

**EFFECTS OF REVENUE DIVERSIFICATION ON FINANCIAL
PERFORMANCE OF COMMERCIAL BANKS IN KENYA**

BY

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DECLARATION

This is my original work and has not been presented in any other university or college for examination purpose.

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DEDICATION

I would like to dedicate my research project to the Almighty God, for His providence and grace without which I would not have accomplished this much, to my husband Stan for his love and support, to my son Erwin for his inspiration and finally my family for their prayers and support during this study.

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LIST OF ABBREVIATIONS

CBK	Central Bank of Kenya
MPT	Modern Portfolio Theory
IM	Interest Margin
II	Interest Income
NOI	Net Operating Income
NII	Non Interest Income
ROA	Return on Asset
ROE	Return on Equity
HHI	Herfindahl Hirschman Index
SPSS	Statistical Package for Social Sciences
DIV	Evidence of revenue diversification
PG	Prudential Guidelines

ABSTRACT

The banking segment is one of the most vital area as far as country's economic growth and development are concerned. However, despite the merit that surrounds the commercial banks in Kenya, their growth and performance has been at risk as evidenced by more than 46% of the banks closing at least 2 to 3 branches while retrenching massively. Between the year 2015 and 2016, Kenyan commercial banks retrenched the workforce at the clerical and secretarial positions by 12.05% and the supervisory level at 9.01%. The report further showed that the banks had closed 62 ATM branches between the year 2015 and 2016 which is a 2.28% drop. Notably, in a period of 2 years, four banks have been facing tremendous times with Charterhouse Bank subjected to management by state, Fidelity, Giro Commercial Banks in acquisition and Chase Bank and Imperial Bank in receivership all this as a result of continued underperformance. The objective of the study was to determine the effect of revenues diversification on financial performance of commercial banks in Kenya. The study population was all the 43 commercial banks in Kenya. The study used secondary data from audited financial statements of all the 43 commercial banks in Kenya. The researcher used both descriptive and inferential statistics in the study. The results indicated that revenue diversification and asset quality had a negative and significant effect on financial performance in commercial banks. The results indicated that liquidity and capital adequacy had a significant and positive impact on performance of banks. However, the results depicted that management efficiency had a positive and insignificant effect on financial performance in commercial banks. The study concluded that revenue diversification and asset quality had a negative and significant impact on financial performance in commercial banks. In addition, the study concluded that liquidity and capital adequacy had a significant and positive impact on performance of banks. The study further concluded that management efficiency had an insignificant impact on financial performance in commercial banks. The study recommends that central bank of Kenya should put in mind grouping banks considering their diversifications in market share, innovations in a bid to link the ranking with profitability.

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Diversification refers to a company's ability to compete with multiple companies in different industries whereby the management can make decisions on competing against many products and markets. Diversification is a strategy that commercial banks are using to manage risks and improve their performance (Mathuva, 2016). On the other hand, performance of a business is defined by culmination of the company plan to innovation, market strategic positioning, value and long term vision (Ngumi, 2013). In this case, most banks are looking for value added and new products and processes that will minimize their production costs and give better profits and improve their customers' satisfaction.

The study was informed by the following theories; modern portfolio theory of diversification, resource based view theory and agency theory. Modern portfolio theory assumes that modern firms are risk-oriented which implies that they are willing to take on riskier investments in turn for higher expected return or accept lower expected return for less risky investments. This insinuates that modern firms are more concerned with risk than rewards. According to Emupe (2013) most commercial banks prefer the less risky investments while at the same time putting the expected return on the note. Resource based view hypothesis argues that organizations are planned with a certain product direction and face similar market power challenges (Edwards, 1955). Based on this theory, the perspective of diversification affirms the advantages that arise in terms of

competitiveness and market share. Agency theory defines moral hazard as a state where the principal is uncertain of the agent's maximal effort.

Commercial banks across the globe focus on utilizing any possible available strategy to enhance their performance through which they promote the customer confidence as well as increasing their sustainability. In many countries, commercial banks and other financial are regulated and there are those areas and industries that they are required to diversify into and those that they are not. However, these regulations put most of these banks in a circled operation area where they are limited to conduct diverse businesses to enhance their performance. Mashiri and Sebele (2014) identify the need to spread risk, counter competition and prolong existence as the key aspects that push firms to diversify their products/operations. Commercial banks thrive to have a well enhanced and differentiated operation system as a way to concur the overgrowing competition. Santarelli and Tran (2013) elaborate that commercial banks can best substitute growth and development through diversification of their revenue to other markets and product lines.

1.1.1 Revenue Diversification

According to Lee and Lieberman (2009) diversification is the process through which organizations seek to enhance their performance and competitiveness through introduction of new product lines and/or markets. Akbulu and Matsusaka (2010) terms revenue diversification as the entire process of placing investments in other industries and/or product lines to enhance competitiveness through aspects such as mergers and acquisition, new product lines and opening of branches and keeping all such aspects

under the same umbrella of management. Revenue diversification is best put as the process by which organizations put their revenue in other market and product lines different from those that they base their major operations in (Nyangweso, 2010).

Diversifying revenue has to come with the main aim of achieving and gaining more markets as well as retaining the existing markets. According to Stiroh (2004) financial firms focus on using their revenues not only investing back to their existing businesses but to also focus on other dimensions besides the banking sector. Some industries are faced with more risks than others while their return is also high (Laeven, & Levine, 2007). However, as a strategy to keep firms in such industries safe and with other sources of income once the risks goes the hard way, these firms diversify their revenue in other industries which are lesser risky although with minimal returns. Nazarova (2015) argue that diversification strategies do not only always bring the best results for the companies where many organizations have met their death-trails through the diversification pathway. Instead, Nazarova (2015) suggests that organizations should expand in their logical adjacencies that have shared economies and not from unrelated diversifications since their competency and capabilities are derived from these economies.

Mayer, Wang, Egginton and Flint (2014) explain that as a way to encounter business growth, commercial banks should ensure that they are stipulated into three major methods of flexibilities which are; market flexibility, production flexibility and competitive flexibility. These are the measures of diversification which according to Laeven (2007) determining the extent to which the firm is willing to relent its revenue to other investments away from their framework of specialization. Market flexibility

enhances diversification in that the organization is ready to adopt and shift to other markets without necessarily tying themselves to one market. A flexible bank in terms of market will not find it difficult to tilt their sale of products to other diversified prospects such as insurance and other non-interest investments (Frumkin & Keating, 2011). On the other hand, production flexibility implies that a firm that is ready to diversify to other industries has the capability to change its production mechanisms to compare those required in the diversified areas. In this case therefore, a commercial bank that is ready to implement and benefit from revenue diversification, it ought to ensure the staff and other systems are flexible and able to accommodate any new products/services as well as new markets.

1.1.2 Financial Performance

Financial performance can be demarcated as the level of business operation in a certain time, indicated by accrued profits and losses in that period (Teimet, Ochieng & Away, 2011). Birya (2009) also defined financial performance as the business' capability to generate liquidity, that is, finances from the investments it already has through which other processes are kept running. In other words, financial performance may be used to mean the extent of safety and stability in handling deposited funds (Mutua, 2013). The level of significance in the performance of a financial institution can be measured in both micro and macro perspectives. In the micro perspective, the most fundamental prerequisite is profit as well as the best source of funds. Despite being a result, profits are also a requirement for effective banking in an era of increasing competition in money

markets. As a matter of fact, the prime aim of banks is basically to make profit as the main reason for doing business (Bobakova, 2003).

Financial performance is measured in different methods. One method is the use of Return on Assets (ROA). This according to Santalo (2011) is the ability of firm's assets to gain profit. It is arrived at after the division of net annual income by the asset value. The other indicator is Return on Equity (ROE) that refers to the profit contributed by the owners capital share in a firm. It is gotten by dividing net income by the total equity capital. The other commonly used measure as upheld by Hendrikse (2009) is Net Interest Margin (NIM) which is the interest earned out of income from the assets. All these measures tend to explain the extent to which the company performs financially which as well steers up other perspectives of performance.

1.1.3 Revenue Diversification and Financial Performance of Commercial Banks

The idea of revenue diversification attracts tremendous attention on whether it has a hand on the financial performance of organizations or not. Internationally, scholars have argued differently on the role played by revenue diversification on firm financial performance. Montgomery (2014) contends that revenue diversification is reliable once it enhances firm's financial performance by increasing the return on equity along with the return on investments. Diversified revenues are arguably the best income-earners for the multi-national companies which enable them to enlarge their sources as well as promoting risk-spreading in various industries and markets.

Firms with diversified portfolio in other instances are argued to operate under more gross discounts an aspect that negatively affects their financial performance (Chartejee & Wernerfelt, 2012). Scholars have argued that diversification could only lead to increased financial performance in a considered perfect world without taxes and transaction costs, free information, riskless bargaining and lending and rational utility maximizing agents (Lubatkin, 2007; Jacquemin & Berry, 2009). However, some of the global leaders such as Nike have revealed different results with their financial performance relatively increasing with the continued diversification of revenues to other industries and product lines (Amit & Livant, 2011). All these arguments therefore put revenue diversification and firm financial performance as a critical subject of discussion whose attention would be worth in the modern research.

Hypothesis like modern portfolio theory, agency theory and resource based view theory suggest a close relationship between revenue diversification and performance. According to modern portfolio theory, diversification increases returns while controlling risks (Morien, 2011). Resource based view theory argues that a firm performance depend on the resources it owns. A firm with resources that enable effective diversification is able to boost its performance (Wernerfelt, 1984). Agency theory also argues that there is relationship that exists between diversification and performance. The relationship depends on agent – principal relationship (Jensen & Meckling, 1976).

1.1.4 Commercial Banks in Kenya

The defining factor of a commercial bank is that its prime function is accepting demand deposits along with making loans, a function that eases transferability of funds in an

economy. End of year 2017 statistics indicated that the Kenyan banking sector had 73 foreign exchange (forex) bureaus, 8 non-operating bank holding companies, 19 Money Remittance Providers (MRPs), 3 Credit Reference Bureaus (CRBs), 13 Microfinance Banks (MFBs), 9 representative offices of foreign banks, 43 banking institutions (42 commercial banks and 1 mortgage finance company) with the Central Bank of Kenya (CBK) as the regulatory authority.

Commercial banks in Kenya can be subdivided into 3 groups by use of a weighted composite index which includes the number of loan accounts, number of deposit accounts, capital and reserves, customer deposits and the net assets. Banks showing weighted composite indices of above 5 percent are the ones classified as big banks. Those whose indices range between 1 percent and 5 percent are termed as medium banks while those whose indices are less than 1 percent are termed as small banks. By the end of year 2017, the banks that fell in the category of being large were 8 which had a 65.98 percent market share. Besides, there were also medium banks that were 11 (26.10 percent market share) as well as small ones which were 21 in number (7.92 percent market share) (CBK, 2017).

ATMs and POS machines together with mobile phones and internet give banks a technological platform for speedy, convenient and flexible banking (Choudhry, 2013). They have enabled a wide customer view and are generally affordable, a phenomenon that has encouraged banking of the unbanked. Many banks have embraced E-B as a performance strategy, mainly to on-board as many customers as possible and attract cash deposits. Banks get most income from interest on loans. These outlined prospects of

performance of commercial banks are possible through putting more efforts in diversifying their operations and seeking to have more differentiated way of doing things as compared to the competitors (Chikoto & Neely, 2014).

Over the years, banks have not been performing as expected despite the growth in markets due to increased population and awareness of the need for banking services among the individuals (Kajuju, 2016). Many commercial banks across the globe have been held under receivership over a number of reasons among them being failure to meet the minimum capital requirements as per the regulations. It has been held that performance of commercial banks has to be viewed on the basis of profitability and the banks customer amount. However, in recent years, commercial banks are seen to perform better based on their share capital and amount of loans that they offer in a given period of time (Sowunmi *et al.*, 2014). Increase in size of the bank also increases liquidity of the commercial banks. In addition, 81% of the changes in liquidity are influenced by the degree of automation of banks' processes and products.

1.2 Research Problem

Revenue diversification is the process by which organizations put their revenue in other market and product lines different from those that they base their major operations in (Nyangweso, 2010). Through diversifying revenues in other industries, companies have enhanced their performance and reduced the risk of relying in one industry especially in the current dynamic market (Teichler, 2008). According to Corcoran and William (2010), revenue diversification is essential in promoting the competitiveness of a firm through spreading the risks to other areas and relenting its investments in more income-generating

ventures. According to Tregenna (2009) financial performance of banks depends on how the bank is able to diversify its portfolio in response to emerging market condition

The banking segment is one of the most vital area as far as country's economic growth and development are concerned. However, despite the merit that surrounds the commercial banks in Kenya, their growth and performance has been at risk as evidenced by more than 46% of the banks closing at least 2 to 3 branches while retrenching massively (Mwenja, 2016). According to CBK report (2016), between the year 2015 and 2016, Kenyan commercial banks retrenched the workforce at the clerical and secretarial positions by 12.05% and the supervisory level at 9.01%. The report further showed that the banks had closed 62 ATM branches between the year 2015 and 2016 which is a 2.28% drop. Notably, in a period of 2 years, four banks have been facing tremendous times with Charterhouse Bank subjected to management by state, Fidelity, Giro Commercial Banks in acquisition and Chase Bank and Imperial Bank in receivership all this as a result of continued underperformance

Empirical studies have shown mixed results on the association between revenue diversification and financial performance of commercial banks. Lee (2013) spurs revenue diversification as an important aspect in enhancing business growth and competitiveness. Locally, Hassan (2017) established that revenue diversification was negatively related to firms' financial performance; Nyanumba, Rotich, Gekara, Keraro and Okari (2017) found that revenue diversification had a direct influence on performance of Counties while Manyuru, Wachira and Amata (2017) established that corporate diversification enhanced firm value and financial performance. Kuppuswamy and Villalonga (2010) and Elif

(2015) contemplate that revenue diversification puts financial firms at more competitive ground where they become their own financiers through which their income base is made stronger.

From the review of the above, it is concrete clear that revenue diversification and performance of commercial banks is a field that would attract attention especially in developing country like Kenya. The studies reviewed did not point out the key aspects surrounding revenue diversification that would enhance commercial banks' performance while at the same time revealing conflicting outcomes. This study therefore seeks to fill these gaps by answering the question; what are the effects of revenue diversification on financial performance of commercial banks in Kenya?

1.3 Research Objective

To determine the effect of revenues diversification on financial performance of commercial banks in Kenya.

1.4 Value of the Study

The findings from the study will significance to a number of parties as herein discussed; The study findings will help commercial banks in Kenya to determine the strategies that they can apply in investing more through diversification for the purpose growth and enhancing performance. The findings from the study will enable the bank managers to identify the right dimensions to adopt revenue diversification when initializing or promoting competitive strategies as well as spreading their risks to ensure financial sustainability.

The investigation will be in a position to help the law makers besides the government such that they will use the findings to determine the implications that may come out of their regulations to the commercial banks. The findings will enable the law makers to make considerate policies in regulating the commercial banks and thus act for the benefit of the bank, the government and more importantly the customers. Through the findings, the government agency in charge of commercial banks supervision (Central Bank of Kenya) will find better ways to regulate diversifications among commercial banks and those areas that the banks should or should not be allowed to invest into.

Future scholars, academicians and researchers will also benefit from the study findings. The study will reinforce the available literature on revenue diversification and how it influences banks financial performance. This therefore will add a reference material to future scholars and researchers who can use the findings to support their studies and at the same time identify gaps which they ought to fill in their studies.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The chapter analyzed previous studies about the effects of revenue diversification on the commercial banks' financial performance. It examined the key theories supporting revenue diversification which granted an exhaustive understanding of the revenue diversification and its role in firm performance. Empirical studies were covered in this chapter from which the study gaps were derived.

2.2 Theoretical Framework

A framework of theories can be described as a group of interconnected concepts. It gives guidance in deciding what to assess, and what relationships to look for statistically (Defee, Randal, Thomasd & Williams, 2010). This investigation was predetermined by Modern Portfolio Theory of Diversification, Resource Based Theory and Agency theory.

2.2.1 Modern Portfolio Theory

This hypothesis was first put forward by Markowitz (1952) in an attempt to point out the need for modern organizations to come up with new strategies and ways of doing things so as to increase their revenue. Since its insinuation, the MPT theory has received high range of attention across the globe based on its comprehensive focus on diversification and innovation. Due to limited resources, economic decisions are subjected to trade-offs. Those confronting investors were identified by Markowitz as risks versus returns. The MPT's prime aim is to come up with a portfolio of various financial assets which has the

greatest expected profit from a certain amount of portfolio risk or correspondingly to select a portfolio which has the lowest risk in a given level of portfolio predicted return.

Morien (2011) covers the key assumptions behind the modern portfolio theory. One of the assumptions is that modern firms are risk-oriented which implies that they are willing to take on riskier investments in turn for higher expected return or accept lower expected return for less risky investments. This implies that modern firms are more concerned with risk than rewards. According to Emupe (2013) most commercial banks similar to other organizations prefer the less risky investments while at the same time putting the expected return on the note. This explains why commercial banks will diversify to other industries such as the insurance industry which according to Hyde (2010) is lesser risky as compared to the banking industry.

Schwartz (2010) explains the need for organizations especially those that are in more risky industries to sort the available investment options (portfolios) and invest in those that are lesser risky through which they can maximize their revenue while at the same time minimizing the risks. Barrett, Linney and Pratt (2012) argue that the modern portfolio theory puts the modern businesses into a stake of focusing on the portfolios of investment that regardless of the industry can give the business extra income and ensure continued performance and sustainability. Commercial banks are known to be in a field that is quite risky and very volatile where their performance is always threatened by aspects such as changes in regulations and fluctuations in currencies. In such an environment therefore, it would be beneficial and well-meant if the banks invest in other lesser risky industries where even as the banking industry continues to face volatility,

they still have source of income. The modern portfolio theory will be therefore be adopted in the study to bring out the basis of diversification in commercial banks and the role the aspect plays to influence commercial banks' growth, performance and sustainability.

2.2.2 Resource Based View Theory

This theory originated with Wernerfelt (1984). The theory holds that competitive advantage that is sustainable often arises from within the firm; in addition, strategies at the company level are normally driven by company's-specific resources as well as capabilities. Moreover, the resource-based approach of the firm stipulates that diversification normally arise from a firm's attempt to leverage firm-specific resources that are non-tradable, which include human resources. Researches about diversification have been a norm in economics besides strategic management studies (Hoskisson & Hitt, 1990).

Resource-based view hypothesis is based on the assumption that business institutions are organized focusing on one product and are faced by a similar factor market. From this conclusion, a perspective of market power (Edwards, 1955) about diversification affirms the advantages accruing to a firm as a result of customers and competitors. Additional critical perspectives presented by the similar theorists affirm the advantages presented by diversification to actual firm managements from its shareholders. The firm's efficiency in terms of strategies depends on the use and application of the available resources. A firm having underutilized production factors creates unique focused opportunities that can be exploited (Montgomery, 1994).

Moreover this hypothesis is regarded sensible in this research because it explains the independent variable that is revenue diversification. As a strategy, diversification aims at exploiting available resources that are firm-specific. Diversification in a firm is better explained as a process in which the management identifies resources which are special in their institution while determining the markets those resources can perform best. At times, certain resources are 'indivisible' and hence 'sticky', especially when such resources are intangible and hard to sell in the market.

2.2.3 Agency Theory

This hypothesis was brought forth by Jensen and Meckling (1976). It outlines business institutions as crucial structures that uphold contracts making it possible to assert control hence curbing agents' opportunistic behaviors. The hypothesis explains that where there is scanty information and unpredictable outcome as in most businesses, two agency problems come up: moral hazard and adverse selection. Moral hazard is a state where the principal is unsure of the agent's utmost effort. Adverse selection is a state the principal is unable to ascertain whether the agent is representing his capability to do the task for which they are being remunerated accurately (Eisenhardt, 1989).

Diamond (1984) indicates out that some degree checking is an open merchandise that nobody has the motivator to give, banks can be the most effective approach to lead this assignment for two reasons: First banks have the economies of scale in observing. "Economies of degree are said to exist when at least two items can be together; created at a lower cost than if similar items are delivered independently (Jensen & Meckling, 1976).

The returns of revenue diversification are irregular, partially, due to the agency issues within the banks. The Directors may diversify out of their own interests and not those of the shareholders. The employees may not efficiently manage the revenue diversification strategy since the success of the strategy may maximize the wealth to the shareholders who are the principals. As a consequence the relationship between revenue diversification and financial performance of a bank depended on how agency relationships are managed.

2.3 Determinants of Commercial Banks Financial Performance

There exist a number of determining factors to financial performance of financial institutions. In this study the factors included; Capital adequacy, Asset quality, Liquidity and management capability as the key factors in financial performance.

2.3.1 Capital Adequacy

Capital adequacy is best understood as the availability of enough equity necessary to undertake every task that the bank may deem crucial (Kosmidou, 2009). Olalekan and Adeyinka (2013) affirms that it has been an important concern in financial institutions and explained it as the percentage ratio of bank's primary capital to its assets used as an expression of its stability and financial strength. The capital makeup of banks is strictly controlled. This is because equity plays an important function in minimizing the amount of hitches on the side of depositors when a bank fails as such institutions might take unwarranted risk in a bid to maximize value of shareholder at the finance providers' expense (Kamau, 2009). Nasieku (2014) brought across two ratios of accounting meant for use in capital adequacy; risk weighted assets ratio and leverage ratio. Leverage ratio is gotten from total capital divided by total assets and applied in calculating regulatory

capital. Nasieku (2014) further noted that risk weighted assets ratio is the core capital divided by total risk weighted assets and is used as a measure of risk-based capital. Commercial banks in Kenya use three ways in calculating capital adequacy ratio. Core capital to Total Risk weighted assets ratio, the minimum CBK requirement is 10.50%, Core capital to Deposit ratio, CBK minimum requirement is 8% and Total capital to total risk weighted assets ratio, with CBK minimum requirement 14.50 %.(CBK PG03, 2013).

2.3.2 Asset Quality

It refers to the valuation of firm asset base in order to aid the extent of the level of credit risk associated with its operation (Siat, 2013). Siat (2013) notes asset quality as a significant parameter that is used to measure the financial stability of a commercial bank. The aim of measuring the quality of assets is to determine the rate of non-performing assets compared to the aggregate assets. Asset quality ratio shows a firm's level of non-performing assets in net advances. Lucky and Nwosi (2015) also argues that asset quality is an important measure that is useful in evaluating the performance of bank. The aim of asset quality measurement is for mainly for ascertaining the level of non-performing assets of a firm in relation to its total assets. In this study asset quality was measured by non-performing loans ratio.

2.3.3 Liquidity

According to Bhunia (2010) the ability of a business in meeting short term obligations is termed as liquidity. According to Clementi (2011) it assists in ensuring that a business or individual always has a constant supply of cash for any given need, though it is a crucial tool for finding out the financial wellbeing of investments in the future (Clementi, 2001).

Liquidity is fundamental the indicators of financial stability based on the fact that its deficiency in one bank results in a crisis that is systemic in the banking sub-sector owing to interconnectedness. Liquidity in commercial banks showcases their ability to pay for additional assets and meet their obligations (CBK, 2017). Mwangi (2014) noted that liquidity refers to a bank being in a position to finance acquisition of more assets and offset both predictable and unpredictable collateral and cash requirements at reasonable cost and without incurring avoidable losses. There are three liquidity ratios that are used namely; the current ratio, the capital ratio and the quick ratio. The minimum statutory ratio is 20%.

2.3.4 Management Capability (Efficiency)

Pranowo and Manurung (2010) argued that firm's efficiency is an indication of whether the firm is utilizing its assets as well as operations productively. The study further noted that operating ratio calculates how well a firm trades its stock as well as sales to cash conversion efficiency. Examples of these operating ratios include; stocks turn over, assets turnover (sales to total assets), working capital to sales ratio and debtor's day (day's receivable outstanding). The average amount of days taken by customers to offset credit sales is shown in the debtor's day. Reduced debtor's day increases cash flow; expressing potential saving for increased cash flows. Operational efficiency was defined by Olalere, Temitope and Oluwatobi (2015) as the extent to which a business is able to avail products or services to buyers in the most economical way possible without compromise on quality. According to research, firm's decision makers should increase the efficiency in

using the tangible assets to generate income (Saleh, 2015). Efficiency ratio was used in this study.

2.4 Empirical Studies

Studies from across the globe have been done concerning the revenue diversification - firm performance relationship. These studies have brought about their diverse and different arguments and findings regarding the subject as it were herein disclosed. One of these studies is that by Tinkelman and Neely (2011) who did a research on the impact of revenue diversification through nonprofit revenue interactions on firm performance. The study focused on microfinance institutions in Pakistan and adopted an exploratory research design. They found that the microfinance institutions that had adopted other modes of business and diversified to other industries had more sustainability base and recorded more sales and return on investment. While concluding, their study indicated that financial performance of microfinance institutions in Pakistan was vested on their ability to increase their service.

Ngumi (2013) on the other hand did a research on the bank diversification - performance relationship in Kenya's commercial banks. The study aimed at finding out the effects of commercial banks diversifying in other industries and/or markets on customer deposits, profitability, return on total assets and overall income of the commercial banks. The investigation applied a case study research design and targeted managing employees in commercial banks in Kenya. Diversifications showcased a high prediction capability when it comes to grouping banks by use of the analysis of predictive discriminant. It is important therefore that Central bank of Kenya should put in mind grouping banks

considering their diversifications in market share, innovations in a bid to link the ranking with profitability (Francesca & Claeys, 2010). Such a ranking will certainly bring about competition among banks culminating in better customer service as well as focusing on other key investments that ought to promote their growth and development.

Kaberia (2012) conducted a study on the income source diversification effects on Kenya's commercial banks' financial performance. This research adopted descriptive design as the information was collected from secondary sources. The researcher employed the model of regression in studying the commercial banks financial performance - income diversification interrelationship when it comes to non-interest incomes by banks. HHI was used to measure diversification while bank performance was measured by ROA. The study utilized chi-square test in testing the significance of variables in the study which showed significant relationship of variables with performance of banks.

Teimet, Ochieng and Away (2011) conducted a study about financial performance and income source diversification for Kenyan commercial banks. It focused on all the 44 registered banks in Kenya. Herfindahl-Hirschman Index, Regression and Correlations analysis were majorly applied showcasing on collective that all Kenya's commercial banks are diversified where big banks lead while Islamic banks trail. As a matter of fact, diversification level positively influences performance of banks in Kenya with the two main revenue streams being positively related.

2.5 Conceptual Framework

Conceptual framework is a representation that serves to give a direction to the study by providing the relationship between variables thus making it easier to answer the research question (Young, 2010). Through a conceptual framework, the study findings are hypothesized. The study adopts the following conceptual framework shown in Figure 2.1.

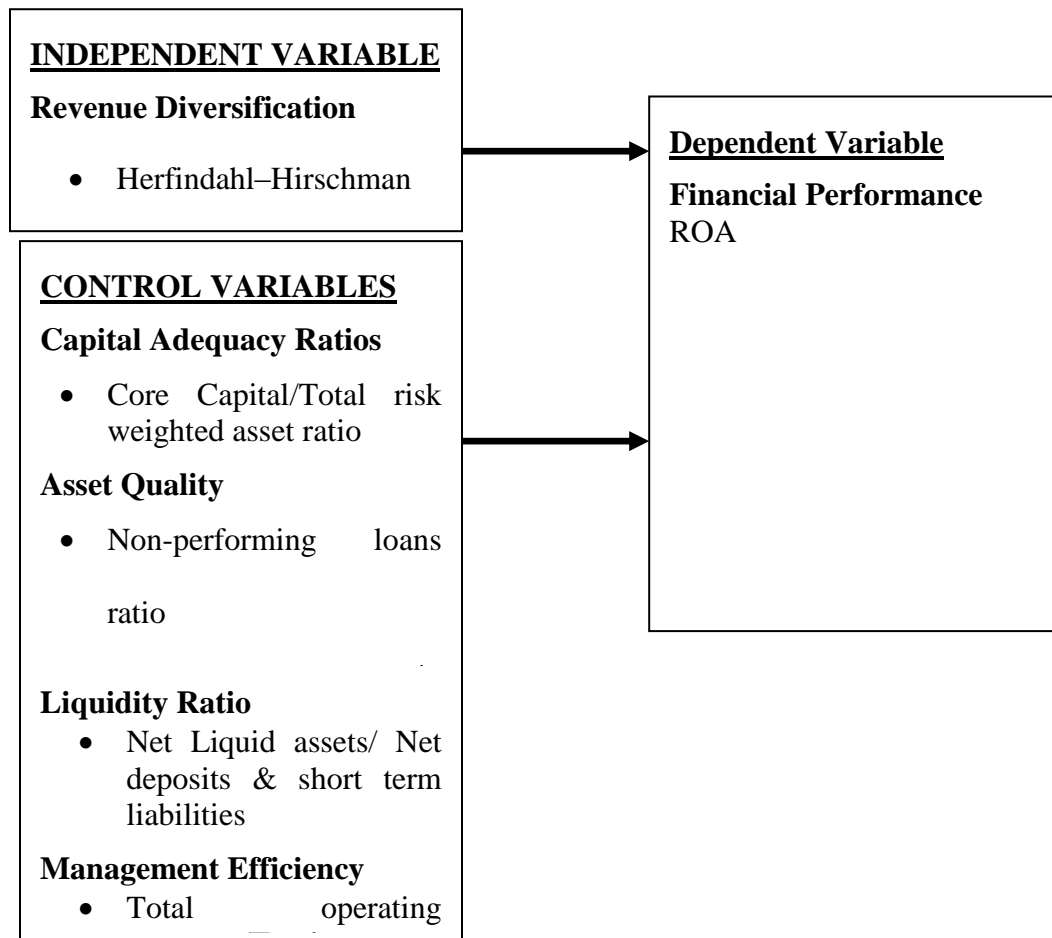


Figure 2.1: Conceptual model

Source: Author (2018)

2.6 Summary of the Literature

The chapter covered the previous readings on the effects of diversification of revenue on commercial banks' financial performance. The theories covered in the chapter were modern portfolio theory upholds the need for organization to diversify their revenues through new markets, products and technology. This ensures more performance base and keeps the firm with a better risk management approach such that in case of failure or decline of one dimension, the other keeps them going. Resource dependence theory on the other hand informs on the need to focus on resources where every organization is dependent on the available resources to foster performance and growth. Empirical studies reviewed showed that there are compelling arguments on organizational performance - revenue diversification relationship. On the same note, much of the research was carried out in developed nations unlike the current one that is done in a developing country. Moreover, these studies addressed revenue diversification as a sub variable that did not deeply analyze its implication of firm performance unlike in this study where it is addressed as the main variable. This study therefore sought to undo the evidenced disparities by underpinning the effects of revenue diversification on the Kenya's banks performance.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The prime goal of this part is to outline on the research procedure to be applied such as design used, locus of the study, and population under target, procedures used for sampling, sample size, data collection, instrumentation and procedures of analysis.

3.2 Research Design

Research design is the arrangement of circumstances in collecting data and analysis of data in a style meant to derive significance from the purpose of the research with budget in research procedure (Kothari, 2004). Research design may be perceived as the main plan or judgment of an investigation that illustrates how the study is to be accomplished. It expresses the manner in which the crucial parts of the research study co-work in a bid to tackle the research questions. Research design greatly compares with an architectural design.

A design of descriptive survey was used in this research. Descriptive survey is normally done to explain the present situation better, things people believe today, things people are doing today and among other issues (Baumgartner, Strong and Hensley, 2002). According to Kothari (2004), the design of descriptive survey comprises of investigations and enquiries of fact finding in different kinds. The prime aim of this design is outlining the set of circumstances as it exists at the moment (Kothari, 2004).

3.3 Population of the Study

Mugenda and Mugenda (2003) explain population as that set of elements that that qualify for consideration in a study. In this case the study population was all the 43 commercial banks in Kenya. Instead of a sample a census was preferred for this research. This is because when it comes to sampling, the population might be too small.

3.4 Data Collection Procedure

The study used secondary data from audited financial statements of all the 43 commercial banks in Kenya. Specifically, time series data was used. The data was collected from each banks websites, CBK bank supervision annual reports and NSE websites. The specific data to collected was capital adequacy and liquidity ratios, total assets, net operating income from interest and non-interest income sources. The period covered in this study was year 2007 to year 2017(10 years).

3.5 Data Analysis

The researcher used both descriptive and inferential statistics in the study. The particular descriptive statistics were maximum, minimum, mean and standard deviations. The use of SPSS helped in getting the statistics that is descriptive besides inferential results generation.

Return on Asset was determined annually using the following model;

Return on Assets (ROA) = Net Income / Total Assets

The researcher used the basic HHI used in Morgan and Samolyk, (2003) to measure Revenue diversification.

The main measure of evidence of revenue diversification, DIV, accounts for variation in the breakdown of operating revenue into two broad categories: interest income, and non-interest income. Using this analysis, the researcher measured revenue diversification of the banks as

$$DIV = (SH_{II}^2 + SH_{NII}^2)$$

Where SH_{II} is the share of operating revenue from interest sources and SH_{NII} is the share of operating revenue from non-interest sources defined as

$$SH_{NII} = \text{Non interest income} / (\text{Non-interest income} + \text{Interest income})$$

$$SH_{II} = \text{Interest income} / (\text{Non-interest income} + \text{Interest income})$$

DIV estimates the characteristic of enhancement in a bank's net working income. A higher value demonstrates a more differentiated mix: 0.0 implies that all income begins from a single source, while 0.5 is an even part between net interest income and non-interest income. These measures are then arrived at the midpoint of over a time of 10years to get a level of average revenue diversification, DIV, average interest income shares, SH_{II} , and average non-interest income shares, SH_{NII} .

Regression analysis was applied in demonstrating the revenue diversification, Capital Adequacy, Management efficiency, Liquidity and financial performance relationship in commercial banks. Moreover the technique of regression is employed in analyzing the extent of relationship between two variables (Mugenda & Mugenda, 2003).

The relationship of the equation was a multiple linear equation as shown below;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where;

Y= Financial Performance= Return on Assets (ROA) = Net Income / Total Assets

β_0 = constant term

$\beta_1 - \beta_5$ = Beta coefficients (intercepts for independent variables)

X₁= Revenue Diversification= ($SH^2_{II} + SH^2_{NII}$)

X₂= Capital adequacy ratio= Core Capital/Total risk weighted asset ratio

X₃= Asset Quality = Non performing loans ratio

X₄= Liquidity ratio= Net Liquid assets/ Net deposits & short term liabilities

X₅ = Management capability (Efficiency ratio) = Total operating expenses/Total operating income

ε = Error term.

Total risk weighted asset ratio=Adjusted credit risk weighted assets +Total market risk weighted assets equivalent +Total risk weighted assets equivalent for operations risks.

3.6 Test of significance

The F- test and t- test was used to test statistical significance. F-test was used to determine the significance of the analytical model and t- test was used to determine the significance of the coefficient of the regression model where a t value is greater than two was considered significant at 95% confidence.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter encompasses of data analysis, findings and interpretation. Outcomes were presented in tables and diagrams.

4.2 Descriptive Statistics

Descriptive measures that were used include mean, maximum, minimum and standard error of estimate. Results were presented in Table 4.1

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	430	-0.292	0.565	0.123	0.134
Revenue Diversification	430	0.002	0.709	0.111	0.176
Capital adequacy	430	0.004	0.994	0.220	0.222
Asset quality	430	0.004	0.746	0.084	0.119
Liquidity	430	0.005	0.773	0.109	0.145
Management efficiency	430	0.004	0.980	0.196	0.225

The results revealed that the mean of ROA of commercial banks in the past 10 years was 0.123. The maximum was 0.565 while minimum was -0.292. The standard deviation was 0.134. This implied that ROA was not greatly spread from the mean.

The results also revealed that the mean of revenue diversification in the given 10 years was 0.111, having a maximum of 0.709 and a minimum of 0.002. The standard deviation

was 0.176 showing that the outcome was not spread from the mean of revenue diversification.

The results also showed that the mean of capital adequacy in the past 10 years was 0.220, having a maximum of 0.994 and a minimum of 0.004. The standard deviation was 0.222 indicating that the results were not spread from the mean of capital adequacy.

The results also indicated that the mean of asset quality in the past 10 years was 0.084, having a maximum of 0.746 and a minimum of 0.004. The standard deviation was 0.119 denoting that the outcomes were not spread from the mean of asset quality.

The results also showed that the mean of liquidity in the past 10 years was 0.109, having a maximum of 0.773 and a minimum of 0.005. The standard deviation was 0.145 indicating that the results were not spread from the mean of liquidity.

The results also revealed that the mean of management efficiency in the past 10 years was 0.196, having a maximum of 0.980 and a minimum of 0.004. The standard deviation was 0.225 depicting that the results were not spread from the mean of management efficiency.

4.3 Diagnostic Tests

Diagnostic tests were conducted before the regression analysis. This included Normality and multicollinearity.

4.3.1 Normality Test

The outcome in figure 4.1 illustrated that the residuals of ROA are normally distributed.

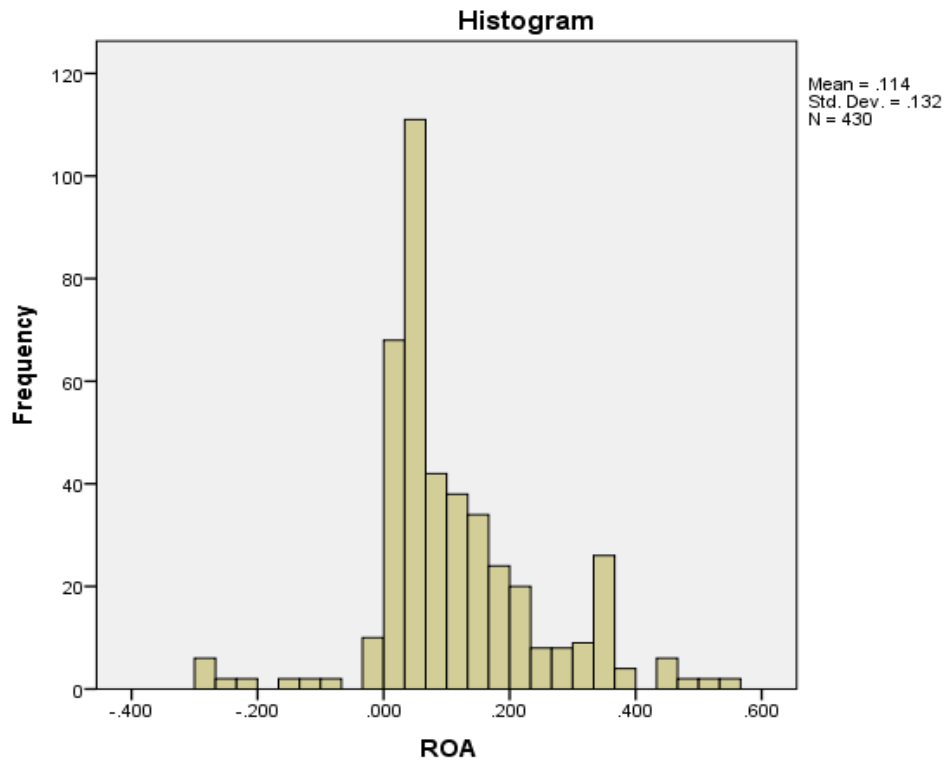


Figure 4.1: Normality

4.3.2 Multicollinearity

Multicollinearity was evaluated using VIF. The results in Table 4.2 depicted that VIF was 1.248 which is less than 10 and thus no Multicollinearity.

Table 4.2: Multicollinearity

	Tolerance	VIF
Revenue Diversification	0.997	1.003
Capital adequacy	0.819	1.22
Asset quality	0.663	1.509
Liquidity	0.71	1.409
Management efficiency	0.91	1.099
Mean		1.248

4.4 Analytical Model

This section presented the correlation and regression analysis results.

4.4.1 Correlation Analysis

Correlation results were presented in Table 4.3.

Table 4.3: Correlation Results

		ROA	HHI	Capital adequacy	Asset quality	Liquidity	Management efficiency
ROA	Pearson Correlation	1					
HHI	Pearson Correlation	-.121	1				
Capital adequacy	Pearson Correlation	.555	-0.004	1			
Asset quality	Pearson Correlation	-0.015	0.028	.372	1		
Liquidity	Pearson Correlation	.151	0.048	.339	.513	1	
Management efficiency	Pearson Correlation	.125	0.009	.208	.277	.144	1

The results showed that revenue diversification and financial performance had a negative correlation ($r=-0.121$). In addition, capital adequacy and financial performance had a positive correlation ($r=0.555$). The results also showed that asset quality and financial performance had a negative correlation ($r=-0.015$). It was also depicted that liquidity and financial performance had a positive correlation ($r=0.151$). Further the results depicted that management efficiency had a positive correlation with financial performance ($r=0.125$).

4.4.2 Regression Analysis

The results presented in table 4.4 showed that revenue diversification, capital adequacy, asset quality, liquidity and management efficiency were fulfilling in explaining financial performance. This means that revenue diversification, capital adequacy, asset quality,

liquidity and management efficiency explain 38.7% of the deviations in the financial performance of commercial banks. The adjusted R was 0.387.

Table 4.4: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.622	0.387	0.380	0.10414

The results indicate that the general model was statistically significant as reinforced by a p value of 0.000 which is lesser than the critical p value of 0.05. This was supported by an F statistic of 53.605 which imply that revenue diversification, capital adequacy, asset quality, liquidity and management efficiency are good predictor of financial performance of commercial banks.

Table 4.5: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.907	5	0.581	53.605	.000
Residual	4.598	424	0.011		
Total	7.505	429			

The results showed that revenue diversification and financial performance had a significant and negative connection ($\beta=-0.092$, $p=0.003$). The results also revealed that capital adequacy and financial performance had a positive and significant connection ($\beta=0.348$, $p=0.000$). The results also showed that asset quality and financial performance had a significant and negative connection ($\beta=-0.354$, $p=0.000$). In addition the results depicted that liquidity and financial performance had an significant and positive connection with financial performance ($\beta=0.085$, $p=0.036$). Further the outcome revealed that management efficiency and financial performance had an insignificant and positive connection ($\beta=0.041$, $p=0.083$).

Table 4.6: Regression of Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.063	0.008		7.672	0.000
HHI	-0.092	0.031	-0.115	-3.008	0.003
Capital adequacy	0.348	0.023	0.624	14.85	0.000
Asset quality	-0.354	0.053	-0.311	-6.67	0.000
Liquidity	0.085	0.041	0.095	2.102	0.036
Management efficiency	0.041	0.023	0.069	1.735	0.083

Optimal Regression Model

Financial Performance = 0.063 -0.092 Revenue Diversification + 0.348 Capital Adequacy -0.354 Asset Quality + 0.085 liquidity

4.5 Interpretation of Findings

The results showed that revenue diversification had a negative and significant effect on financial performance in commercial banks. This means that a rise in revenue diversification by one unit will result in a decrease in financial performance by 0.092 units. The results also revealed that capital adequacy had a positive and significant impact on financial performance in commercial banks. This means that a rise in capital adequacy by one unit will result in a rise in financial performance by 0.348 units. The results also showed that asset quality had a negative and significant impact on financial performance in commercial banks. This means that a rise in asset quality by one unit will result in a decrease in financial performance by 0.354 units. In addition the results depicted that liquidity had a positive and insignificant effect on financial performance in commercial banks. This means that a rise in liquidity by one unit will result in a rise in financial

performance by 0.085 units. Further the results revealed that management efficiency had an insignificant and positive impact on performance of banks. This means that a rise in management efficiency by one unit will not result to any change in financial performance.

These findings agreed with that of Kaberia (2012) who found out that income source diversification had a significant relationship with performance of banks. However, the results were consistent with that of Teimet, Ochieng and Away (2011) who found that income source diversification significantly influences performance of banks in Kenya.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMENDATIONS

5.1 Introduction

This section displayed summary and discussed the findings relative to the research problem and research goals.

5.2 Summary of Findings

The objective of the study was to determine the effect of revenues diversification on financial performance of commercial banks in Kenya. Revenue diversification was used as the independent variable while financial performance was used as the dependent variable. Liquidity, capital adequacy, management efficiency and asset quality were used as the control variables. The study used secondary data from audited financial statements of all the 43 commercial banks in Kenya. The researcher used both descriptive and inferential statistics in the study.

Findings from regression results, revenue diversification had a negative and significant effect on financial performance in commercial banks. The results also revealed that capital adequacy had a significant and positive impact on performance of banks. The results also showed that asset quality had a negative and significant effect on financial performance in commercial banks. In addition the results depicted that liquidity had a positive and significant effect on performance of banks. Further the results revealed that management efficiency had an insignificant and positive impact on performance of banks.

5.3 Conclusion

Findings from regression results showed that revenue diversification had a negative and significant effect on financial performance in commercial banks. The study therefore concluded that revenue diversification and financial performance in commercial banks are negatively and significantly related.

The findings revealed that capital adequacy had a significant and positive impact on performance of banks. The study therefore concludes that capital adequacy had a positive impact on financial performance in commercial banks.

The results also showed that asset quality had a negative and significant effect on financial performance in commercial banks. Therefore, asset quality and financial performance are negatively and significantly related.

In addition the results depicted that liquidity had a positive and significant effect on financial performance in commercial banks. Therefore, liquidity and performance are positively and significantly associated.

Further the results revealed that management efficiency had an insignificant and positive impact on performance of banks. Therefore, management efficiency and financial performance are positively and significantly associated.

5.4 Recommendations

The study recommends that central bank of Kenya should put in mind grouping banks considering their diversifications in market share, innovations in a bid to link the ranking

with profitability. This is because revenue diversification and financial performance in commercial banks are negatively and significantly related.

The study also recommends that commercial banks should work to improve their liquidity ratios. This is because liquidity have a positive impact on financial performance. They should work to maintain and increase the capital adequacy ratios and management efficiency ratios. This is because capital adequacy ratios and management efficiency ratios positively affects financial performance in commercial banks.

Also, it is recommended that commercial banks should put more investment on assets such as buildings that they would use as their premises and rent out the rest to gain revenue. Further banks should also highly invest in assets that they could sell at a gain to improve their revenue.

5.5 Limitations of Study

The data collected was secondary in nature. However, the researcher is not conscious of how it was composed and the various alterations and presumptions that were utilized with the end goal to define and present the information.

The analytical procedure was also scientific. The study failed to extract qualitative data that would have clarified the soft and unseen issues that affect the association between revenue diversification and financial diversifications of commercial banks. An open ended questionnaire, an interview guide or a focus group discussion would have yielded qualitative data and hence support this results.

The study only concentrated on 10 years (year 2008 to year 2017). Using a longer period of around 20 – 30 years would probably have yielded different results.

5.6 Areas for Further Study

The study proposes that further studies should include a qualitative analysis such as interview guide of the relationship between revenue diversification and financial diversifications of commercial banks. In addition, the current study focused on commercial banks in Kenya only. Further study should focus on commercial banks in other East African countries for purposes of making comparisons with the current study.

Since the R squared was not 100% it seems there are other determinants of financial performance that were not addressed by the study. Other studies should therefore focus on other determinants of financial performance of commercial banks.

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APPENDICES

APPENDIX 1: LIST OF COMMERCIAL BANKS IN KENYA AS AT 31/12/2017

1. Victoria Commercial Bank
2. United Bank for Africa
3. Trans National Bank Kenya
4. Standard Chartered Kenya
5. Stanbic Bank
6. Spire Bank
7. Sidian Bank
8. Prime Bank (Kenya)
9. Paramount Universal Bank
10. Oriental Commercial Bank
11. NIC Bank
12. National Bank of Kenya
13. Middle East Bank Kenya
14. Kenya Commercial Bank
15. Jamii Bora Bank
16. Imperial Bank Kenya (In receivership)

17. I&M Bank
18. Housing Finance Company of Kenya
19. Habib Bank AG Zurich
20. Habib Bank
21. Gulf African Bank
22. Guardian Bank
23. Guaranty Trust Bank Kenya
24. Mayfair Bank Ltd
25. First Community Bank
26. Fidelity Commercial Bank Limited
27. Family Bank
28. Equity Bank
29. Ecobank Kenya
30. Dubai Islamic Bank
31. Diamond Trust Bank
32. Development Bank of Kenya
33. Credit Bank
34. Cooperative Bank of Kenya
35. Consolidated Bank of Kenya

36. Commercial Bank of Africa
37. Citibank
38. Chase Bank Kenya (In Receivership)
39. Barclays Bank of Kenya
40. Bank of India
41. Bank of Baroda
42. Bank of Africa
43. ABC Bank (Kenya)

Source: CBK (2017)