EFFECTS OF PORTFOLIO DIVERSIFICATION ON FINANCIAL PERFORMANCE OF COMMERCIAL BANKS IN KENYA

BY

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DECLARATION

This research project report is my original work and has never been submitted for the award of a degree in any other University or any other institution of higher learning for examination and academic purposes.

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DEDICATION

This work is dedicated to my supervisor, family and friends for their support in ensuring the successful completion of this research proposal.

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ABBREVIATIONS

ADC – Alternative Delivery Channels

CAMEL – Capital Adequacy, Asset Quality, Management Earnings and Liquidity

CBK – Central Bank of Kenya

GDP – Gross Domestic Product

HHI - Herfindahl Index

KBA – Kenya Bankers Association

NI – Net Income

NII – Net Interest Income

NOI – Net Operating Income

NPL – Non-performing Loans

ROA – Return on Assets

ROE – Return on Equity

ABSTRACT

This study investigated the effects of portfolio diversification on financial performance of commercial banks in Kenya. A descriptive research design was adopted in this study. The study targeted all the 40 commercial banks registered and licensed under the Banking Act. Secondary data was used in this study to achieve the set objective. The secondary data obtained from CBK reports and annual published statements of accounts for the commercial banks in Kenya between 2013 and 2017. Data was analysed using descriptive statistics and regression analysis. A significant strong positive correlation between Portfolio diversification and commercial banks performance was also noted ($r = 0.632$, $p = 0.000$, $n = 40$). This study revealed a weak positive correlation between bank size and commercial banks performance. This implies that an increase in bank size would lead to an increase in commercial banks performance. An increase in interest rate spread was found to lead to increase in financial performance of commercial banks. A weak positive correlation between interest rate spread and commercial banks performance was established ($r = 0.327$, $p=0.000$ and $N=40$). This relationship was found statistically significant at $p=0.000>0.05$. Finally the study established a significant relationship between asset quality and financial performance of commercial banks. This implied that when, asset quality is increase by one unit it would led to an increase in financial performance of commercial banks by 27.2%. A weak positive correlation between the asset quality and commercial banks performance was also noted ($r = 298$, $p = 0.000$, $n = 40$). The study concluded that portfolio diversification, sank size, interest rate spread and asset quality has influence on the financial performance of commercials banks in Kenya and a positive correlation exist between portfolio diversification, bank size, interest rate spread, asset quality and financial performance. The study therefore recommends that policy makers like capital markets authority to promote policies that encourage commercial banks to practice diversification to mitigate their financial losses and boost their profitability. The study recommends that commercial banks diversify their real estate finance schemes to make it reachable to more customers since real estate had a significant effect of their financial performance. It also recommends that that commercial banks should extend their product mixes to increase profitability through combination of traditional intermediation activities and non interest activities. Also the study recommends that there is need to strengthen bank diversification policy through effective and efficient regulation and supervisory framework. This study recommends that a similar study should be carried out across East Africa and beyond and see whether the same results would be replicated. Also, a study should also be done on the importance of credit diversification on banks performance.

CHAPTER ONE: INTRODUCTION

1.1 Background of Study

Due to volatility of microeconomic and macroeconomic environment, local commercial banks have turned their focus on improved ways of undertaking their operations with one key aim of reducing risk, increasing profits and increasing market share. This is aimed at winning and maintaining a friendly relationship with investors and maintaining a competitive advantage power over their competitors in the market which also helps to boost economic status (Marcia, Otgontsetseg & Hassan, 2014).

Cernas (2011) argues that diversification continues to be a key strategy employed by a majority of businesses globally in the business world. Among the main institutions practising the same are banks. Perez (2015) argues that commercial banks need to have many portfolios that are well diversified and can earn more income, especially in periods of increasing adoption and utilization of technology-enabled products and services. This is based on the fact that different portfolios achieve different performance when subjected to different economic conditions, and the performance realized though most of such given portfolios seem to have no correlation. Therefore, diversified portfolio can play a role in insuring a firm against harsh market conditions and frequent economic variations.

According to the Kenya Bankers Association (KBA), bank profitability can be affected by the level of diversification practised (KBA, 2012).In my research, special focus was the three major portfolios in commercial banks in Kenya i.e. Bancassurance, alternative delivery channel banking and real estate financing. The study was measuring how bancasurance had effects on the financial performance in case banks adopted it as one of their investment plans. While in ADC banking, I analysed the mobile and internet banking and their effects banking industry performance. In real estate finance, the focus

was on fixed asset financing, construction financing and mortgage financing and how they have turnaround effects on commercial banks financial performance.

1.1.1 Portfolio Diversification

In finance, portfolio is the process of grouping of financial assets in accordance with the risk associated and financial returns attached to each individual asset. Diversification is an act of risk management where it employs a technique of mixing different investment within a given portfolio. Arora & Jain, (2013) argues that Portfolio diversification is the process of bringing together diverse assets to lower the general risk associated with the entire portfolio of an organization.

In commercial banks in Kenya, some of the noticeable portfolios common across the industry are loans, term deposits, government bonds, real estate financing, bancassurance, safe custody, client segmentation and alternative delivery channels such as internet banking. A good portfolio mix realised on different kinds of investments will, most cases, yield higher returns with minimal risk than any individual investment creating a positive impact on the financial stability and performance. Therefore portfolio diversification is a strategy many institutions have adopted, in order to identify best set of investments which realised meaningful returns with low risk.

Portfolio diversification can be measured by the rate of return on asset, return on equity or price per share which all together aims at measuring the profitability. Perez (2015) concludes that asset diversification within banks can be measured through examining returns on loans, financial assets, other investments made and cash equivalents which was in turn used to measure their overall financial performance. Stoner (2003) concludes that revenue realized from organisational operations, overall unit sales, cash

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flows realized from different investment portfolios and operating income was well utilized to realise a good financial stability for commercial banks.

1.1.2 Financial Performance

According to Stoner, (2003) financial performance is the capabilities to perform profitably, efficiently and effectively, being able to withstand all the hard economic times, environmental threats while utilizing the available resources and existing opportunities to the maximum with minimal cost Financial performance is also defined as the level of business progress at a particular period of time or after some certain period of time, in Kenya commercial banks, their financial performance is measured quarterly as per central bank regulation. This can be easily determined by the study of their financial statements. The financial statement was able to capture in details each portfolio and the profits or returns, it has contributed in overall performance.

Boru (2011) argues that financial performance is important as it one of the elements that shows whether a firm is profitable or not. Hitt (1996) in his study depicted that financial ratios parameters can be used to enable stakeholders of business determine how their businesses are faring in regards to financial performance.

Kent (1994) in his research found that the measures of performance comprises of several indicators among them growth of revenue and profit, return on assets and profits on injected capital on any investment. Return on assets (ROA) is taken as the best method when determining performance (Kamwaro, 2008). ROE was used to determine financial performance for this study, especially on measuring the performance of different portfolios on commercial banks in Kenya to show the impact that they had on their financial performance.

1.1.3 Commercial Banks of Kenya

In Kenya, the banking sector falls under the ministry of finance which formulates and implements monetary policy. Commercial banks are governed by the Companies Act (CAP 486), Banking Act (Cap 488), Central Bank of Kenya (CBK) Act (Cap 491), Insolvency Act of 2015 and other regulatory guidelines issued by CBK. The industry comprises of 40 licensed commercial banks which are operational at the moment. There is also 1 licensed mortgage finance institution and 7 authorized non-operating holding companies. All these banks have teamed up to form Kenya Bankers Association (KBA), an organization that addresses issues affecting the members i.e. the banks.

Due to increasing competition, poor governance and high tech technology and innovation, commercial banks have had to diversify their investment portfolios in order to be profitable and remain relevant in business. Some banks have adopted mergers and acquisition for example, Habib Bank Limited, Equatorial Commercial Bank and Giro Commercial Bank while other have been put under receivership I.e. Chase Bank and Imperial Bank.

The industry has over the recent past experienced noticeable diversification levels which are majorly spurred by the financial sector liberalization and reduced sector repression in the last two decades (Mwau, Tarus & Kosgei, 2015).Diversification in the industry has also been driven by resilient competition from micro financial institutions and informal institutions. Adding to their research Mwau and Kosgei (2016) saw that commercial banks in Kenya have posted good financial performance while others have not which has called for creative diversification strategies to overcome the profit compression and competition pressure, For instance, several commercial banks in Kenya if not all are partnering with insurance companies to offer insurance products, others are venturing in real estate while almost all of them have added mobile, internet

and Agency banking services in their lines of business so as to uphold competitiveness in the operating market. While others have resulted to closing most of their branches in an effort to cost cut.

Many commercial banks have taken major steps in adopting creative diversification strategies to overcome such challenges ,i.e. profit compression and competition pressure, many researchers and investors still have unresolved questions central to this field, which this study sought to address and reveal how portfolio diversification affected commercial banks financial performance in Kenya.

1.1.4 Financial Performance and Diversification.

Ongore and Kusa (2013) observed that, every strategy designed and undertaken by commercial banks seeks to achieve one particular objective which is the financial stability. Kamwaro (2008) carried a causal research design approach in studying the impact of portfolio choice on financial performance of investment companies in Kenya. His findings indicates that investment on different portfolio in a company such as bonds, asset size and also real estate definitely impacted financial performance of unit trusts. Kimeu (2014) undertook a study to establish the effects of portfolio structure on financial composition of various investment companies listed with NES. He concluded that portfolio composition is direct proportional to the financial performance.

Rop, Kibet and Bokongo (2016) in their research on the effect of portfolio diversification on financial performance of commercial banks concluded that there is more need to promote diversification of bank portfolios since it has a significant impact on the financial performance. In a study done by Makokha, Namusonge, and Sakwa (2016) argued that commercial banking diversification is identified mainly on loans, deposits, assets, and geographical location portfolios. The study majored on asset

diversification and established a positive linear relationship between portfolio diversification and financial performance among commercial banks in Kenya.

However, some researchers had a contrary opinion on this. Patrick (2012) who acknowledges that there exists no consensus about a positive, negative or neutral influence of asset portfolio diversification on financial performance. Hayden (2007) established that diversification led to reduced returns on the German banks. While in some instances, research shows no relationship exists whatsoever, for example Kipleting (2016) studied the effect of investment diversification on the financial performance of commercial banks in Kenya and found no significant effect of diversification on their financial performance.

Thus, the link between portfolio diversification and financial performance still remains a debatable issue due to the diversity in research conclusions from different scholars. Thus, the question of whether diversification improves or worsens firm performance is still worthy of further research such as this study is focused to do. This research is derived from this gap that there is no agreement on whether the diversification and financial performance have any relationship, which indicates the need for further research. The findings this study sheds light on most of these issues and provide motivation to examine Kenyan banks in the field of portfolio diversification in an effort to boost bank's profitability.

1.2 Research Problem

The global banking industry and financial sectors have experienced turbulent market deregulation, stiff competition, technological advancements and reduced trade barriers thereby necessitating banking to bring on board different strategies, including portfolio diversification to address such challenges in the quest for profitability. As such, many

commercial banks Kenya have resorted to diversifying their portfolios in order to stay afloat and maintain or enhance their profitability. This has necessitated many researchers to investigate how portfolio diversification are created, and what was their impact on the financial performance of the banking industry in Kenya.

Banking diversification may be pursued to moderate the turbulent markets and operational environments and further to lower portfolio unpredictability and losses. One of the key drivers of financial progress among Kenyan commercial banks in their ability to modify products that meet Kenyans' needs and demands, and which has helped the country manage one of the highest financial inclusion rates in the developing world, at 75% according to the oxford business group report on the Kenyan banking 2017.The knowledge of understanding and identifying customer needs has helped many banker managers to edge out the best portfolio mix that derives the best returns with minimal risk while taking care of market trends and putting customers first. Several studies has been done to address the effects of various diversification options and their effects on the financial performance on various institutions.

There are empirical studies conducted in the international context. Oyedijo (2012) carried out research on whether diversification of product and market affected the corporate financial growth and performance of some Nigerian companies. This research focused on the product and market diversification on the few Nigerian companies. This research didn't mention any effects on the banking sector, thus creating a research gap for more research on the banking industry where my study seeks to investigate the effect of diversification on financial performance on Kenya banks. Hayden (2007) did a research on the effects of portfolio diversification in German banks, he established that diversification led to reduced returns in the German banks. German being a developed economy the result could be different from a developing economy like Kenya and

therefor this creates a research gap to determine the effect of diversification on small economies like in Kenya where this study focused on portfolio diversification on commercial banks in Kenya.

Locally, Kimeu (2014) showed that institutions that insisted on well balanced portfolio diversification saw increased profitability, and that is, there is a direct relationship between diversification and performance. However, research shows that not all combinations of selected portfolios created a positive synergy to bring about positive results. Similarly, according to Kiweu (2012) on his study on the effect of income diversification initiatives by Kenyan commercial banks established only minimal positive relationship with their financial performance. This could have changed since 2012 up to date many institutional changes and innovation have taken place, therefore this research went deeper to investigate if his finding still holds by looking on different diversification models on commercial banks in Kenya.

The main motivation to carry out this study is derived from the knowledge that there is no agreement on if there any significant benefit if banks adopted the strategy to diversify or not, which suggests that there is still need for further research to prove it. This shows that portfolio diversification may not completely be a new concept as evidenced by the numerous studies that have been conducted. However, available literature is not sufficient enough to provide a framework for determining the impact this portfolio diversification has on performance in commercial banks. Thus, this research paper sought to identify and fill such gaps of knowledge through establishing the effects of portfolio diversification on financial performance of commercial banks in Kenya.

1.3 Objective of Study

The objective of this study was to determine the effects of portfolio diversification on financial performance of commercial banks in Kenya.

1.4 Value of the Study

This study is of great help to the Banking industry at large and financial systems in Kenya, umbrella bodies such as Kenya Bankers Association, finance experts and analysts, financial intermediaries and stakeholders as it justify the rationale for the adoption of strategic portfolio diversification for enhanced financial performance. It also contribute to a broader realm of diverse businesses in the Kenyan economy.

In academia, the study adds value to academic research in the area of banking and portfolio investment and finance. Future academia not only use the study as a reference but is able to suggest more research activities that can be researched and explored to improve the study. Regulators of the financial institution such as CBK and insurance regulators rely on the study to devise better ways and policies governing financial firms, which are necessitated by ever growing industry through innovation and technology. Potential Investors and prospectors benefit from the research by observing the trends of the firms that are adopting the portfolio diversification in determining which firms are best to invest. Shareholders and owners of these firms benefit from the research by having confidence on the portfolio managers who have adopted this strategy and scaled the profits up with reduced risk and losses. To the general public, the research help to educate people on the need to adopt the diversified bank products, to enjoy faster access to these products and benefit from cost-effective financial services Diversification also offers a wide variety of resulting products hence consumers and the general public enjoy the wide variety and freedom of choice.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, various studies were reviewed from other scholars who had conducted research on portfolio diversification and their impact on the financial performance. The areas covered in this chapter include literature review of several theories that guided the study, local and global empirical studies related to Portfolio diversification on financial performance of commercial banks, a conceptual framework and summary of the reviewed literature and research gaps that exist on diversification and its influence on financial performance.

2.2 Theoretical Review

As the financial institution strive to achieve a portfolio that maximises high returns and reduced risks on their investments there is need to focus more on the implementation of key decisions on the strategies aimed at allocation of resources on various assets. This research was guided by the following theories: Markowitz portfolio theory, capital market theory and diversification strategy model.

2.2.1 Modern Portfolio Theory

Harry Markowitz (1952) coined the modern portfolio theory on his paper for portfolio mixture. This theory emphasised on how expected returns can be maximised by establishing portfolios that are weighed through risk levels. Markowitz concluded that institutions can construct a portfolio that would give the highest expected returns at a manageable risk level. This theory tries to maximize profits in a given portfolio risk or equally reduce the risk in a given level of expected returns, this can be achieved by carefully selecting proportion of various investments (Fabozzi, Gupta, & Markowitz, 2002).

This theory identified two types of risks which investors need to be conscious of, that is, a systematic risk and unsystematic risks. Systematic risk is inherent in the volatility of the entire market or some part of it, while unsystematic risk is associated with the extent to which an individual investment is volatile. Investors are therefore instructed to combine portfolios by guaranteeing that, specific risk carried by that specific investment in the portfolio is offset by a lower specific risk in another investment.

With respect to our study portfolio diversification on commercial banks in Kenya, the MPT greatly helps the banking industry in defining investment preferences in relations to the risks and expected returns, this was achieved through allocation of resources among different levels of investments. This theory contributes to the study in that it helps the portfolio managers to achieve an efficient frontier by ensuring that the portfolios selected have unsystematic returns and can be able to offset each other to maximise the returns at any given time. This theory also points out that, where the portfolio diversification is well positioned as a performance improvement strategy, it may enable commercial banks attain their market power. It can also be utilised in coming up with other strategies, based on the benefits accrued by such investments.

2.2.2 Capital Market Theory

This theory is an extension of the portfolio theory by Markowitz. The portfolio theory explains how rational stakeholders should build efficient portfolios while a capital market theory describes how different assets need to be priced in the capital markets if, all the investors are rational as portfolio theory proposes. Financiers base their investment decisions on the expected return of a given investment and risk of that individual investments. Risk is measured by the unevenness in returns where Investors always endeavour to reduce the unpredictability through portfolio diversification. This results in creation of a different portfolios with different risk levels. Among these

portfolios some dictate others, or some are more efficient than the vast majority of portfolios because of either lower risk or higher returns. The capital market theory was developed from the concept of Markowitz portfolio theory, has some conventions that financiers follow the efficient frontier as proposed by Markowitz where they were likely to capitalise in all portfolios that fall on the capital market line. This theory is very useful to banker managers when establishing their portfolios that are in consistency with the market demand, it guided our study in testing whether investment portfolios are exposed to certain macro-economic or multivariate factors.

The APT model in the capital market theory helped our research in calculating the betta factors of different portfolios that commercial banks have adopted in their diversification strategy on their move to capture the market power and relevancy in maintaining their financial performance and competition in the industry. The knowledge of capital market theory guided our study in identifying the best and efficient investment option that fits the capital market line, that is, the investments that are efficient and can maximise returns at minimal risk.

2.2.3 Diversification strategy model

Diversification is a marketing strategy that was developed under the market strategy mix. The Ansoff matrix strategy that was advanced by Igor Ansoff in 1965 and is used to develop strategic selections for developing businesses. The model explains four strategies for the market, market penetration where the firm markets its products into a new market. Product development where the firm markets its new products in the markets and market development where the firm markets its products into a new market.

Diversification, the fourth marketing strategy, forms the main focus in this study. It is marketing of new products in a new market, this strategy comes with a high risk since it involves a company entering into a new market with new products. Diversification strategy perceived to enhance a firm's growth if the other marketing strategies fail to meet desired objectives .Sometimes firms diversify if only they can see a prospect to consolidate their market control to increase proceeds, which foretells a linearly positive link between diversification and profitability. Diversification helps exposes the firm to new opportunities and increases its revenue by providing new profitable investment channels.

In regards to our study the management of the commercial banks were in a position to identify new markets for the created portfolios. For example, it guides this research in the identifying the gaps in the real estate financing to show how quick investment in the real estate financing will tap the benefits of such emerging market. Statistics shows that 80% of Kenyans use mobiles phones, which is a new market for mobile and internet banking, bank managers are at need to create portfolios that fit the demand for the use of the mobile phone to access their services.

This move is complemented by a modification in the investment structure of the diversifying banks, for example, closing the physical branches and creating digital branches. The type of change used in any given case, as well as the amount of capital involved, depends on the resources available for diversification and profits that accompany the move. A special look at the internal capital markets theory, which affirms that diversification in businesses arise when financial market wars compels managers to allocate resources more resourcefully than the external capital market (Klein and Lien, 2009).

2.3 Determinants of Financial Performance

Financial performance is determined by many different factors in a given industry which can be classified either internal or external. Internal factors are those which the firm has power over while external factors are those which management don't have any control. This study discussed some of the factors that affect the commercial banks financial performance with some empirical evidence.

2.3.1 Interest Rates Spread

Interest is defined as the charge on borrowed cash. It is also the amount of interest charged per unit of time in a given period of time usually annually. The return on equity has a positive relationship with the interest rate, i.e. a high interest rate in borrowing affects the stock market price and consequently the returns. Most of the banks earn their profits through lending out money to the borrowers in terms of loans. Interest is charged at a given percentage, in Kenya, interest for loans is at 13% across the board for all banks. The lending base rate according to Kenya banks reference rate (KBRR) is at 9%. This means the bank's profits can only be earned on the 4% margin.

Interest rate spread is achieved by getting the difference between the interests the bank charges on the lending out to customer and the interest it gives out to the depositors.

Interest Rate Spread = Interest Earned on Lending – Interest Paid to Depositors

If the interest rate on borrowing is high then the banks earning is high leading to high financial performance.

2.3.2 Portfolio Diversification

The study measured portfolio diversification using Herfindahl Index, According to Schertler (2006) when HHI moves close to its minimum, then it's an indication that

banks are extremely diversified across that given sector. The index measures non-interest income in commercial banks. An increase in the index indicates less diversification while a decrease in the index indicates increased diversification. In financial statements, interest income is usually separated from non-interest income. The index is calculated as follows

$$HHI = K_1{}^{\wedge 2} + K_2{}^{\wedge 2} + K_3{}^{\wedge 2} \ldots + Kn^{\wedge 2}$$

Whereby K is the market share controlled by a bank in a given sector given in decimals ranging from 0 to 1. Analysis shows that a high index value of HHI means that the banks are less diversified and the reverse is true Stiroh and Rumble (2006), Kiweu (2012) and Maina (2013) used HHI to measure diversification through proportionate allocation of different incomes.

The main portfolio for commercial banks is offering loans, their main source of income is interest. Therefore, any other income was classified as non-interest income, the incomes from bancaasurance, real estate financing and incomes from alternative delivery channels. This study accounts for diversification through premiums from bancaassurance covers, interest charged from mortgages and real estate finances and service charges from mobile and internet banking.

2.3.3 Operational Efficiency

Operational efficiency has a constructive relationship on the rate of assets on the commercial banks. According to Bhagavath, (2009) the operational efficiency model has become a going concern due to high competition, new business processes and policies coupled with new technology evolution and innovation in the business operations. Research shows that improved operational efficiency has a positive influence on the firm's profit margins and also affirms that efficient firms are most cost-

effective. The concept remains very critical in the banking sector since it is one of the elements of their success in their highly precarious and competitive industry.

2.3.4 Bank Size

The size of the bank still remains a big contributor to the overall profitability of the firm. Size is majorly measured by the volume of assets they control, the size of lending books and customer base among others. With an increase in access to resources, banks gain from advantages of large scale operations and offer local organisation with more efficient financial services. Thus it creates opportunity for employment and income, they also meet customers' demands and needs through a large network of branches .The research shows that cost reduction occurred as the banks grew in assets. Dogan, (2013) in his study argues that big firms enjoy many opportunities of working in sectors that need high capital requirements, this is because they have more resources and enjoys economies of scale.

2.3.5 Macroeconomic Variables.

Many economists would assess the success of a given economy by analysing its overall performance and how it can achieve high output level and good consumption growth. These variables may include Gross Domestic Product, Inflation, Interest rates and economic growth. Their changes have effects on the financial performance in banking industry. For example, GDP affects the demand for investments in assets. Decline in GDP growth leads to fall in demand for investments which in turn affect the bank's revenues.

The effect of inflation on banks success depends on whether inflation has been wholly and correctly predicted by bank managers or not (Perry, 1992) .If the interest rate on borrowing is high then the banks earning is high leading to high financial performance.

This interest is what is charged on loans and deposits, it affects the level of borrowing. Increase in interest on lending had a negative effect on borrowing which lowers the lending book on loans and overall performance is affected. Interest rate can affect banks profitability either positively or negatively subject to its movement in the market. High economic growth, which is measured through the level of GDP, means good financial growth in all industries including banks.

2.3.6 Asset Quality

The concentration of the asset that the bank owns also contributes to its financial strength. The major bank's asset concentration are loans and the customer base. Other asset includes current asset, fixed asset, and other investments. Asset worth indicates the credit risks levels related to the assets.

The size of credit portfolio in a bank determines the profitability of banks and therefore non-performing loan ratios remains the best pointer of asset quality. This forms the biggest worry of all commercial banks where they always focus on maintaining the level of non-performing loans as low as possible, this is because high NPL affects profitability of commercial banks. Low NPL to gross loans shows a healthy maintained portfolio by the banks. Low ratio indicates better performing by the banks (Sangmi and Tabassum, 2010). It's given by:

Asset quality = Net Non-Performing Assets /Total Assets

2.3.7 Management Quality

Management quality forms a major internal factors that define the commercial bank productivity. It is the ability and competency of management to detect, evaluate, and mitigate the risks associated with the portfolio diversification and by ensuring that operations are compliant with the regulatory requirements. According to Grier (2007)

management is regarded as an integral factor in the CAMEL rating since it is fundamental to the success of any organisations. Management quality is defined through various parameters such as quality and level of supervision by managers, ease of adherence to internal policies, presence of manageable internal controls, the leadership and quality of the directors and the firms Boards of directors and managements overall performance of an investing firm. Management quality can also be measured as a ratio of operational expenses and revenue generated.

2.4 Empirical Review

Studies across the world have been contacted to investigate the effects of portfolio diversification on financial performance with diverse conclusions and different findings. Many perceptions have been used to delineate the impact of portfolio divergence on bank's performance. In this section, the study explored various empirical studies from various scholars on diversification and its influence on financial growth on commercial banks.

Hayden, Western Hagen and Finan (2007) did a study to understand if diversification improved Performance of German Banks. They looked at evidence from individual bank loan portfolios. In their paper they investigated the case study by looking at the choice of the sample and by calculation of the risk of given variables.They found that there is little evidence of high performance paybacks associated with diversification. Their study only focused on data from one portfolio i.e. information on loans only, which tempts the researcher to combine more of the portfolios so that it can bring out a clear impact of diversification, this gap creates my focus of study.

Peng, Jeng, Wang & Chen (2015) in their study on the effects of bancassurance on the financial performance and profitability of banks in Taiwan. Their research aimed to examine the effect of involvement in bancassurance on bank performance and also assess the effect of the firm's diversification strategy in bancassurance business on bank performance. Peng et al (2015) used actual data from a unique database on engaging in bancassurance business in the period between 2004 and 2012, obtained from the Taiwan Insurance Institute to facilitate the empirical inquiry of the connection between bancassurance and bank performance in terms of profitability. The results showed an increase in income, non-interest income and shareholders' value. Their study also revealed that banks that invested on bancassurance accrued larger risk-adjusted returns with such involvement leading to improved profitability. It therefore recommended that 12 banks should employ a diversification strategy because it promotes the bank's profitability and hence better financial performance.

Their study only looked at bancaassurance as one investment which cannot be used to show any effect it had on financial performance, due to this gap, this research combined different portfolios to bring out clear indication on, if diversification of banks in different sectors can true bring a change to their financial stability.

Sibel and Ihsan (2012) contacted a study on diversification in banking and its effect on banks' financial performance: this was done in Turkey. Their objective was to establish if diversification through sectoral and geographical credits had any benefits to banks.Their results showed that sectoral credit diversification is favourable for banks to advance their performance. Turkey is among the established economies and therefore, the conclusions of the study might not relate to Kenya, which is one of the developing markets in southern Sahara. This creates a contextual gap, which is filled by this proposed study.

Yan, Talavera and Fahretdinova (2016) evaluated the effects of product diversification on profitability of banks in Azerbaijan using data for six different types of loans and four types of deposits. The findings of the study revealed a negative relationship between loan-based portfolio diversification and bank profitability. In addition, the study also indicated that deposit-based diversification had a marginally significant and positive correlation with profitability of the banks considering that bank specific characteristics as well as economic and institutional characteristics.

Alkhatib and Harsheh (2012) examined the financial performance of Palestinian commercial banks listed on the Palestine Securities Exchange (PEX). The study sampled 5 Palestinian banks listed on PEX and used annual time series data extracted from the banks' financial reports for the period 2005-2010. The findings of the study revealed that there is noticeable impact on firm size, credit asset risk rate, and efficiency on operation and asset management on financial performance of Palestinian banks. The results, however, never looked at whether the bank's portfolio was diversified or not, and as such, its findings may not apply to commercial banks with diversified portfolios. This creates a research gap where more research on this field of diversification is inevitable.

Elefachew M & P Hrushikesava R (2016) contacted another research on the effect of diversification on Ethiopian banks' revenues generated. Their research investigated the impact of industrial diversification on profitability of some few banks from Ethiopia. The data covered 6 years period from 2008/09-2013/14 for 10 private and 2 government commercial banks. Their findings showed that the banks could be said to have diversified their loan portfolios among different industries in Ethiopia. Fixed model was used to determine the regression and the results revealed that, industrial diversification had a negative significant effect on both return on asset and equity. This

study forms another evidence in support of the focus strategy for better profitability. However, if the research could focus on different portfolio mix, the results could be different which allows my research to focus on various portfolio mix with aim of banks diversification to test its effects on financial performance.

Makokha, Namusonge, and Sakwa (2016) studied the effect of portfolio diversification on Commercial Banks financial performance. They established a positive link between portfolio diversification and financial performance. Portfolio diversification explained 68% of the changes in the financial performance of commercial banks in Kenya in terms of profitability and that most banks spread their portfolio investments which has empowered them to grow their profits and revenues in the past years. A different approach in conducting the research can help elaborate more on their research, the research focused on descriptive research design and measure the performance through profitability and return of assets which is different from their research work. .Mixed research design was used on the study where descriptive and quantitative research designs were employed. They studied 42 banks in Kenya. Sources of data was both secondary and primary data collection methods where quantitative techniques were used to undertake data analysis.

Rop, kibet & Bokongo (2016) carried a study on the effect of portfolio diversification on financial performance of commercial banks in Kenya. Exploratory research design was used in their study. Secondary data method was employed to collect data, interviews for primary data collection was used, and they sampled 40 banks.

2.5 Conceptual Framework

This is a diagrammatic representation of the related variables. It helps to understanding on how the particular variables relate to each other. Ngechu (2006) defines conceptual

framework as a diagram demonstrating how predictor variables and dependent variables connect. Dependent variable in this study is the financial performance of Kenyan commercial banks, the study sought to measure the financial performance in terms of returns on assets whereas the independent variables are asset quality, interest rate spread, and portfolio diversification.

Independent Variable   **Dependent Variable**

| Portfolio Diversification |

| **Financial Performance**
• ROA |

Control Variables

| • Interest rate spread
• Asset quality
• Bank size |
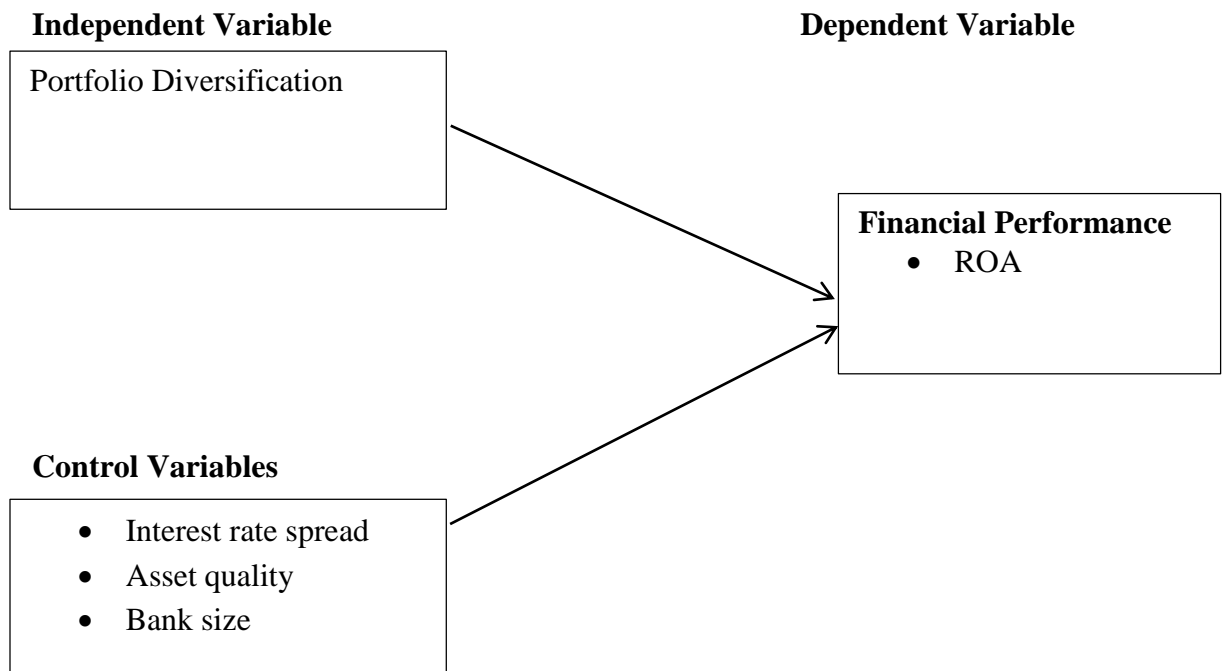
Figure 1.1: Conceptual Framework
Source: Researcher (2018)

The Figure 2.1 shows a diagrammatic representation of the concepts that was used in this study. The independent variables are the determinants of the financial performance of the banks which include related portfolio diversification that is bancassurance, real estate financing and alternative delivery channels in banking while financial performance is construed as the dependent variable.

2.6 Summary of the Literature Review

In this part, theoretical and empirical studies that looked at the concept of portfolio diversification on financial performance in banking are summarised. The study checked at theories related to diversification on financial performance, the Markowitz portfolio theory, capital market theory, and diversification strategy model to give the direction on the key research gaps. A review of the existing literature on portfolio diversification and their relation to financial performance of commercial banks was also done to compare what the other scholars have done. From such evaluations, it is clear that very few contemporary studies have specifically focussed on how portfolio diversification has affected the financial performance of commercial banks and thus it forms a big research gap for scholars to do more on the same field.

Main discussion of some of the factors affecting the financial performance such as bank size, portfolio diversification, asset and management quality and microeconomic variables contributed much in the financial stability of the commercial banks. Many commercial banks have taken major steps in adopting creative diversification strategies with an aim of profit compression and competition pressure, many researchers and investors still have unresolved questions central to this field, Therefore this study sought to investigate if portfolio diversification has any effects on the financial stability of the firms in the banking industry.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that was used in conducting the study. It focuses on the research design, the population identified, data collection method used, and data analysis as well as presentation techniques employed.

3.2 Research Design

In an effort to address the research problem discussed in chapter one, this study used a descriptive research design to investigate the influence of portfolio diversification on commercial banks. This research design allows the comparison of the given variables which have been selected among others since it enables the researcher to explain the observable changes in financial performance due to the diversification of different portfolios in the banking industry.

3.3 Population

Research population of this study was 40 licensed commercial banks. The research adopted census approach given the small size of the population. Their financial statements as well as the annual bank supervision reports prepared by the Central Bank of Kenya was the source of the data used in the research work.

3.4 Data Collection

Secondary data was solely relied upon in this study to achieve the set objective. The data and any relevant information was obtained from the CBK reports and annual published statements of accounts for the commercial banks of Kenya between 2013 and 2017.

3.5 Data Validity and Reliability

The information in this study was extracted and compiled from Central Bank of Kenya and external audited financial statements of the commercial banks. This justifies the

completeness and accuracy of the data used. All the reports are also certified by independent and professional third parties. Golafshani (2003) in his study argues that validity is more focused on testing if the research measures what it is intended to measure and get the results.

3.6 Diagnostic Tests

To study the relationship between the dependent and independent variables in linear regression model, various diagnostic tests such as the tests of normality and multicollinearity tests were used.

3.6.1 Normality Test

Normality test is done because it is impractical to achieve accurate and reliable deductions about the reality on whether the population from which the sample is derived is normally distributed (Ghasemi & Zahediasl, 2012). This study used Kolmogorov-Smirnov test of normality and the graphical method to assess whether the data is normally distributed.

3.6.2 Multicollinearity Test

To ensure the data collected is free from bias and one variable data is not related to another variable data, the study conducted a multicollinearity test. Multicollinearity occurs when there is nearly exact or exact linear relation among two or more of the independent variables. The variance of Inflation was used to test multicollinearity. Whenever the values of VIF less between 1 and 10, then there is no multicollinearity compared to when the VIF is less than 1 or greater than 10, then there is presence of multicollinearity. When the test fails you should standardize the continuous variables by choosing on a standardization method on the regression dialog box. For instance one may choose variable centering approach (Cohen, West & Aiken, 2013).

3.7 Data Analysis

This is the conversion of the data collected into understandable information through application of various instruments of statistics. The collected data was coded cleaned and edited in readiness for processing using statistical package for social science (SPSS V. 21.0). The data gathered was analysed using both descriptive and inferential methods to establish the relationship between portfolio diversification and financial performance of the commercial banks in Kenya. In descriptive statistics, study measured percentages of given variables, means and standard deviation in order to interpret the study findings while linear model that can be used to show the connection between the variables. Tables, figures and graphs was used to present the data findings.

Below is the regression model that was used to show the relationship amongst the independent and dependent variables.

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

Where:

Y = Financial performance which is given by Return on Assets (ROA)

$$\text{Where: } ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

X1 = Portfolio diversification measured using Herfindahl Index

$$HHI = K_1{}^{\wedge 2} + K_2{}^{\wedge 2} + K_3{}^{\wedge 2}$$

Where: **K** is the income stream from…

K_1 = Bancassurance

K_2 = ADC

K_3 = Real Estate Financing

X2 = Bank Size (defined as the natural log (Ln) of total assets) this was a Control variables (S) size

X3 = Interest Rate Spread measured by Interest earned on lending − Interest paid to depositors

X4 = Asset Quality measured by Non-Performing Loans (NPLs) divided by Gross Loans.

$$\text{Where: Asset Quality} = \frac{\text{Non Performing Loans}}{\text{Gross Loans}}$$

ε = Error term / Erroneous variables,

β_0 = is the minimum change in Y when the rest of the variables remains constant,

βi = measure the rate of change in Y.

3.8 Variable Measure

Bancassurance was measured through premiums covers as percentage of total income generated. Alternative delivery channel was measured through service charge collected as percentage of total income generated.

Real estate financing was measured through total interest charged on mortgages as percentage of total income generated. Bank Size measured by the value total assets. The study adopted 5% level of significance and 95% confidence level. Therefore, if the significance value from the analysis is less than 5% level of significance, the conclusion would be that there is significance and the reverse is true.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter focuses on the presentation and interpretation of the study findings. The purpose of the study was to establish the effects of portfolio diversification on financial performance of commercial banks in Kenya and it focused on the year 2013 to 2017.

4.2 Test of Assumptions of the Study Variables

The study performed tests on statistical assumptions i.e. test of regression assumption and statistic used.

4.2.1 Normality Text

Normality was tested using the Shapiro-Wilk test which has power to detect departure from normality due to either skewness or kurtosis or both. It ranges from 0 to 1 and its p values less than 0.05 indicate the data is normal (Rizal and Wah, 2011

Table 4.1: Tests of Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Portfolio diversification	.206	39	.000	.461	39	.001
Bank Size	.166	39	.000	.330	39	.000
Interest Rate Spread	.101	39	.001	.258	39	.000
Asset Quality	.151	39	.000	.238	39	.000

When the p-value is less than the alpha value, then one fails to reject the null hypothesis and does not accept the alternative hypothesis. From the Table 4.1, one cannot reject the null hypothesis H_0 since Portfolio diversification (p = .001), Bank Size (p = .000),

Interest Rate Spread (p = .000) and Asset Quality (p = .000). Therefore the data used in this study was normally distributed.

4.2.2 Multicollinearity Test

To ensure the data collected is free from bias and one variable data is not related to another variable data, multicollinearity test was used. Multicollinearity occurs when there is nearly exact or exact linear relation among two or more of the independent variables. The variance of Inflation was used to test multicollinearity. Whenever the values of VIF less between 1 and 10, then there is no multicollinearity compared to when the VIF is less than 1 or greater than 10, then there is presence of multicollinearity.

Table 4.2: Collinearity Statistics

Variables	Tolerance	VIF
Portfolio diversification	.932	1.435
Bank Size	.887	1.375
Interest Rate Spread	.931	1.177
Asset Quality	.863	1.203

4.3 Descriptive Statistics

Data was collected from the 40 commercial banks, which were operational in Kenya for the five years the average was done. Data collected included: Portfolio diversification, Bank Size, Interest Rate Spread, Asset Quality and data on return on Asset.

Table 4.3: Descriptive Statistics

Year	N	Minimum	Maximum	Mean	Std deviation
Portfolio diversification	40	0.027	0.391	0.1964	0.057
Bank Size	40	8.36	15.32	11.688	3.366
Interest Rate Spread	40	7.52	14.23	10.994	3.142
Asset Quality	40	0.193	0.822	0.3522	0.116
ROA	40	-0.661	0.701	0.063	0.097

Source; Research fidings, 2018

The study considered descriptive statistics for the analysis. Table 4.3 depicts ROA of an average of 0.063 with a minimum of -0.661 and a maximum of 0.701. Portfolio diversification on average was 0.1964 with standard deviation of 0.057. The Herfindahl Index ranged from 0.027 minimum to a maximum of 0.391. Bank Size on average was 11.688 with standard deviation of 3.366. The bank with the least assets had 8.36 while the bank with highest assets had 15.32. The interest rate spread was on average of 10.994 with a standard deviation of 3.142. Also on assessing the Asset quality on average the ratio was 0.3522 with a standard deviation of 0.116. The Asset quality ratio ranged from 0.193 to 0.822.

4.4 Correlation

Table 4.4 presents the findings Pearson Product-Moment Correlation Coefficient: It indicates that there was a strong positive correlation between the Portfolio diversification and commercial banks performance where $r = 0.632$, $p = 0.000$, $n = 40$. The results also revealed that the p-value was 0.000, which is less than 0.05. This implies that statistically there is a significant relationship between the two variables. A positive correlation means that an increase in one variable leads to an increase in the other variable. In this case, an increase in Portfolio diversification would lead to an increase in commercial banks performance.

Table 4.4 Correlations

		Financial Performance	Portfolio diversification	Bank Size	Interest Rate Spread	Asset Quality
Financial Performance	Correlation Coefficient	1.000	0.632	.413	.327	.298
	Sig. (1-tailed)	.	.000	.000	.000	.000
	N		40	40	40	40	40
Portfolio diversification	Correlation Coefficient	.632	1.000	.142	.037	
	Sig. (1-tailed)	.000	.	.000	.000	
	N	40	40	40	40	
Bank Size	Correlation Coefficient	.413	.142	1.000		
	Sig. (1-tailed)	.000	.000	.		
	N	40	40	40		
Interest Rate Spread	Correlation Coefficient	.327	.037			
	Sig. (1-tailed)	.000	.000			
	N	40	40			
Asset Quality	Correlation Coefficient	.298				
	Sig. (1-tailed)	.000				
	N	40				

4.5 Regression Analysis

The study conducted regression analysis to examine whether there exist a relationship

between portfolio diversification and performance of commercial banks in Kenya.

4.5.1 Model Summary

Table 4.5 was used to test if there existed significant variation on the independent

variables and dependent variables.

Table 4.5 Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.842ª	0.709	0.676	1.834

a. **Predictors:** Portfolio diversification, Bank Size, Interest Rate Spread and Asset Quality
b. **Dependent variable:** Financial Performance

R squared of 0.709 indicated that there existed a variation of 70.9% in dependent variable due to change in independent variables. This implied that there was a proportion variation of 70.9% of Commercial banks financial Performance due to influence of Portfolio diversification, Bank Size, Interest Rate Spread and Asset Quality.

4.5.2 Anova

Table 4.6 Anova[a]

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	312.4	4	78.1	21.39	.000[a]
Residual	127.82	35	3.652		
Total	440.22	39			

a. **Predictors:** Portfolio diversification, Bank Size, Interest Rate Spread and Asset Quality

b. **Dependent variable:** Financial Performance

4.5.3 Coefficient Analysis

Table 4.7, β_0= 3.854 represented the constant which predicted value of Commercial banks financial Performance while Portfolio diversification, Bank Size, Interest Rate Spread and Asset Quality were held constant at zero (0).

Table 4.7 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	3.854	0.735		5.244	.000
Portfolio diversification	0.735	0.141	0.632	5.213	.000
Bank Size	0.473	0.045	0.413	10.51	.000
Interest Rate Spread	0.392	0.036	0.327	10.89	.000
Asset Quality	0.272	0.056	0.198	4.857	.000

a. **Predictors:** Portfolio diversification, Bank Size, Interest Rate Spread and Asset Quality
b. **Dependent variable:** Financial Performance

The optimal regression model is therefore:

$$Y = 3.854 + 0.735X_1 + 0.473X_2 + 0.392\ X_3 + 0.272X_4 + \varepsilon$$

Regression results revealed that Portfolio diversification has significance and positive influence on financial performance of commercial banks as indicated by $\beta_1=0.735$, p=0.000. This means that an increase in the Portfolio diversification lead to an increase in financial performance of commercial banks by $\beta_1= 0.735$. Regression results also revealed that the size of the commercial banks has a significance influence on their financial performance as indicated by $\beta_2=0.473$, p=0.000. This implies that an increase in the size of the commercial banks lead to an increase in the financial performance by $\beta_2=0.473$.

Further, the study revealed that there existed a significant positive relationship between Interest Rate Spread and financial performance of commercial banks as indicated by $\beta_3=0.392$, p=0.000. The suggestion is that an increase in Interest Rate Spread would lead to increase in financial performance of commercial banks by 0.392. The regression findings further indicated that there existed a significant relationship between Asset Quality and financial performance of commercial banks as indicated by $\beta_4= 0.272$, $p=0.000<0.05$. This implied that when an Asset Quality is increase by one unit it would led to an increase in financial performance of commercial banks by $\beta_4= 0.479$. This finding concur to that of Sangmi and Tabassum (2000) the size of credit portfolio in a bank determines the profitability of banks and therefore non-performing loan ratios remains the best pointer of asset quality and low ratio indicates better performance by the bank.

4.6 Discussion of the Findings

From the model, Portfolio diversification, Bank Size, Interest Rate Spread and Asset Quality has great influence on the financial performance of commercials banks in Kenya. The study found out that the intercept was 3.854 for all years. Portfolio

diversification, Bank Size, Interest Rate Spread and Asset Quality explained a substantial 70.9% of financial performance of commercials banks in Kenya as represented by R squared (0.709). This therefore means that the four independent variables contributes 70.9% of the financial performance of commercial banks in Kenya while other factors and random variations not studied in this research contributes a measly 29.91% of the financial performance of commercial banks in Kenya.

The Herfindahl Index of commercial banks for the five years was 0.1964 with a maximum of 0.391 and a minimum of 0.027. Stiroh and Rumble (2006) in their analysis noted that an increase in the index indicates less diversification while a decrease in the index indicates increased diversification. Further the study established that bank size which was determined by total assets had average of 11.688 with standard deviation of 3.366. The bank with the least assets had 8.36 while the bank with highest assets had 15.32. Dogan, (2013) in his study argues that big firms enjoy many opportunities of working in sectors that need high capital requirements, this is because they have more resources and enjoys economies of scale. This shows that the commercial banks are working to increase their total assets so as to be competitive and work in more profitable fields. The descriptive analysis also indicated that interest rate spread which was derived from Interest earned on lending minus Interest paid to depositors had an average of 10.994 with a standard deviation of 3.142. The lowest difference between interest earned on lending and Interest paid to depositors was 7.52 while the highest was 14.23. Also on assessing the Asset quality on average the ratio was 0.3522 with a standard deviation of 0.116. The Asset quality ratio ranged from 0.193 to 0.822.

The regression result revealed that Portfolio diversification has significance and positive influence on financial performance of commercial banks. Portfolio diversification was measured by use of Herfindahl Index which included Bancassurance, Real Estate

Financing and alternative delivery channel. According to Schertler (2006) when HHI moves close to its minimum, then it's an indication that banks are extremely diversified across that given sector. The finding implies that when commercial banks portfolio become more diversified then the financial performance improves. Further the correlation analysis established that there was a strong positive correlation between the Portfolio diversification and commercial banks performance where $r = 0.632$, $p = 0.000$, $n = 40$.

Further the study established that size of the commercial banks has a significance influence on their financial performance. This finding concur with Dogan, (2013) in his study argues that big firms enjoy many opportunities of working in sectors that need high capital requirements, this is because they have more resources and enjoys economies of scale. The result means that the more the assets a commercial bank owns the better the financial performance.

A unit increase in the size of the commercial bank leads to an increase of financial performance by $\beta_2=0.473$. Correlation analysis indicated that there was a weak positive correlation between bank size and commercial banks performance, where $r = 0.413$, $p=0.000$ and N=40.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section summarises key findings made in the study, the conclusion drawn from the findings, and recommendations proposed by the researcher. The conclusions and recommendations are addressed in regards to the main objective of the study. It also discusses suggested areas for future research.

5.2 Summary of Findings

The study found that Portfolio diversification had implication on financial performance of commercial banks which means that when commercial banks portfolio become more diversified the financial performance increases. A strong positive correlation between the portfolio diversification and commercial banks performance was established. This implies that an increase in Portfolio diversification would lead to an increase in commercial banks performance

Further the study revealed that size of the commercial banks has a significance influence on their financial performance. A unit increase in the size of the commercial bank leads to an increase in financial performance. This was also confirmed by correlation analysis which revealed a weak positive correlation between bank size and commercial banks performance The more the assets a commercial bank owns the better the financial performance of organisation this is because a large organisation have more resources and enjoys economies of scale.

The study further established that there existed a significant positive relationship between Interest Rate Spread and financial performance of commercial banks. This implies that the larger the gap between interests earned on lending and Interest paid to

depositors the higher the financial performance. Further, a weak positive correlation between Interest Rate Spread and commercial banks performance was established. This means an increase in Interest Rate Spread would lead to an increase in commercial banks performance.

Finally a positive correlation between the Asset Quality and commercial banks performance was noted. The results also revealed the p-value of 0.000, which is less than 0.05. This implies that statistically there is a significant relationship between the two variables. Therefore an increase in asset Quality would lead to an increase in performance of commercial banks. Regression results indicated an increase in Interest Rate Spread would lead to increase in financial performance of commercial banks. Regression results also established that there existed a significant relationship between Asset Quality and financial performance of commercial banks. This implied that when an Asset Quality is increase by one unit it would led to an increase in financial performance of commercial banks.

5.3 Conclusion

This study has provided a comprehensive review on the effects of portfolio diversification on financial performance of commercial banks in Kenya. Based on the findings of this study, the study concluded that portfolio diversification, Bank Size, Interest Rate Spread and Asset Quality has influence on the financial performance of commercials banks in Kenya. Further the study concludes that Portfolio diversification has significance and positive influence on financial performance of commercial banks which means that when commercial banks portfolio become more diversified the financial performance increases. Study also concluded that size of the commercial banks has a significance influence on their financial performance. A unit increase in the size of the commercial bank leads to an increase in financial performance. The more

the assets a commercial bank owns the better the financial performance of organisation this is because a large organisation have more resources and enjoys economies of scale.

Finally the study concluded that there existed a significant positive relationship between Interest Rate Spread and financial performance of commercial banks. This implies that the larger the gap between interests earned on lending and Interest paid to depositors the higher the financial performance. An increase in Interest Rate Spread would lead to increase in financial performance of commercial banks. There also existed a significant relationship between Asset Quality and financial performance of commercial banks. This mean that when an Asset Quality is increase by one unit it would led to an increase in financial performance of commercial banks. The study also concluded that there is a positive correlation between Portfolio diversification, Bank Size, Interest Rate Spread, Asset Quality and financial performance.

5.4 Limitations of the Study

As the university requires the completion of the research document at a specified date, there were time and resource constraints which restricted the researchers' data collection from the individual commercial banks. Nevertheless, the researcher managed to collect data from the financial statements availed to the public by the banks.

Another limitation is on the measurement of financial performance. The researcher used ROA to determine financial performance of commercial banks. However, financial performance could be measured using market ratios and ROE.

Some commercial banks, for example Standard Chartered Banks, have their annually financial statements derived based on their operations globally which fails to have specific impact of portfolio diversification and financial performance in relation to Kenyan context only. The study also faced limitation whereby banks ventured into

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portfolio diversification into different area at different times hence their impacts on the financial performance of commercial bank may also vary

5.5 Recommendations

The study recommends that commercial banks should seek out more clarity on whether fee based income increases due to the adoption bancassurance products, whether selling insurance through the bank promotes bank's efficiency and enhances portfolio performance and whether selling insurance through the bank increases bank's commission income, non-interest income and shareholders' value.

The study therefore recommends that policy makers like capital markets authority to promote policies that encourage commercial banks to practice diversification to mitigate their financial losses and boost their profitability.

The study recommends that commercial banks should increase their level of portfolio diversification to build stability other than concentrating on a single industry or product. This will enhance their predictability about the future and thus boost their financial strengths through making profitable investments decisions.

The study recommends that commercial banks diversify their real estate finance schemes to make it reachable to more customers since real estate had a significant effect of their financial performance.

This study recommends that commercial banks should extend their product mixes to increase profitability through combination of traditional intermediation activities and non interest activities. Also the study recommends that there is necessity for strengthening bank diversification policy through effective and efficient regulation and supervisory framework.

5.6 Recommendation for Further Research

This study recommends that a related study should be carried out regionally and beyond and see whether the same outcomes would be replicated. Also, a study should also be done on the importance of credit diversification on banks performance.

For further studies, this study can be recommended for credits like locational credit diversification, agency theory applications on credit diversification additionally, developed countries and emerging markets can be compared in the basis of portfolio diversification. The study suggests that further research be conducted on the relationship between portfolio diversification and financial performance of SACCO societies and microfinance banks.

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APPENDIX 1: LIST OF COMMERCIAL BANKS

1.	AFRICAN BANKING CORPORATION LTD.
2.	BANK OF AFRICA KENYA LTD.
3.	BANK OF BARODA (K) LTD.
4.	BANK OF INDIA
5.	BARCLAYS BANK OF KENYA LTD.
6.	CFC STANBIC BANK LTD.
7.	COMMERCIAL BANK OF AFRICA LTD.
8.	CONSOLIDATED BANK OF KENYA LTD.
9.	CO-OPERATIVE BANK OF KENYA LTD.
10.	CREDIT BANK LTD
11.	CITIBANK N.A.
12.	DEVELOPMENT BANK OF KENYA LTD.
13.	DIAMOND TRUST BANK KENYA LTD.
14.	DUBAI BANK KENYA LTD.
15.	ECOBANK KENYA LTD
16.	EQUATORIAL COMMERCIAL BANK LTD.
17.	EQUITY BANK LTD
18.	FAMILY BANK LIMITED
19.	FIDELITY COMMERCIAL BANK LTD
20.	FINA BANK LTD
21.	FIRST COMMUNITY BANK LIMITED
22.	GIRO COMMERCIAL BANK LTD.
23.	GUARDIAN BANK LTD
24.	GULF AFRICAN BANK LIMITED
25.	HABIB BANK A.G ZURICH
26.	HABIB BANK LTD.
27.	IMPERIAL BANK LTD
28.	I & M BANK LTD
29.	JAMII BORA BANK LIMITED.
30.	KENYA COMMERCIAL BANK LTD
31.	K-REP BANK LTD
32.	MIDDLE EAST BANK (K) LTD
33.	NATIONAL BANK OF KENYA LTD
34.	NIC BANK LTD
35.	ORIENTAL COMMERCIAL BANK LTD
36.	PARAMOUNT UNIVERSAL BANK LTD
37.	PRIME BANK LTD
38.	STANDARD CHARTERED BANK
39.	TRANS-NATIONAL BANK LTD
40.	VICTORIA COMMERCIAL BANK LTD

APPENDIX 2: RESEARCH DATA

Name	AVE. HHI	AVE. Log Bank Size	AVE. Log Interest rate	AVE. Asset quality
African Banking Corporation Ltd.	0.1780342	12.1964300	11.1266489	0.4122043
Bank of Africa Kenya Ltd.	0.1653938	12.5918655	10.5324573	0.2768669
Bank of Baroda (K) Ltd.	0.1578122	11.5583942	10.7804425	0.2231071
Bank of India	0.1077568	11.4322732	9.8776157	0.3638635
Barclays Bank of Kenya Ltd.	0.0830987	12.4685599	11.4855037	0.3048742
CFC Stanbic Bank Ltd.	0.1634952	11.3147310	11.7219786	0.2296106
Commercial Bank of Africa Ltd.	0.3064490	10.9154955	11.0844040	0.2509990
Consolidated Bank of Kenya Ltd.	0.3231830	11.6138166	11.3995138	0.2831214
Co-operative Bank of Kenya Ltd.	0.1314542	12.4223823	10.9132757	0.3309293
Credit Bank Ltd	0.0965656	11.3184491	10.1005214	0.3515157
Citibank N.A.	0.1749507	12.3973718	10.0220650	0.2909123
Development Bank of Kenya Ltd.	0.2002042	12.0070387	10.1795571	0.2817794
Diamond Trust Bank Kenya Ltd.	0.2636765	11.9160832	11.0475939	0.2997686
Dubai Bank Kenya Ltd.	0.1903885	12.3966008	9.9166430	0.3233541
Ecobank Kenya Ltd	0.2063733	11.5950679	10.4895610	0.4281210
Equatorial Commercial Bank Ltd.	0.2872011	10.8832295	11.5078218	0.3252775
Equity Bank Ltd	0.1396043	11.7741873	11.3171047	0.3764750
Family Bank Limited	0.0704557	11.1555625	9.9011225	0.4598181
Fidelity Commercial Bank Ltd	0.0834379	10.6282029	10.3867751	0.3612345
Fina Bank Ltd	0.1292553	11.5483998	10.5116304	0.3422255
First community Bank Limited	0.1440753	12.0218119	11.3994676	0.2498918
Giro Commercial Bank Ltd.	0.2118070	12.3655956	11.4281926	0.3662385
Guardian Bank Ltd	0.2504763	10.6723970	10.2917177	0.3538598
Gulf African Bank Limited	0.2731748	12.6307970	11.5815780	0.3360825
Habib Bank A.G Zurich	0.1123471	12.4097435	10.7205806	0.4478887
Habib Bank Ltd.	0.2584445	11.1127431	10.2142755	0.4697398
Imperial Bank Ltd	0.2650349	11.2686717	10.3305038	0.4109194
I & M Bank Ltd	0.2012577	10.6558755	11.7890529	0.3368997
Jamii Bora Bank Limited.	0.1636270	12.5229034	11.6450230	0.4758073
Kenya Commercial Bank Ltd	0.2736476	12.1028156	10.3420380	0.2635784
K-Rep Bank Ltd	0.2845677	12.6112225	9.9799685	0.3071431
Middle East Bank (K) Ltd	0.2231269	11.4749177	11.4233061	0.3587421
National Bank of Kenya Ltd	0.2319596	11.8668950	11.2337176	0.4213625
NIC Bank Ltd	0.1386114	11.0277834	10.0316333	0.3913428
Oriental Commercial Bank Ltd	0.1750898	10.6031122	11.0757333	0.4335560
Paramount Universal Bank Ltd	0.0658637	11.1424735	11.1641657	0.2648232
Prime Bank Ltd	0.2294603	10.6929445	10.1847853	0.3682959
Standard Chartered Bank	0.2973287	12.5185354	11.3357503	0.2564318
Trans-National Bank Ltd	0.1306040	10.8714300	11.7219964	0.2994970
Victoria Commercial Bank Ltd	0.0653872	12.0370566	10.2216668	0.2971430