: prove from Kenyan business banks. *Kenya Investors Affiliation Working Paper Arrangement*.
- Korir, R. V., Sang, S., Shisia, D., & Mutung'u, M. (2015). Financial advancements and execution of business banks in kenya. *Worldwide Journal of Financial aspects, Business and Administration*, 2(6), 142-155.
- Kothari, E. F. (2004). *Research Methodology: Strategies and Systems*. New Delhi: New Age Worldwide.
- Lautier, T., & Raynaud, U. (2012). Fundamental hazard in vitality subsidiary markets: a chart hypothesis examination. *Journal of Vitality*, 3(5), 17– 24.
- Lup, E. V. (2015). *Salary expansion and bank execution in double banking framework. Unpublished MBA Task*. University of Tunku Abdul Rahman , 1-86.
- Markowitz, Y. (1952). Portfolio Determination. *The Journal of Finance*, 6(3), 7-11.
- Masa'deh, T., Tayeh, C., Al-Jarrah, R. T., & Tarhini, E. (2015). Bookkeeping vs.market-based measures of firm execution identified with data innovation ventures. *Universal Survey of Sociologies and Humanities*, 6(3), 12-25.
- May, G. F. (1995). Do administrative thought processes impact firm hazard decrease systems? *Journal of Finance*, 4, 121-128.
- McConnel, T. (2013). Key Hazard Administration: Practice in Foundationally Imperative Banks. *The Capco Establishment Journal of Financial Change*, 5-8.
- Mercieca, Y., Schaeck, C., & Wolfe, R. (2007). Little European Banks: Advantages from Broadening? *Journal of Banking and Finance*, 1, 195-205.
- Misra, E. T. (2011). Research and Improvement and Efficient Danger of the Firm: An Investigation of the Indian Ventures. *Journal of Connected Business and Financial aspects*, 2(5), 10-21.
- Mugenda, T. B., & Mugenda, Y. V. (2008). *Research Techniques: Quantitative and Subjective Methodologies*. Nairobi, Kenya: Corrosive Press.
- Mulwa, R. N. (2013). Does financing broadening make a difference? an assessment of the execution of funds and Credit Helpful Social orders; an instance of Kakamega Region, Kenya. *Worldwide Journal of Administration and Data Innovation*, 4(6).

- Mulwa, R. N., & Kosgei, M. (2016). Business bank broadening and financial execution: the directing part of hazard. *Journal of Finance and Venture Examination*, 2(6), 41-50.
- Mulwa, R. N., Tarus, Y., & Kosgei, M. (2015). Business bank broadening: a hypothetical overview. *Worldwide Journal of Exploration in Administration and Business Studies*, 2(1), 45-49.
- Muthoni, W. H. (2012). The impacts of salary source expansion on the financial execution of business banks in Kenya. *Unpublished MBA Venture, University of Nairobi*.
- Olo, A. (2009). Corporate enhancement and firm execution. *Journal of Current Financial Emergency*, 2, 32-41.
- Omisore, B., Yusuf, C., & Nwufo, D. R. (2012). The advanced portfolio hypothesis as a venture choice device. *Journal of Bookkeeping and Tax collection*, 7(1), 9-18.
- Ongeri, Y. O. (2014). The impact of macroeconomic factors on the financial execution of non-bank financial organizations in Kenya. *Unpublished Task, University of Nairobi*.
- Ongore, O. D., & Kusa, T. Z. (2013). Determinants of financial execution of commercial banks in Kenya. *Worldwide Journal of Financial matters and Financial Issues*, 7(3), 27-32.
- Pandey, F. N. (1999). *Financial Administration (8th ed.)*. New Delhi: Vikas Distributing House.
- Penrose, D. V. (1959). *The Hypothesis of the Development of the Firm*. New York: Wiley.
- Perrut, T. (2012). Financial Direction after the "Subprime" emergency: what lessons can be realized and what changes embraced? *Journal of European Issues*, (2)26, 1-11.
- Peteraf, R., & Barney, V. (2003). *Unwinding The Asset Based Tangle. Administrative and Choice Financial aspects*, 24 (1), 39-53.
- Raffaelli, O., & Glynn, E. C. (2014). *Institutional Advancement: Novel, Valuable and Genuine*. Harvard Business college, 1-35.
- Reed, P., & Luffman, R. C. (1986). Expansion: the developing disarray. *Key Administration Journal*, 1(3), 9-15.
- Ritho, T., & Jagongo, D. (2015). Portable banking and financial execution of business banks in Kenya. *Universal Journal of Finance and Current Business Studies*, 4(2), 6-11.

- Rogers, Y. (1998). The Definition and Estimation of Development. *Melbourne Organization of Connected Financial and Social Exploration, Melbourne Foundation Working Paper No. 10* (98), 1-27.
- Saunders, R., & Schumacher, B. (2000). The determinants of bank loan cost edges: A worldwide investigation. *Journal of Worldwide Cash and Finance*, 4(7), 83-92.
- Scott, E. (2008). *Foundations and associations: Thoughts and interests*. Washington DC, USA: Sage Distributions, Inc.
- Scylla, N. (1982). Money related Advancement in American. *Journal of Financial History*, 4(3), 1-10.
- Senyo, I. D., Olivia, V. A., and Musah, S. (2015). Wage expansion and financial dependability of banks in Ghana. *Worldwide Journal of Business and Sociology*, (3), 77-84.
- Silber, R. (1983). The Procedure of Financial Advancement. *American Monetary Survey*, 7(1), 9-15.
- Simon, C. T. (2011). *Thesis and Academic Exploration: Formulas for Progress*. Seattle: WA: Paper Achievement LLC.
- Smaga, E. (2014). The idea of fundamental hazard. Financial and Social Exploration Gathering. *Extraordinary Paper Arrangement* (5), 1-26.
- Solans, G. A. (2003). Financial development and fiscal arrangement. Extracts of discourse conveyed at the 38th. 38th SEACEN Governors Gathering and 22nd Meeting of the SEACEN Leading group of Governors on Auxiliary Change and Development Prospects in Asia – Difficulties to Focal Banking. Manila: SEACEN Leading group of Governors.
- Sorescu, G. W., & Spanjol, U. (2008). Development's Impact on Firm Esteem and Hazard: Bits of knowledge from Buyer Bundled Products. *Journal of Showcasing*, 2(4), 14-22.
- Stultz, H. R. (1990). Administrative heading and ideal financiing strategies. *Journal of Finance a Financial aspects*, 2(9), 13-28.
- Szpunar, T. A., & Głogowski, E. (2012). *Loaning in outside monetary standards as a foundational hazard*. Full scale prudential Discourses, Issue No. 4, ESRB, 5.
- Taleb, R. R. (2007). *The Dark Swan: The Effect of the Exceptionally Unlikely*. Arbitrary House.
- Teece, H., Pisano, T., & Shuen, R. (1997). Dynamic capacities and key administration. *Key Administration Journal*, 3(6), 59-67.

- Teimet, E. G., Ochieng, V. A., & Aywa, T. (2011). Wage source enhancement and financial execution of business banks in Kenya. *Worldwide Journal of Business and Open Administration*, (1), 6-12.
- Wafubwa, R. T. (2013). Elements affecting execution of business banks in Kenya: an instance of The Kenya Business Bank, Bungoma District. *Unpublished MBA Task, University of Nairobi*.
- Zigrand, U. A. (2014). *Frameworks and Foundational Hazard in Finance and Financial aspects*. Fundamental Hazard Center Unique Paper No 1, January, 3.
- Zongwe, U. (2011). Conjuring fundamental hazard through financial direction by SADC national banks. *SADC Law Journal*, (6), 9-19.

APPENDICES

Appendix I: Annual Summary of Total Assets

BANK	2011(Kshs in '000)	2012 (Kshs in '000)	2013 (Kshs in '000)	2014 (Kshs in '000)	2015 (Kshs in '000)	2016 (Kshs in '000)
ABC Bank (Kenya)	38,734,220	48,957,925	48,957,925	62,211,641	69,280,267	74,876,824
Bank of Africa	2,286,130	2,147,779	52,021,524	61,944,650	68,177,548	14,504,110
Bank of Baroda	24,876,824	24,876,824	30,721,440	34,370,422	42,162,947	69,579,795
Bank of India	14,504,110	14,504,110	18,271,638	18,240,290	18,240,290	24,881,964
Barclays Bank of Kenya	69,579,795	69,579,795	71,242,659	79,397,808	88,147,287	80,64,213
CfC Stanbic Holdings	124,881,964	124,891,964	124,881,964	175,808,828	175,808,828	27,282,271
Citibank	15,328,000	18,064,213	16,778,631	15,077,000	14,136,000	11,612,962
Commercial Bank of Africa	77,702,389	99,662,974	31,215,358	22,689,098	39,549,808	27,828,282
Consolidated Bank of Kenya	11,523,037	13,417,095	15,580,630	16,954,227	16,942,714	22,819,100
Cooperative Bank of Kenya	77,447,778	94,511,818	114,136,429	141,175,794	190,947,903	114,108,996
Credit Bank	27,210,496	31,771,339	36,907,136	45,934,458	52,426,513	30,985,096
Development Bank of Kenya	12,926,902	14,108,996	15,562,476	16,589,359	14,469,562	11,772,118
Diamond Trust Bank	26,001,753	30,985,096	43,500,988	61,812,663	81,190,214	17,149,892
Ecobank Kenya	10,789,498	11,772,118	12,778,509	13,020,283	14,113,812	19,958,767

First Community Bank	14,630,459	17,149,892	25,838,050	32,991,926	29,374,062	12,279,809
Fidelity Commercial Bank Limited	9,958,767	9,988,097	11,305,398	15,278,026	14,564,631	18,018,785
Family Bank	11,846,372	12,279,809	13,623,296	15,082,199	15,810,061	12,778,509
Equity Bank	330,663,959	368,018,785	390,851,579	390,851,579	390,851,579	25,838,050
Giro Commercial Bank	14,846,372	15,279,809	15,623,296	16,082,199	14,810,061	14,778,509
Guaranty Trust Bank Kenya	8,704,220	8,957,925	8,957,925	6,211,641	9,280,267	14,876,824
Guardian Bank	286,130	147,779	221,524	244,650	177,548	204,110
Gulf African Bank	881,964	891,964	881,964	808,828	808,828	282,271
Habib Bank	328,000	664,213	778,631	677	736,000	612,962
Habib Bank AG Zurich	772,389	662,974	715,358	689,098	549,808	828,678
I&M Bank	44,523,037	56,417,095	90,580,630	52,954,227	88,942,714	90,819,100
Housing Finance Company of Kenya	447,778	511,818	736,429	775,794	947,903	708,996
Jamii Bora Bank	210,496	771,339	907,136	934,458	426,513	985,096
Middle East Bank Kenya	926,902	108,996	562,476	589,359	469,562	772,118
Kenya Commercial Bank	76,001,753	70,985,096	83,500,988	91,812,663	91,190,214	89,149,892
National Bank of Kenya	1,789,498	1,772,118	2,778,509	3,020,283	4,113,812	5,958,767
NIC Bank	4,630,459	7,149,892	5,838,050	2,991,926	9,374,062	2,279,809
Diamond Trust Bank	9,958,767	9,988,097	11,305,398	15,278,026	14,564,631	18,018,785
Oriental Commercial Bank	1,846,372	2,279,809	1,623,296	1,082,199	1,810,061	1,778,509

Paramount Universal Bank	30,663,959	68,018,785	90,851,579	30,851,579	90,851,579	65,838,050
Prime Bank (Kenya)	4,846,372	5,279,809	5,623,296	6,082,199	4,810,061	4,778,509
Sidian Bank	8,704,220	8,957,925	8,957,925	6,211,641	9,280,267	14,876,824
Spire Bank	286,130	147,779	221,524	244,650	177,548	204,110
Standard Chartered Kenya	7,846,372	9,279,809	9,623,296	7,082,199	7,810,061	7,778,509
Trans National Bank Kenya	8,704,220	8,957,925	8,957,925	6,211,641	9,280,267	14,876,824
United Bank for Africa	210,496	771,339	907,136	934,458	426,513	985,096
Victoria Commercial Bank	8,704,220	8,957,925	8,957,925	6,211,641	9,280,267	14,876,824

Appendix II: Annual Summary of Net Operating Income (NOI)

BANK	2011 (Kshs in ‘000)	2012 (Kshs in ‘000)	2013 (Kshs in ‘000)	2014 (Kshs in ‘000)	2015 (Kshs in ‘000)	2016 (Kshs in ‘000)
ABC Bank (Kenya)	373,392	1,400,669	1,912,866	1,666,608	1,592,702	221,744
Bank of Africa	2,126,066	3,981,087	3,981,087	3,256,097	3,620,303	9,496,141
Bank of Baroda	2,455,491	2,467,136	3,319,953	3,632,035	4,047,691	4,463,742
Bank of India	966,153	966,153	1,619,827	1,702,967	2,035,476	-42,723
Barclays Bank of Kenya	221,744	221,744	251,092	1,121,409	1,121,409	23,541,284
CfC Stanbic Holdings	9,496,141	9,496,141	7,577,582	4,453,457	5,470,501	1,431,695
Citibank	4,4637,42	4,463,742	4,463,742	4,521,900	4,521,900	8,731,052
Commercial Bank of Africa	24,6544	-42,723	-142,387	1,381,121	2,015,035	-1,533,789
Consolidated Bank of Kenya	18,070,825	23,541,284	27,889,803	31,382,898	34,028,117	4,943,27
Cooperative Bank of Kenya	1,038,436	1,431,695	1,589,935	1,757,716	1,807,638	4,729,202
Credit Bank	6,512,208	8,731,052	9,978,180	10,944,703	13,276,831	638,803
Development Bank of Kenya	121,393	-1,533,789	-881,892	-320,212	90,373	1,292,067
Diamond Trust Bank	725,702	494,327	1,090,579	1,394,581	795,530	940,305
Ecobank Kenya	3,766,041	4,729,202	6,254,372	7,925,503	9,206,549	9,267,190
First Community Bank	754,567	638,803	935,175	326,027	551,845	591,897
Fidelity Commercial Bank Limited	2,354,103	1,292,067	1,507,408	304,219	3,469,148	725,702
Family Bank	940,305	940,305	1,002,513	1,003,005	1,312,739	37,66,041

Equity Bank	1,643,678	1,185,113	818,891	906,811	970,360	754,567
Giro Commercial Bank	39,309,082	46,257,118	50,110,265	50,110,265	50,110,265	2,354,103
Guaranty Trust Bank Kenya	373,392	1,400,669	1,912,866	1,666,608	1,592,702	221,744
Guardian Bank	2,126,066	3,981,087	3,981,087	3,256,097	3,620,303	6,496,141
Gulf African Bank	2,455,491	2,467,136	3,319,953	3,632,035	4,047,691	4,463,742
Habib Bank	966,153	966,153	1,619,827	1,702,967	2,035,476	942,723
Habib Bank AG Zurich	221,744	221,744	251,092	1,121,409	1,121,409	23,541,284
I&M Bank	9,496,141	9,496,141	7,577,582	4,453,457	5,470,501	1,431,695
Housing Finance Company of Kenya	4,463,742	4,463,742	4,463,742	4,521,900	4,521,900	8,731,052
Jamii Bora Bank	246,544	42,523	142,387	1,381,121	2,015,035	1,533,789
Middle East Bank Kenya	8,070,825	23,541,284	27,889,803	31,382,898	34,028,117	494,327
Kenya Commercial Bank	1,038,436	1,431,695	1,589,935	1,757,716	1,807,638	4,729,202
National Bank of Kenya	6,512,208	8,731,052	9,978,180	10,944,703	13,276,831	638,803
NIC Bank	121,393	-1,533,789	-881,892	-320,212	90,373	1,292,067
Diamond Trust Bank	725,702	494,327	1,090,579	1,494,581	795,530	940,305
Oriental Commercial Bank	3,766,041	4,729,202	6,254,372	7,925,503	3,6549	8,267
Paramount Universal Bank	754,567	638,803	935,175	326,027	551,845	897,006
Prime Bank (Kenya)	354,103	129,206	507,408	304,219,900	469,148	725,702
Sidian Bank	940,305	940,305	102,513	103,005	312,739	766,041
Spire Bank	1,643,678	1,185,113	818,891	906,811	970,360	754,567
Standard Chartered Kenya	39,309,082	46,257,118	50,110,265	50,110,456	50,110,265	26,354,103

Trans National Bank Kenya	1,643,678	1,185,113	818,891	906,811	970,360	754,567
United Bank for Africa	966,153	966,153	1,619,827	1,702,967	2,035,476	942,723
Victoria Commercial Bank	221,744	221,744	251,092	1,121,409	1,121,409	23,541,284

Appendix III: Annual Summary of Net Interest Income (NII)

BANK	2011 (Kshs in '000)	2012 (Kshs in '000)	2013 (Kshs in '000)	2014 (Kshs in '000)	2015 (Kshs in '000)	2016 (Kshs in '000)
ABC Bank (Kenya)	752,618	910,590	1,248,974	1,199,681	1,202,281	2,147,779
Bank of Africa	2,126,066	2,751,209	2,751,209	3,157,464	3,764,295	780,876
Bank of Baroda	228,613	2,147,779	3,044,384	3,376,252	3,707,781	1,092
Bank of India	780,876	780,876	1,423,780	1,487,644	1,808,780	7,101,667
Barclays Bank of Kenya	1,092	1,092	1,092	27,644	27,644	5,511,538
CfC Stanbic Holdings	7,101,667	7,101,667	5,630,009	4,523,747	5,678,464	713,283
Citibank	5,511,538	5,511,538	5,511,538	6,174,959	6,174,613	15,916,095
Commercial Bank of Africa	864,883	713,283	1,075,063	2,913,141	1,018,829	269,721
Consolidated Bank of Kenya	11,868,118	15,916,095	15,869,248	21,200,823	22,954,679	6,866,470
Cooperative Bank of Kenya	332,029	269,721	549,109	1,153,623	1,358,253	706,338
Credit Bank	4,805,099	6,866,470	7,992,733	7,992,733	7,992,733	29,018
Development Bank of Kenya	44,148	706,338	901,216	997,552	1,709,742	33,878,788
Diamond Trust Bank	391,604	343,130	828,505	919,277	612,450	15,916,095
Ecobank Kenya	2,354,382	3,290,959	4,450,401	5,370,719	6,392,431	269,721
First Community Bank	404,082	274,085	555,900	186,242	369,612	866,470
Fidelity Commercial Bank Limited	1,403,907	763,213	1,106,434	2,311,789	2,652,337	706,338

Family Bank	803,691	855,691	880,398	906,739	1,041,927	343,130
Equity Bank	483,725	553,249	707,006	719,210	833,130	3,290,959
Giro Commercial Bank	23,286,408	30,636,232	30,636,232	30,636,232	30,636,232	8,036,910,920
Guaranty Trust Bank Kenya	752,618	910,590	1,248,974	1,199,681	1,202,281	2,147,779
Guardian Bank	2,126,066	2,751,209	2,751,209	3,157,464	3,764,295	780,876
Gulf African Bank	228,613	2,147,779	3,044,384	3,376,252	3,707,781	1,092
Habib Bank	780,876	780,980	1,423,780	1,487,644	1,808,780	7,101,667
Habib Bank AG Zurich	1,092	1,092	1,092	27,644	27,644	5,511,538
I&M Bank	7,101,667	7,101,667	5,630,009	4,523,747	5,678,464	713,283
Housing Finance Company of Kenya	5,511,538	5,511,538	5,511,538	6,174,613	6,174,613	15,916,095
Jamii Bora Bank	864,883	713,283	1,075,063	913,141	1,018,829	269,721
Middle East Bank Kenya	11,868,118	15,916,095	15,869,248	21,200,823	22,954,679	6,866,470
Kenya Commercial Bank	332,029	269,721	549,109	1,153,623	1,358,253	706,338
National Bank of Kenya	4,805,099	6,866,470	7,992,733	7,992,733	7,992,733	29,018
NIC Bank	44,148	706,338	901,216	997,552	1,709,742	33,878,788
Diamond Trust Bank	391,604	343,130	828,505	919,277	612,450	15,916,095

Oriental Commercial Bank	2,354,382	3,290,959	4,450,401	5,370,719	6,392,431	269,721
Paramount Universal Bank	404,082	274,085	555,900	186,242	369,612	866,470
Prime Bank (Kenya)	1,403,907	763,213	1,106,434	2,311,789	2,652,337	706,338
Sidian Bank	803,691	803,691	850,398	906,739	1,041,927	343,130
Spire Bank	483,725	553,249	707,006	719,210	833,130	1,290,959
Standard Chartered Kenya	23,286,408	30,636,232	30,636,232	30,636,232	30,636,232	8,036,910,920
Trans National Bank Kenya	483,725	553,249	707,006	719,210	833,130	990,959
United Bank for Africa	23,286,408	30,636,232	30,636,232	30,636,232	30,636,232	8,036,910,920
Victoria Commercial Bank	3,344,148	2,706,338	1,901,216	1,997,552	1,709,742	33,878,788

Appendix IV: Annual Summary of Non-Interest Income (NON)

BANK	2011 (Kshs in '000)	2012 (Kshs in '000)	2013 (Kshs in '000)	2014 (Kshs in '000)	2015 (Kshs in '000)	2016 (Kshs in '000)
ABC Bank (Kenya)	379,226	490,079	663,892	466,927	390,421	185,277
Bank of Africa	2,126,066	1,229,878	1,229,878	98,633	143,992	220,652
Bank of Baroda	2,226,878	319,357	275,569	255,783	339,910	2,394,474
Bank of India	185,277	185,277	196,047	215,323	226,696	1,047,796
Barclays Bank of Kenya	220,652	220,652	250,989	1,093,765	1,093,765	756,006
CfC Stanbic Holdings	2,394,474	2,394,474	1,947,573	770,290	207,963	625,189
Citibank	747,796	847,796	747,796	652,713	652,713	161,974
Commercial Bank of Africa	245,679	756,006	1,217,450	467,980	996,206	1,864,582
Consolidated Bank of Kenya	6,202,707	7,625,189	12,020,555	10,182,075	11,073,438	2,240,127
Cooperative Bank of Kenya	706,407	1,161,974	1,040,826	604,093	449,385	151,197
Credit Bank	1,707,109	1,864,582	1,985,447	2,951,970	5,284,098	1,438,243
Development Bank of Kenya	77,245	2,240,127	1,783,108	1,317,764	1,619,369	364,718
Diamond Trust Bank	334,098	151,197	262,074	475,304	183,080	528,854
Ecobank Kenya	1,411,659	1,438,243	1,803,971	2,554,784	2,814,118	136,614

First Community Bank	350,485	364,718	379,275	139,785	182,233	3,878,788
Fidelity Commercial Bank Limited	950,196	528,854	400,974	2,007,569,100	816,811	1,047,796
Family Bank	136,614	136,614	152,115	96,266	270,812	1,217,590
Equity Bank	1,159,953	631,864	111,885	187,601	137,230	720,555
Giro Commercial Bank	16,022,674	15,620,886	50,110,265	19,474,033	19,474,033	152,115
Guaranty Trust Bank Kenya	379,226	490,079	663,892	466,927	390,421	185,277
Guardian Bank	2,126,066	1,229,990	1,229,878	98,633	143,992	220,652
Gulf African Bank	2,226,878	319,357	275,569	255,783	339,910	2,394,474
Habib Bank	185,277	185,277	196,047	215,323	226,696	1,047,796
Habib Bank AG Zurich	220,652	220,652	250,878	1,093,765	1,093,765	756,006
I&M Bank	2,394,474	2,394,474	1,947,573	1,290,909	1,207,963	1,625,189
Housing Finance Company of Kenya	1,047,796	1,047,796	1,047,796	1,652,713	1,652,713	1,161,974
Jamii Bora Bank	245,679	756,006	1,217,450	467,980	996,206	1,864,582
Middle East Bank Kenya	6,202,707	7,625,189	12,020,555	10,182,075	11,073,438	2,240,127
Kenya Commercial Bank	706,407	1,161,974	1,040,826	604,093	449,385	151,197
National Bank of Kenya	1,707,109	1,864,582	1,985,447	2,951,970	5,284,098	1,438,243

NIC Bank	77,245	2,240,127	1,783,108	1,317,764	1,619,369	364,718
Diamond Trust Bank	334,098	151,197	262,074	475,304	183,080	528,854
Oriental Commercial Bank	950,196	528,854	400,974	1,007,569	816,811	1,047,796
Paramount Universal Bank	136,614	136,614	152,115	96,266	270,812	1,217,450
Prime Bank (Kenya)	1,159,953	631,864	111,885	187,601	137,230	12,020,555
Sidian Bank	16,022,674	15,620,886	50,110,265	19,474,033	19,474,033	152,115
Spire Bank	379,226	490,079	663,892	466,927	390,421	185,277
Standard Chartered Kenya	2,126,066	1,229,878	1,229,878	98,633	143,992	220,652
Trans National Bank Kenya	1,159,953	631,864	111,885	187,601	137,230	12,020,555
United Bank for Africa	16,022,674	15,620,886	50,110,265	19,474,033	19,474,033	18,152,115
Victoria Commercial Bank	245,679	756,006	1,217,450	467,980	996,206	1,864,582

Appendix V: Annual Summary of Variables

VARIABLE	2011	2012	2013	2014	2015	2016
ROA	0.095255	0.098248	0.095283	0.086079	0.084965	0.087845
NIT/NOI	0.655753	0.726011	0.690574	0.731579	0.713604	0.758928
NON/NOI	0.322005	0.273989	0.557938	0.268421	0.286396	0.309282
REVENUE DIVERSIFICATION	0.533699	0.602162	0.788186	0.607257	0.591253	0.628918