

**ANALYSIS OF FINANCIAL STRUCTURE ON FINANCIAL PERFORMANCE  
OF TIER ONE COMMERCIAL BANKS IN KENYA**

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## DECLARATION AND APPROVAL

### Declaration

This project is my original work and has never been presented for any academic award in any institution.

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MBA/2020/63354

Signature:  .....

Date: 25/06/2025

### Approval

This project is being submitted for examination with our approval as University supervisor.

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Signature:  .....

Date: 25/06/2025

## DEDICATION

I dedicate this research to God Almighty, my Parents and my big brother for their support and encouragement during the entire period of my study.



## AKNOWLEDGEMENT

I want to thank God Almighty for giving me life and providing me everything I needed to write this project and I thank my parents and my big brother Landry Makarakiza for their financial support, my supervisor Dr Martin Onsiro for his recommendations and guidance, also my friends for their assistance.



## ABSTRACT

In Kenya, the financial performance of commercial banks has been inconsistent, with some recording increasing profits while others have recorded decreasing profits. The general objective of this research is to analyse the effect of financial structure on financial performance of Tier one commercial banks in Kenya. This research was guided by four objectives which were to examine the effect of retained profits on the financial performance of Tier one commercial banks in Kenya, to assess the effect of short-term debt on the financial performance of Tier one commercial banks in Kenya, to investigate the effect of long-term debt on the financial performance of Tier one commercial banks in Kenya and finally to assess the effect of share capital on the financial performance of Tier one commercial banks in Kenya. Descriptive study design was used towards those tier one commercial banks where secondary data was collected using their annual financial reports from 2018 to 2022, and data to be represented in tables and analysed using SPSS software. Mean standard deviation and ANOVA was utilized for descriptive statistics and inferential statistics. To measure financial performance, several different ratios were utilised, inclusive of return on equity, return on assets, and net interest ratio, and so on. The study purports to sought ethical clearance from Mount Kenya University Ethical Review Committee (MKUERC) and NACOSTI. Results displayed the correlation between the effects of financial structure on a Bank's performance. The ANOVA (Analysis of Variance) evaluated the significance of the regression model. The F-statistic of 6.003, with a significance value of 0.018, indicates that the model as a whole is statistically significant at the 5% level. This means that at least one of the independent variables significantly affects financial performance. The regression analysis shows the coefficients ( $\beta$  values) for each bank in relation to the predictors. The regression analysis indicates that each of the independent variables has a positive effect on the financial performance of Tier One commercial banks in Kenya. Specifically, a one-unit increase in retained earnings (X1) is expected to increase financial performance by 0.234 units ( $p$  value $<0.05$ ), suggesting that retained earnings play a role in improving the banks' financial outcomes. Similarly, a one-unit increase in short-term debt (X2) is anticipated to lead to a 0.286 ( $p$  value $<0.05$ ) unit increase in financial performance, highlighting the positive influence of short-term debt on performance. Long-term debt (X3) has the most significant impact, with a unit increase in long-term debt expected to boost financial performance by 0.375 ( $p$  value $<0.05$ ) units. Finally, share capital (X4) is also positively associated with financial performance, with a one-unit increase expected to result in a 0.314 ( $p$  value $<0.05$ ) unit increase in performance. These findings underscore the importance of each of these financial factors in enhancing the overall performance of the banks, with long-term debt showing the strongest relationship. Banks should focus on efficient management of long-term debt to maximize its positive impact on financial performance. Regular assessments of borrowing strategies and investments can help mitigate risks associated with high borrowing costs and inefficient debt usage.

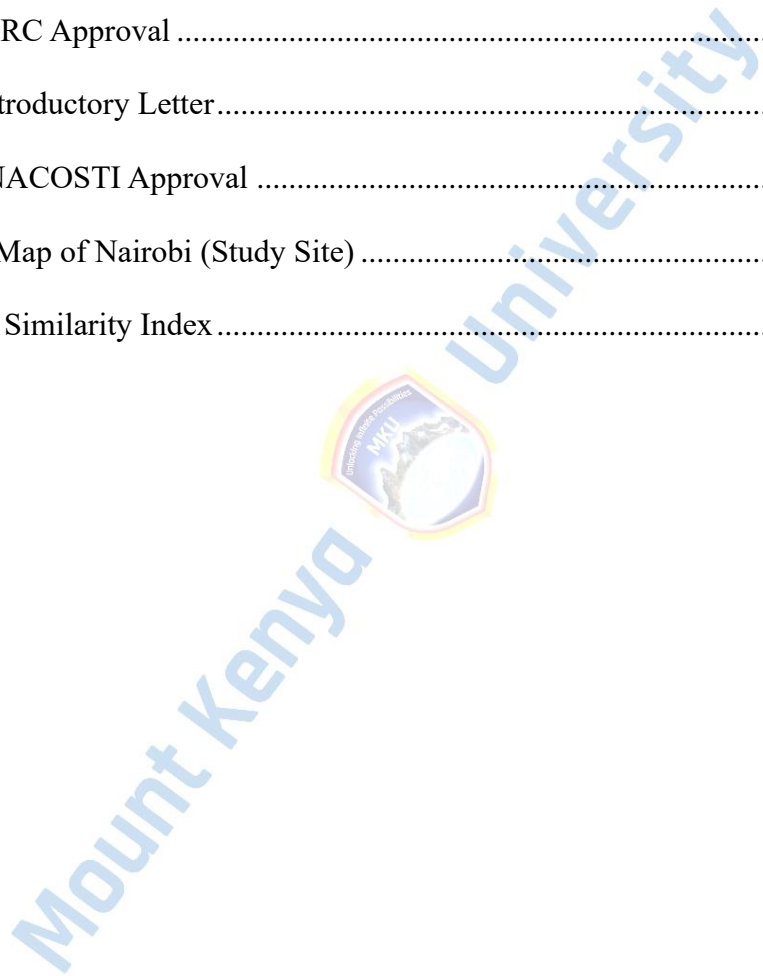
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## LIST OF ABBREVIATION AND ACRONYMS

<b>ASEAN</b>	The Association of South East Asian
<b>CBK</b>	Central Bank of Kenya
<b>CFI</b>	Corporate Finance Institute
<b>GCC</b>	Gulf Council Countries
<b>I&amp;M</b>	Investments and Mortgages
<b>MENA</b>	Middle East and North African
<b>MM</b>	Modigliani Miller
<b>NACOSTI</b>	National Commission Science Technology and Innovation
<b>NSE</b>	Nairobi Stock Exchange
<b>ROA</b>	Return On Asset
<b>ROE</b>	Return On Equity



## CHAPTER ONE

### INTRODUCTION

This Chapter intends to explore the Background of the study as well as the justifications for the research.

#### 1.1 Background of the study

Strong and profitable financial markets as well as a more robust monetary structure that can resist negative shocks are both enhanced by the strong financial performance of commercial banks (Kuria, 2015). Ineffectiveness may result in financial institutions runs, bank crises, and lead to a significant financial predicament. According to Kuria (2015), it is possible to assess the monetary effectiveness of listed commercial financial institutions by comparing their earnings to other indicators, such as total shareholder equity and holdings (Kuria, 2015).

Success demonstrates a financial institution's financial achievement. Any type of organization's top priority should be increasing financial efficiency, and it's crucial to assess keeping an eye on people and teams inside the company that contribute to its financial goals. Several measures, including return on equity, return on asset, and net interest margin, are utilized to assess financial performance (Gatsi & Akoto, 2015).

The disagreement arises from different prospects, insights and concepts on how to achieve an ideal financial structure that reduces a corporation's cost of capital and increases its profit (Harrison, 2021). Commercial banks find themselves at a crossroads in attempting to accomplish an ideal method of financing their financial structure. For commercial banks to be operationally sustainable, choosing the right funding option is essential (Kipsha & Moshi, 2014).

But research indicates that most of the time, commercial banks make the wrong choice when it comes to finance capital, which causes disruptions to their business and

negatively affects their financial performance. Because the mechanism of financing affects the cost and accessibility of capital, which additionally affects the daily activities of the commercial bank; financial structure, which includes debt (bonds), equity (stock), or a combination of the two, continues to be of great importance to academics and business organizations (Magero, 2014).

### **1.1.1 Financial structure**

Financial structure illustrates the combination of financial resources that a company relies on to support its activities. The financial mix includes the utilisation of equity or debt or a hybrid of both (Saona, 2015). The significance of financial structure cannot be overstated as it is nearly connected to the worth of the company. Therefore, a wrong decision regarding debt and equity composition can lead to capital wastage that negatively impacts the financial performance of the company. The choice of financial structure is very crucial in any corporation as it has a straight impact on decisions regarding the success of any company. Therefore, financial structure as a funding resolution procedure of commercial banks is positively correlated to its existence (Saona, 2015). Capital is important to maintain the operations of commercial banks. Structured financing involves several kinds of securities that a company owns in the form of debt and long-term financing. Securities include preferred stock, retained earnings (inside stock), and common stock (outside stock) (Harrison, 2021). Common equity is created by selling common shares to shareholders that are in the public sphere (Haron, 2016). Share capital is the entire capital of an organization split into shares. A shareholder-owned business needs enough capital to fund its activities. Finances are collected by auctioning out shares in exchange for money or another benefit. Typically, an organization raises capital through bonds (debt capital) and selling shares (equity). These finances give existence to the organization entity, allowing it to begin activities

and thus achieve the goals for which it was created. Equity refers to the amount of value that shareholders contribute to the company. Retained earnings are the parts of an organization's net profits that are kept by the organization and reinvested in the organization or used to pay down debts owed by the organization, rather than being distributed as dividend to shareholders. Retained earnings are reported as shareholders' equity in the financial statement. General reserves and revenue reserves are instances of retained earnings. A revenue reserve is a kind of revenue that an organization uses to offset or hide a decline or decrease in profits to support the company during its recovery (Haron, 2016).

Revenue reserves are a reasonable form of financing for businesses and are also used to increase credit scores when looking for credit financing. Short-term financing define assets that are certain to be used, converted into cash flow, and paid off per annum. Short-term assets are normally funded by short-term debts (Kipesha & Moshi, 2014) and are settled as 5% of short-term obligations of total assets held. Short-term liability is a way of financing with maturity of not more than or equivalent to one year and must be repaid within 3 to 4 months. Short-term liability is chosen when financing is required quickly and there is low need for long-term liability. For example, the benefit of using short-term financial obligations lies in reducing taxes for an organization. Short-term auto loans attract low interest rates because most lenders do not charge interest unless default occurs (Kipesha & Moshi, 2014).

Long-term financial obligations involve strict legal agreements between the company and the debt provider, are often purchased in exchange for interest for the company, and are also related to the company's economic distress. Long-term cash liabilities are valued as long-term obligations divided into total assets. This is by reason of high levels

of financial obligations increase the amount of interest that must be paid frequently, which can cripple a company's liquidity levels (Birru, 2016).

#### **1.1.1.1 Global perspective**

The banking industry in Europe has actually undergone significant changes throughout the past 20 years, with a wave of mergers, dilemmas regarding national financial obligations (Harrison, 2021), restructuring but also changes in the structure of approaches and legal audits. -accounting reforms, are some adjustments that have taken place. The European Union has actually implemented, encouraged and announced a number of several initiatives that have influenced the financial performance of banks in the area (Harrison, 2021).The major goal of all these activities is to build a marketplace with a standard legal system as well as the enforcement of a convergency model. Since 1980,almost 7,000 merging banks have taken place in the US, as well as in the UK and other European nations.

The MENA region's poor job and growth results are also a reflection of the shallowness of the finance sector's reforms. While many of the region's nations achieved improvements in their banking sector reforms, A number of MENA nations, including the GCC, Jordan, Lebanon, Morocco, and Tunisia, have improved banking supervision and regulation, set up modern protocols for routinely gathering prudential data, and conducted bank inspections and audits. However, these reforms fell short in the majority of other nations and did not level the playing field within the private sector or between state-owned and private businesses. The region's nations have sizable banking systems, but they also have the greatest global rates of credit concentration. They have increased capital adequacy ratios and decreased nonperforming loans in an effort to comply with worldwide Basel criteria. But progress in the latter has been patchy, with

nonperforming loans still accounting for 10–20 percent of total loans in the majority of countries (Arayssi et al., 2019).

In Pakistan, many commercial banks are having difficulty maintaining operations, because of inadequate financial structures. Many commercial banks are relying on loans to fund their operations in this country (Gohar & Rehman, 2016). It is assumed that the difficulty of commercial banks' survival and their failure are the consequences of the weakness of the financial structure, although this assertion remains to be established empirically. In Bangladesh, commercial banks have difficulty maintaining an optimal financial structure due to underdeveloped bond and equity markets (Siddik et al., 2017).

In the past ten years, Latin America has regularly experienced rapid economic expansion and steady financial development. The progressive alteration of the economic and social structures of the Latin American and Caribbean region makes it a prime site for researching the effects of human activities on environmental degradation (including energy use and financial liberalization). Globalization has led to increased production, and economic growth has shown to be a key tool for commercial expansion (Haseeb et al., 2018). However, rising energy consumption brought about by financial gain and quick productivity has resulted in environmental deterioration. However, due to a lack of sustainable planning in the country's rural and urban areas, this growth has resulted in deforestation, soil erosion, habitat destruction for wildlife, and carbon pollution, which has contributed to global warming (Haseeb et al., 2018).

#### **1.1.1.2 Regional Perspective**

In Ghana, financial leverage of commercial banks remains at 84% of total capital, including 77% of short-term debt, in spite of the rise in banks' minimum capital levels. The benefit of Ghana's commercial banks is negatively impacted due to the wide ratio

of long-term to short-term debt (Gatsi & Akoto, 2015). In Nigeria, commercial banks' overreliance on loan capital has an adverse effect on their return on assets (Adeniyi et al., 2020). In Uganda, commercial banks struggle to maintain optimal financial structures aimed at improving benefit and resilience. (Serwadda, 2019) claims that the efficiency of banks in Uganda has declined since 2010, as evidenced by the increasing number of bank defaults and bankruptcies. Twesigye and Patrick (2020) note that commercial banks in Rwanda struggle to strike the right balance when it comes to funding their operations with debt or equity. They further note that Rwandan commercial banks don't manage the proportion of debt to equity while financing their banking activities, which prevents them from performing at their best financially (Twesigye & Patrick, 2020).

#### **1.1.1.3 Local Perspective**

In Kenya, the financial performance of commercial banks has been inconsistent, with certain banks recording increasing profits while others have recorded decreasing profits. Numerous commercial banks in Kenya have occasionally closed. Inadequate financial frameworks were cited as the reason behind the failure of Chase Bank in 2016 and Imperial Bank Limited in 2015 in Kenya. This calls into question the events of 2015 and 2016, when the banking industry suffered a decline in profits of 5% and 10% respectively and has not yet fully recovered. Many banks have been compelled to undertake mergers or acquisitions in Kenya to strengthen their financial structures. In 2017, SBM Holdings purchased Fidelity Bank (Harrison, 2021).

The resolution to strengthen the financial structure was necessary not only by reason of the necessity to optimize profits for the various organizational components but also by reason of the impact of that resolution on the corporation's capacity to care for the environment competition (Harrison, 2021). This isn't always the case, though, since the

larger part of commercial banks struggle to put together a good mix of funding for their operations, endangering their ability to endure eventually (Serwadda, 2019). As a result, making incorrect decisions about the ratio of debt to equity, for instance, can raise capital costs, raise financial risk, reduce profitability hence leading to possible closure of the company.

Inappropriate financial structure choices can lead to excessive capital costs, which is an automatic catalyst for a company to collapse. The choice of financial structure is an important resolution in a company for the reason that it has a straight effect on decisions regarding the success of any company. Therefore, financial structure is one of the necessary financial systems of banks and is nearly linked to the existence of banks (Saona, 2015). Capital is needed to maintain the operations of commercial banks, maintain social confidence as well as to mobilize enough deposits for customers.

### **1.1.2 Financial Performance**

Financial performance is the situation of the business's finances in a certain period that comprises the collection and utilization of finances calculated by indicators such as the capital adequacy ratio, liquidity, leverage, solvency, and profitability. The financial performance of a corporation is determined by how well it manages and controls its resources, It's the way a business utilizes its funds to produce income for itself, financial performance reflects a business's performance eventually (Moradi, 2020). To assess a business's ability of generating profits financially, particularly those in the banking sector, is to consult its financial statements which consist of cash flow, balance sheet, profit and loss, and changes in capital. Those financial statements can be yearly, half-yearly or quarterly basing on how they want it to be. the financial statements represent the financial state of a business and include the balance sheet of profit and loss as well as additional financial data including cash flows and retained earnings

(Fatihudin, 2018). Depending on what they are interested in, financial statements may occasionally be made in distinct versions. There are financial reports available for commissioners and managers, for the general meeting of shareholders, for obtaining bank credit loans and also for tax payment.

The four factors mentioned above can be used to analyze the financial condition of a business. If a business has excessive earnings, it might be considered financially sound. The ratio of operating costs to operating income provides evidence of this. When operating income exceeds operating costs, profit results. If the reverse occurs, there was a deficit because the operational income is less than operational costs.

Saona (2015) states that a balanced scorecard may be used to examine a company's performance, focusing on four important aspects: financial, internal business processes and learning, customer, internal and growth. Return on equity, net profit margin, return on assets, and net profit margin are a few measurements of listed commercial banks' financial performance. Net interest margin is the value of interest revenue generated by a bank after subtracting the sum of interest the lender receives from total assets. Net income is the ratio of income produced minus loan interest to total assets. The return on assets is considered an overall measure of financial performance. ROA can also be utilized to depict how efficiently a business is operating. ROA helps demonstrate a bank's capability to convert resources into revenue. Several ratios, which includes the liquidity, profitability, solvency, efficiency, and leverage ratios, are utilized to evaluate a corporation's financial performance (Saona, 2015).

In conclusion, the financial performance is the business's financial accomplishment, and it's critical to comprehend the management of the business.

### **1.1.3 The Tier one Commercial Banks in Kenya**

The Central Bank of Kenya (CBK) is the principal controller of the banking sector in Kenya. According to the Central Bank of Kenya (CBK), there are three types of commercial banks in Kenya. These three categories are often known as tiers. Each tier's features are determined by their asset holdings, market share, customer deposits, and capital (Central Bank of Kenya, 2019). Tier one banks are the biggest financial institutions. They have billions of shillings in capital, assets, and customer deposits. Kenya presently has nine tier-one banks. These include Equity Bank, Kenya Commercial Bank, NCBA Bank, Cooperative Bank, Stanbic Bank, Standard Chartered Bank, Diamond Trust Bank (DTB), Absa Group Limited and I&M bank. These banks held roughly 90.3% of deposit accounts, 66.7% of total deposits, 49.9% of the financial sector, and 94.10% of loan accounts. Tier two comprises sixteen commercial banks which are medium-sized banks managing 41.7% of the financial market share. The 3rd tier comprises twenty one banks which are small banks that manage the other part, which is 8.4% of the financial bank market share (Central Bank of Kenya, 2019). Commercial banks in Kenya operate to receive deposits from customers as well as lending organizations. Its functions also include maintaining liquidity to support depositors as well as establishing a financial foundation to support savings. In Addition, commercial banks contribute a lot in the economic progress of a nation by paying income tax obligations while also lending the federal government finances to fund development programs. Commercial banks are recognized and controlled in agreement with the requisites of the Companies Act, the Finance Act, the policies of the Reserve Bank of Kenya as well as the prudential guidelines provided regularly by the Central Bank of Kenya (CBK). Based on Central Bank of Kenya policy, banks must hold at least 14% of their accumulated assets as core resources. Commercial banks that manage

large amounts of finance are capable of making even riskier and more profitable financial investments than banks that hold fewer resources and also have to rely on into loan capital (Central Bank of Kenya, 2019).

### **1.2 Statement of the problem**

The relationship between financial structure and financial performance remains a critical concern for businesses, particularly in the banking sector where effective financial management directly influences economic growth and stability. According to Puatwoe and Piabuo (2017), nations with stable financial systems value rapid financial development more than those with less stable and disorderly economies, and sustained economic growth depends on a robust financial system. The consistent and strong performance of banking market institutions is a sign of increased profitability and stability within the financial industry. Better performance by banks and insurance companies results in higher profitability for commercial banks and more money available for investment (Puatwoe & Piabuo, 2017). Studies conducted over the past twenty years have revealed that commercial banks in sub-Saharan Africa are proven to be more lucrative than commercial banks worldwide, with an average return on assets (ROA) of 2% .These have been determined by decisions made on finances, such as investing in risky businesses. Another possible reason why commercial banking is so profitable in sub-Saharan Africa is that there exists a significant disparity among the demand for banking services and the supply of banking services (Puatwoe & Piabuo, 2017).

Kenyan commercial banks' performance has varied; while some have reported increasing profitability, others have reported diminishing profitability. This begs the question of what happened in 2015 and 2016, when the banking industry saw declines in profitability of 5% and 10%, correspondingly (Ndungu, 2019). According to Ndungu

(2019), major tier1 banks also saw a significant fall in profits in 2018, their combined return on equity (ROE) was 17.03%. A few commercial banks were forced out of the market by this drop in profits. For example, insufficient financial structure was blamed for the failure of Imperial Bank Limited, Chase Bank, and Dubai Bank, yet this has not yet been shown experimentally (Ndungu, 2019). In Kenya, other banks—Giro and I&M, NIC Bank and CBA—have been compelled to combine or acquire one another in order to fortify their financial structures. 2017 saw SBM Holdings buy Fidelity Bank.

The subject of financial structure continues to be very contentious among corporate finance experts. Divergent opinions, insights, and beliefs on how to achieve the ideal financial structure to reduce a corporation's cost of capital and augment its worth are the root of the dispute. The choice of financing source for commercial banks is essential to their ability to continue operating sustainably (Kipsha & Moshi, 2014). Nevertheless, most of the time, commercial banks make the mistake of choosing the best capital financing option, which disrupts their business and negatively affects their bottom line. Financial structure includes debt (bonds), equity (stock), or a combination of one and the other. Because the method of funding determines the outcome on the value and accessibility of capital, which affects the commercial bank's ability to operate, financial structure is still of great interest to business organizations and academic researchers. Kenyan commercial banks currently have an average capital adequacy ratio of 18%, far higher than the regulation minimum of 8%. Regulations are a second-order predictor of Kenyan banks' financial structures, as (Gropp & Heider, 2019) found. The Basel II capital rules, which mandate that banks have capital adequacy ratios of no less than 8%, were approved by the Central Bank of Kenya (CBK). Beck, Demirguc-Kunt, and Peria (2018) claim that banks' average capital needs are 18%, which is significantly higher than the suggested ratio of 8% (Beck et al., 2018).

An adequate and suitable combination of financial structure is necessary for a firm to make important decisions about how to finance its operations. These capital finance choices are essential for both maximizing a company's profits and ensuring its survival in the fast-paced, cutthroat business world (Serwadda, 2019). This isn't always the case, though, as many commercial banks struggle to put together an appropriate mix of funding for their operations, endangering their ability to endure in the long term. As a result, making poor decisions regarding the ratio of debt to equity, for instance, can lead to costly capital, higher financial risk, which lowers profitability, and eventually can cause a company to fail. The empirical literature also indicates that practitioners and academics are not entirely in agreement about how financial structure influences the financial performance of commercial banks, some researchers have discovered favorable relation while others have discovered negative one (Serwadda, 2019); Then this study was driven by the absence of agreement on the relation connecting financial structure and commercial bank performance in the setting of Tier one commercial banks in Kenya.

### **1.3 Purpose of the study**

The purpose of the study was to analyze the effect of financial structure on financial performance of Tier one commercial banks in Kenya.

### **1.4 Objectives of the study**

The objectives of the research are:

- i. To examine the effect of retained profits on the financial performance of Tier one commercial banks in Kenya.
- ii. To assess the effect of short-term debt on the financial performance of Tier one commercial banks in Kenya.

- iii. To investigate the effect of long-term debt on the financial performance of Tier one commercial banks in Kenya.
- iv. To assess the effect of share capital on the financial performance of Tier one commercial banks in Kenya.



## **1.5 Hypotheses**

The hypotheses that guided this study were as follows:

**H<sub>01</sub>:** Retained earnings did not have a statistically significant effect on the financial performance of Tier One commercial banks in Kenya.

**H<sub>02</sub>:** Short-term debts did not have a statistically significant effect on the financial performance of Tier One commercial banks in Kenya.

**H<sub>03</sub>:** Long-term debts did not have a statistically significant effect on the financial performance of Tier One commercial banks in Kenya.

**H<sub>04</sub>:** Share capital did not have a statistically significant effect on the financial performance of Tier One commercial banks in Kenya.

## **1.6 Significance of the study**

### **1.6.1 Academic performance**

This research is designed to assist the writer to gain new knowledge on how to conduct research and help me obtain a master's program in my academic field. The findings might also serve as a foundation for upcoming investigations on the relation of financial structure and performance. The outcomes was accorded as a point of reference for future scholars interested in research.

### **1.6.2 Bank Management**

The outcomes of my study was extremely beneficial to Tier one commercial banks in Kenya, policy makers and future researchers. The findings was crucial for these commercial banks in choosing the accurate mix of debt and equity financing for their activities. These Tier one commercial banks was able to minimize losses by identifying risk variables that influence their financial performance and increase their profits and to ensure an optimal combination of debt and equity solutions in the financial structure to optimize financial efficiency and remaining activities.

### **1.6.3 Policy makers**

The outcomes of this research will impact policy makers, especially the tier one commercial banks in Kenya. The policy regulators will have a better chance of adopting financial structure policies that can help banks to optimally decide between equity and debt as financing methods.

### **1.7 Scope of the study**

This investigation concentrated on Tier 1 commercial banks in Kenya in the period between 2018 and 2022. The study used yearly panel data on the banks, and secondary data was taken out of the commercial banks' financial annual reports. The analytical study was based on a panel regression model.

### **1.8 Study Limitations**

This study had limited access to secondary data and it could be difficult to collect the necessary information from the internet sources, seen that some data may not be available.

### **1.9 Delimitations**

The researcher addressed potential limitations associated with the use of secondary data by ensuring that all data used in the study were obtained from credible and verifiable sources, such as official commercial bank websites and reports published by regulatory authorities. To enhance the reliability of the findings, participants were informed that the data collected would be used strictly for academic and research purposes, thereby encouraging openness and accuracy in information sharing.

Furthermore, recognizing that some Tier One commercial banks in Kenya had incomplete annual financial records for the study period, the researcher employed an unbalanced panel data model to accommodate the variations in data availability without compromising the validity of the analysis. The study was also delimited to Tier One

commercial banks in Kenya due to their substantial market share, regulatory importance, and consistency in financial reporting, making them suitable for evaluating the impact of capital structure on financial performance.

#### **1.10 Assumptions of the study**

This research assumed that the sample size was adequate and respondents were able to provide relevant information based on the availability of their bank's annual financial records.



### 1.11 Operational Definition of Key Terms

**Debt:** To put it in simple terms, debt is the money that a borrower owes to a creditor. A debt is a sum of cash borrowed for a predetermined period of time that must be paid back, with interests. The amount of the loan and whether it was approved or not are both dependent on how trustworthy the borrower is. Debt is categorized as either long-term or short-term in accounting. Debt with a payback period longer than a year is known as long-term debt. Conversely, debt that is payable in a year is known as short-term debt. Both kinds of debt are shown as liabilities on the balance sheet of a business.

**Financial structure:** A business's financial structure is the mixture of debt and equity it applies to fund its functioning. A business's financial leadership has the responsibility of deciding on the best mix of debt and equity to optimize the financial structure. A business's financial structure is generally mentioned as its capital structure.

**Net interest margin:** The difference between the interest that banks earn and the interest that they pay to their creditors (such as deposit) is calculated by the Net Interest Margin (NIM), in proportion to the quantity of their assets that generate income. This is often calculated as a percentage of a financial institution's earnings on debts and resources during a specific time frame, less interest payments, divided by the average revenue from assets during this specific time frame.

**Return on assets:** ROA is another important ratio used to determine how profitable a bank is. It is ratio of income to its total assets. This metric assesses the bank's leadership's ability of producing income from its available assets. This demonstrates how well the assets of a business are utilized to create revenue.

**Return on equity:** Return On Equity (ROE) is a financial measurement evaluating a corporation's profit to its total shareholder equity investment. Shareholders seek return on equity (ROE) for their investments. A significant return on equity indicates the capacity of a company to generate income within. A greater ROE indicates a more profitable corporation.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter includes theoretical literature which supported the study conceptual framework study of the variables, empirical literature review where the ideas that govern the research was analyzed and also discussed the previous literature review done by different authors in relation to my study objective. Finally, this literature ended up by summarizing the critical review gaps identified in different areas of the study.

#### 2.1 Empirical literature

##### 2.1.1 Retained earnings and Financial Performance

A percentage of a company's net earnings which is retained by the company and reinvested in the company or used to pay off debts owed by the company is known as retained earnings. Retained earnings are described as shareholders' equity in the financial statement. Retained earnings include, for example, capital and revenue reserves (Haron, 2016). A company's revenue reserves are a sort of earnings that are utilized to make up for a drop in profit revenue and keep the business afloat. It is one of the most advised sources because it is frequently the least expensive source of resources when compared to equity and economic debt, In addition to other components of the financing, it is taken back to maintain corporate operations. A corporation can finance itself more affordably by using revenue reserves, which are also helpful in boosting a company's credit rating(Haron, 2016).

Chughtai & Azeem (2014) study used a Pearson correlation matrix at the firm level to examine relationships between various earnings components. The retained earnings components have a considerable, favorable impact on the firms' net future earnings, as this article makes clear. conducted research on the effect of retained and distributed

earnings and invested capital on financial performance. A sample of 99 Pakistan listed firms' data covering the years 2006–2011 was used. To thoroughly examine the relation among the variables, the research included panel regression analysis as well as descriptive analysis. The outcomes of the research make known that dividends and earnings have a constructive and substantial link with financial performance. However, the investigation did not identify any relation among capital utilized and retained earnings with financial performance (Chughtai & Azeem, 2014).

Thirumalaisamy (2020) investigated how corporate earnings retentions affected efficiency. The study's time frame covered the years 2002 through 2016 with a focus on Indian companies' development in retained earnings. The study proved that retained earnings are not used in an efficient manner, which has an effect on the corporate benefit of enterprises in Indian. Companies may make money, but shareholders lose money because retained earnings are devalued in the stock market. The fundamental tenet of earnings retention, according to Thirumalaisamy, is that a company's prospects of expanding and achieving better financial performance increase with the amount of earnings it keeps (Thirumalaisamy, 2020).

On the balance sheet, retained earnings are often listed under shareholders' equity. According to Wu, Y.-C. and Wei Kiong Ting, cumulative retained earnings are similarly connected to periodically retained earnings. They are calculated by deducting any dividends given to shareholders and adding net income to the initial retained earnings, or removing any net losses (WU et al., 2020). Wu et al. (2016) did research on the performance of ASEAN banks and how earnings management affects it. The study's period frame was from 2007 to 2014, and its target audience was made up of ASEAN commercial banks. Ratios for management and profitability evaluation were utilized to evaluate bank performance. The study discovered a negative and remarkable correlation

among ASEAN banks' performance and their methods for managing earnings (Wu & Kweh, 2016).

The study must be conducted in the circumstances of Kenyan commercial banks because the funding of commercial banks may vary from area to area depending on the modalities of funding. By concentrating on the Niger Mills Company, Basse et al. (2015) looked into how retained profit affects corporate performance. Information was taken out of Niger Mills Company Ltd. The findings showed that Niger Mills Ltd.'s retained earnings are an important predictor of retained profits (Basse et al., 2015). Retained profits may increase Niger Mills Ltd.'s earnings in the future. However, the study 14 concentrated on Niger Mills Company, whose business operations are very different from those of the banking industry and present contextual.

### **2.1.2 Short Term Debt and Financial Performance**

All of a corporation's debt that has payments due within the current fiscal year is referred to as short term debt. The significance of short-term debt cannot be overstated in assessing the financial performance of a company. Liquidating short-term assets and liabilities is simple, yet they mature quickly and must be paid back quickly (Gatsi & Akoto, 2015). Income taxes, lease payments, wages, accounts payable, and short-term bank loans are all examples of current liabilities, often known as short-term debts. Gatsi et al. (2015) found that businesses extremely count on short-term debt to pay for their obligations in the near future and short-term liabilities typically finance short-term possessions (Gatsi & Akoto, 2015).

Muchugia (2015) found a strong positive correlation among short-term debt financing and lucrativeness. This is since short-term debt has a lower average cost of borrowing and may be increased at a relatively low interest rate, which boosts performance and profit levels (Muchugia, 2015). Short-term financial debt has a favorable link with

robust development. He concluded saying that short-term debt funding favorably and remarkably affects the company's economic performance. His results run counter to the conclusions of Githinji (2020), who found that the major part of NSE companies fund their assets with long-term loans. According to Githinji (2020), effective debt management and liability can lower borrowing costs, increase debt sustainability, and lower fiscal risks (Githinji, 2020).

There is no accord on the relation between short-term debt and lucrativeness between commercial banks across nations, showing a circumstantial disparity, according to Gohar and Rehman's (2016) investigation into how resources framework have an effect on financial institutions' performance: empirical evidence from Pakistan (Gohar & Rehman, 2016). How debt funding has an impact to the lucrativeness of commercial banks in Nepal was examined by Pradhan and Khadka (Pradhan & Khadka, 2017). Long-term debt, total debt, short-term debt to total properties, passion income, and bank size, along with the ratio of debt to equity, were the study's independent variables. The relation between short-term debt, interest income, and bank size showed a favorable and remarkable relation with financial institution lucrativeness. Long-term debt, financial debt equity, and overall debt all have an adverse impact on the productivity of commercial banks. Commercial banks worldwide do not agree on the relation between short-term financial debt and lucrativeness, creating a contextual disparity. Additionally, the research concentrated on Nepalese commercial banks whose financial structures would be different from those of commercial banks in Kenya, presenting a contextual disparity (Pradhan & Khadka, 2017).

An adverse relation among short-term debt and bank performance as assessed by return on assets has been revealed. The findings show that there isn't agreement among academics about whether to employ short-term debt and how it affects commercial

banks' profitability when making conceptual arguments. Serwadda (2019) made an investigation on the influence of resource structure on the effectiveness of financial institutions from the perspective of Uganda (Serwadda, 2019). Panel data was obtained from bank economic statements, and a panel model was then utilized to inspect the relation betwixt the capital structure and the effectiveness of Ugandan commercial banks. It was determined 15 years ago that the pair long-term and short-term debt have a favorable and remarkable effect on bank performance in Uganda (Serwadda, 2019).

Muchugia examined how Kenyan business banks' success is impacted by debt as a funding source (Muchugia, 2015). This in-depth investigation focused on 43 business banks in Kenya. The research study's current time frame was 2008–2012. The study's findings demonstrated that short-term debt has a constructive and inverse relation with business financial institutions' profitability. Temporary debts are manageable and have low interest rates, which boosts the efficiency of financial institutions. Long-term debt has an adverse consequence on banks' ability to succeed. There is no agreement among industrial financial institutions throughout nations giving contextual gaps regarding the outcome of short-term financial obligations as well as production (Muchugia, 2015).

### **2.1.3 Long Term Debt and Financial Performance**

Bonds and other obligations with maturities longer than a year are considered long-term debt. Tailab claims that long-term debt implies rigorous contractual agreements among the company and debtor companies, which are frequently associated with high interest rates to the company and also a high risk of financial disaster. Long-term obligations divided by total assets is a measurement of long-term financial responsibility. This is due to the fact that a lot of debt raises the amount of loan repayment that must be completed regularly, which could severely harm the organization's liquidity (Tailab, 2014). Inasmuch as the cost of debt does not surpass the appropriate rate of return for

the company, businesses should employ additional long-term debt since it has less adverse effect on financial performance. As an outcome of their asset base and the need for security from many deposit-taking banks, long-term debt is the favored source of financial obligation funding between prestigious business institutions (Tailab, 2014).

Birru (2016) detailed the precise effects of resource structure on Ethiopian business banks' financial performance (Birru, 2016). The research study, which employed panel data, ran from 2011 to 2015. ROE and ROA metrics were utilized to evaluate financial performance. The study discovered a constructive but negligible relation between long-term debt and the financial performance of Ethiopian's commercial banks as calculated by both ROA and ROE. The study also employed a number of regression models, in contrast to recent investigations that studied the relation between the capital structure and economic performance utilizing panel data. Many regression models cannot be used to assess panel data with technical space (Birru, 2016). The study also focused on corporate financial institutions in Ethiopia, whose capital framework can be different from commercial banks' financial structures of Kenya and provide a contextual gap.

While concentrating on commercial financial institutions in Kenya, Harrison studied how resource system influences financial efficiency (Harrison, 2021). The researcher conducted her study in a descriptive manner. 34 commercial financial institutions that were operational within the study's 10-year period (2005–2014) were the population of the research study. Long-term debt has little influence on the lucrativeness of commercial banks, the research discovered. There have been researches that demonstrate how long-term debt significantly affects business financial institutions' earnings. However, the results of this study's agreements, Adeniyi et al present a lack of agreement on how much long-term debt correlates with financial institution performance, giving rise to a theoretical disagreement (Adeniyi et al., 2020).

Magero made a research on the impact of financial structure selection on financial performance while concentrating on Kenyan commercial banks. Since the research's time frame was from 2009 to 2013, panel data was gathered. To discover the impact of financial structure on commercial bank performance, multiple regression models were utilized. According to the study, among the factors affecting financial structure, capital reserve and long-term debts had a significant beneficial effect on ROA and ROE. The research's result about the relation among the financial structure and banking performance is incorrect, as explained by the researcher, who said that multiple regression models are not appropriate for use when assessing panel data due to methodological gaps (Magero, 2014).

Kuria (2015) looked into how the financial structure of commercial banks in Kenya influences their financial performance. 35 banks in operation from 2008 to 2012 made up the study's sample. The relation among financial structure and bank performance was ascertained using a simple linear regression model in SPSS. The results of the research demonstrated that the influence of financial structure on financial performance was minimal. The analysis of panel data using a multiple regression model presents methodological gaps, which may result to the establishment of incorrect parameter estimates and an incorrect research ending regarding the relation betwixt the financial structure and banking performance (Kuria, 2015).

#### **2.1.4 Share Capital and Financial Performance**

The share capital that was utilized as a source of equity funding determines the banks' financial success. The likelihood of the bank improving its overall financial performance increases with the amount of share capital it injects into its operations (Githinji, 2020). A company may decide to sell shares in order to raise money for operating costs. According to Githinji (2020), a company frequently increases capital in

the structure of debt capital and equity capital (in the structure of shares). This money give the business entity life and allow it to start operating, allowing it to fulfill the purposes for which it was founded. A company can raise cash by issuing shares to the general public for a fee. The worth that shareholders have added to the company is represented by share capital. Share capital is typically calculated using the Book value, statements. Calculating the price per share over the share capital value converts the aforementioned into a ratio (Githinji, 2020).

The distinction between the book value of an asset's equity and the entire value of all financial commitments collectively known as liabilities is referred to as the value of capital and is then divided among the prominent share capital shares as shown by the statement of financial position (Dudycz, 2019). The equivalent value of residual assets is thus determined from the aforementioned logic, and this goes a long way toward determining the enterprise's net value in the event that liquidation is necessary. The impact of share capital on corporate performance was investigated by Dudycz (Dudycz, 2019). The study concentrated on initial public offering (IPO) firms making their debut on the Warsaw Stock Exchange between 1998 and 2013. It demonstrates that while a high proportion of share capital in equity restricts capital adaptability, it could as well be an indication that a company is performing well on the market. It additionally demonstrates that, following an IPO, the market's information efficacy declines, which, amongs other things, means that pre-IPO accounting information has little effect on the success of the businesses' stock markets. The context gap presented by the initial public offering (IPO) whose manner of activities may be different from that of commercial banks (Dudycz, 2019).

Aymen (2015) performed a research in Tunisia to ascertain the impact of financial structure on bank financial performance (Aymen, 2015). Through the use of ROE,

ROA, and net interest margin, bank performance was evaluated. 19 Tunisian commercial banks over the years 2000 to 2009 made up the research's sample. Share capital was discovered to have a certain and important influence on 17 bank's financial performance as determined by ROE, ROA, and net interest. The study concentrated on Tunisian commercial banks since there may be a contextual gap between their financial structures and those of Kenyan commercial banks (Aymen, 2015).

How capital-structure alternative affects bank performance in Egypt was inspected by Ebaid. As indicators of bank performance, ROE and ROA were utilized. Measures of financial structure include overall debt, short-term debt, and long-term debt. The descriptive research approach was used. It was determined that long-term debt and share capital had a large influence on return on assets but a negligible influence on return on equity. The conclusion reached was that modifications to the corporation's financial structure affect its performance. The research concentrated on Egyptian commercial banks since there may be a contextual gap between their financial structures and those of Kenyan commercial banks (El-Sayed Ebaid, 2015).

Omai et al. (2018) looked at how share funding affects oil marketing businesses' profits in Kenya (Omai et al., 2018). This research utilized a cross-sectional study design with 35 enterprises as the research population from 2007 to 2016. To gather both primary and secondary data, collections of sets of questions were used. The results showed a negative but minor relation between share capital and productivity. This study concentrated on companies that promote petroleum, whose business practices and financial structure differ from those of commercial banks, creating a gap in the literature. A methodological gap in the study was also presented by the failure to develop a panel model and make evident the relation betwixt share capital and financial performance (Omai et al., 2018).

## **2.2 Theoretical Literature**

A theoretical literature presents theories' hypotheses and how they relate to study variables. Modigliani and Miller's 1958 hypothesis served as the study's primary theoretical framework. The additional theories are listed below:

### **2.2.1 Modigliani and Miller Theorem**

The Modigliani-Miller theorem (1958) statement and its modification made on 1963 marked the beginning of modern financial structure theory. According to the notion, how the financial structure is created has no bearing on the corporation's market value. The Modigliani-Miller theorem (1958) declared that the market value is unaffected by a company's financial structure being composed of more debt and less equity or, conversely, more equity and less debt. The basic accounting equation which declares that assets should equal liabilities and equity is actually connected to the construction of the financial structure. This indicates that a firm's assets are either entirely funded by equity or liabilities, or they are partially funded by both (Modigliani & Miller, 1958). According to Modigliani-Miller (1958–1963), the total of debt or equity in the financial structure, regardless matter how big or small it is, has no influence on the corporation's value. There is currently no formula or concept that can identify the ideal ratio of these two sources of invested capital in assets, making the choice of what amount to fund with debt and how much with equity remains unclear and difficult (Modigliani & Miller, 1963). The Modigliani-Miller Theorem (1958) was the first to propose ideas about the financial structure of businesses. It maintained that the market value of a corporation is uninfluenced by its financial structure and that there is no relationship between the two.

It is now more important than ever to ameliorate the financial performance of commercial banks and other corporate entities (Modigliani & Miller, 1958). Businesses

can enhance their effectiveness and financial performance, which in turn raises the market value of the corporation. This can be achieved through the adoption of various rules and regulations, such as addressing resource allocation issues, and by lending more money to invest in capital, as more lending has no bearing on market value (Modigliani & Miller, 1958). Furthermore, organizations can implement various strategies to enhance their understanding of systematic danger. This is because assessing systematic risk can help them handle difficult situations more effectively, which in turn boosts overall performance and increases market value. The market value of a corporation is uninfluenced by the structure of its financial structure in the presence of robust markets, according to the Modigliani-Miller theorem (1958). To put it briefly, the idea holds that the market value is uninfluenced by the debt ratio in the financial structure (Modigliani & Miller, 1958).

Two assertions were generated by Modigliani and Miller: the first was about the invariance of company value to financial structure, and the other one was about the invariance of company value to dividend policy. However, the initial of these two assertions has consistently garnered the majority of focus, including MM's. In fact, the dividend invariance assertion was created primarily to counter arguments against their initial assertion.

There is no optimum leveraged ratio, according to the first MM theorem, which outlines the circumstances in which a company's value is unaffected by selecting debt over equity to finance a specific level of investment (Pagano, 2015). There is no ideal payout ratio in the same circumstances, as demonstrated by the second MM theorem, which further shows that a corporation's value is uninfluenced by its approach to dividends. Therefore, both theorems fall into a category of unexpected findings called in economics as "irrelevance propositions" also known as "neutrality propositions" or

"constancy propositions." These concepts demonstrate how a decision that may appear to be crucial at first, like choosing a dividend or capital structure, is actually irrelevant (Pagano, 2015).

(According to the MM theorem regarding the irrelevance of financial structure, a company's debt amount and structure have no bearing on its value in the following scenarios:

-There are no taxes;

-Bankruptcy results in no real clearance costs for the corporation or reputational costs for its leaders.

-and financial markets are ideal, which means that they are competitive and devoid of any information asymmetry.

According to the theorem, a firm's value, which is settled by the market value of its debt and shares, is equivalent to the current discounted value of its cash flow, gross of interest, with the discounted rate representing the needed return for businesses in the same "risk class." Therefore, the only factors that define the firm's value are this discount rate and its earnings, or its assets, and they have nothing to do with the makeup of the liabilities that are utilized to fund those assets (Ahmeti & Prenaj, 2015). Additionally, the theorem suggests that the average cost of capital matches the return that shareholders want for businesses in the same "risk class" and is unaffected by the amount and kind of debt. Because there is no risk premium associated with debt, it might seem more affordable than equity; Nonetheless, raising leverage will not lower the firm's average cost of capital because the higher cost of equity capital will exactly equal the effect of increased leverage. As an outcome, funding and investing choices can be completely separated. The sole criterion that should guide investment choices is to maximize company value. The total cost of capital, as determined by the needed rate of

return on entirely equity-financed companies in the same "risk class," should be considered when making logical capital choices (Chen, 1978).

-The Modigliani-Miller (1958) theory on the irrelevancy of resources framework absolutely assumes that marketplaces are fully informed of the activities that enterprises must perform and that the asymmetry of information affects financial development (Miller, 1988). According to (Villamil, 2015), the MM financial framework irrelevance theory holds that financing mix has no effect on the enterprise's value.

Along with Miller, Modigliani put up two ideas regarding the importance of resources. The initial recommendation was the arbitrage-based irrelevance concept, which suggested that specialists participate in arbitrage to make sure that its use would not have an impact on financial growth. The traditional notion of arbitrage-based irrelevance, however, faced significant obstacles that called into question its viability because it disregarded crucial factors like discount rates, tax obligations, adverse choice, company issues, sponsor customers' effects, insolvency costs, and the mix betwix a firm's financing and operational methods (Villamil, 2015).

The theory also presumed symmetric information amongst professionals in top-notch financial markets. The second sources structure irrelevance concept was made by Miller and Modigliani in 1963, and it was based on the idea that when a corporation chooses a given financial investment plan, the funding structure it chooses will not affected its price. 11 The Modigliani-Miller thesis makes the notion that an organization's resource structure has no bearing on how valuable it is. The current value of anticipated coming earnings indicates market value. The Modigliani-Miller hypothesis has drawn criticism for its unrealistic assumption that market conditions are ideal. Additionally, it has been questioned and criticized that arbitrage can be used to demonstrate the Modigliani-Miller hypothesis (Ahmeti & Prenaj, 2015). Arbitrage is useless without precise capital

markers. However, it is unrealistically true that there is a market that is tax-free. The company's management also serves as the shareholders' representation. This presumption is false since capital markets are never flawless, proving that corporate financing is dependent on the status of the market and the strategies used by enterprises to make investment decisions (Ahmeti & Prenaj, 2015). -

The MM leverage irrelevance hypothesis caused a great deal of discussion and criticism when it was initially put forth, mostly for methodological grounds. The majority of the study of finance was limited to describing the institutions and practices of the financial sector until the mid-1950s. It was rare to find the formal, rational thought that characterizes the study of economics. The 1958 paper by Modigliani and Miller, as well as the concurrent development of the portfolio decision theory by James Tobin, Harry Markowitz, and William Sharpe (all of whom, predictably, won Nobel prizes), marked its exact entry into the area of finance (Markowitz, 1952) . These achievements marked the beginning of the development of a cogent theory that could explain how families distributed savings and how businesses funded their investment decisions. The concept was predicated on the ideas of market equilibrium and reasonable investor conduct. The theory of finance could advance quickly once these fundamental components had been put in place. But, Modigliani and Miller were unable to rely on the sophisticated equilibrium models of securities pricing that are now included in every finance textbook when they attempted to validate their initial claim (Modigliani & Miller, 1958) . This clarifies why they chose to build their conclusion on an arbitrage argument, which is a more basic and less challenging concept than the idea of competitive equilibrium.

In this investigation, the Modigliani and Miller Theorem was deemed pertinent. The theory's presumptions have a key role in deciding the best combination of preferred share capital, long-term loans, debentures, short-term forms of funding, retained

earnings, and other sources of funding for an organization's activities. The type of financial structure is crucial since any breach of the aforementioned presumptions makes it impossible for commercial banks to function effectively. It directs the appropriate choice of funding options for bank activities.

### **2.2.2 Pecking Order Theory**

Pecking Order Theory by Donaldson (1961) predicts that external funding will always be relatively expensive compared to internal funding by reason of the information asymmetry betwixt the firm and outside stockholders regarding the real value of both present methods along with coming revenue streams and also opportunities.

The pecking order theory claims that firms fund their activities in a particular hierarchical manner. They start with internally produced cash in the structure of retained earnings, which are then backed by debt, and finally external financing. Due to the issue of information asymmetries betwixt the company and stockholders, the decision is a reflection of the preferred cost of the readily available financial resources (Donaldson, 1961).

The asymmetric information theory states that internal funding escapes the inspection of capital providers. Debt is desirable if more money is required because investors who are less informed than managers view debt issues as a good indicator. The assumption that leadership will never issue an undervalued security forms the basis of this conclusion (as well as the empirical finding). Investors will therefore presume that the leadership team thinks the stock is cheap if debt is provided (Donaldson, 1961). Additionally, Myers (1984, p. 584) states that the pecking order structure suggests that the company should provide the most reliable possible securities especially in accordance with the asymmetric information concept. Securities whose future price modifies least when the leader's secret information is made public. The order relies on value unpredictability,

with the preferred source being the lowest unpredictable. This leaves the pecking order as follows: retained earnings, new debt, and new equity. An obvious implication of the pecking order theory is that extremely successful companies with huge earnings are likely to utilize a smaller amount of debt capital than less successful companies. Many investigators have examined the impact of profitability on firm leverage, concluding that there is an important adverse relation between profitability and debt/asset ratios (Myers, 1984a)

The asymmetry information between the company's outside suppliers and internal stakeholders (managers and proprietors) guided to the development of Pecking Order Theory (POT) by Myers and Majluf in 1984. Business leaders use an investment plan that prioritizes their own funds over other funding from outside and aims to lower the expenses associated with asymmetric information, especially wrong choices. According to this concept, a company manager should adhere to the following hierarchy: self-financing, issuing non-risky debt first, then risky debt second, and lastly issuing equity. Such actions avoid a decline in the company's share value; they limit dividend payments to boost revenue and minimize capital expenses by reducing the amount of loans available. Successful companies for that reason have extra internal capital. The debate over debt vs equity should be centered on asymmetric information. Issuance of debt shows the board's assurance that an investment is profitable and that the stock value is currently discounted. The issuance of equity suggests an absence of assurance in the board and may indicate that the value of shares is too high. Therefore, a reduction in the value of shares would result from an equity issue. Intangible assets, however, might not be covered by this (Myers & Majluf, 1984).

In accordance to the Pecking Order Theory, enterprises may not have enough resources due to the information asymmetry between managers/owners and shareholders, hence

they use a hierarchical structure to identify ways to make money. Enterprises often prioritize internal finance (retained earnings), if it is required to turn to outside funding, it utilizes short-term loans with low risk, and outside capital as a last resort. As a result, enterprises with a high profit margin have a low debt ratio. The more profitable the company is, the greater is its capacity to amass retained earnings, and so reducing the requirement for outside funding (Shahar & Manja, 2018). Pecking Order theory states that bigger corporations are better able to gather retained earnings, and so less debt is required. Pecking Order Theory forecasts an adverse relation between size and debt. Therefore, this suggests that very small companies should use less debt due to the expenses of external financing resulting from information asymmetry. Myers (1984) found that bigger companies have less information asymmetry between managers and investors, leading to better debt conditions (Myers, 1984a). According to (Marsh, 1982) and other many studies, the Pecking Order theory forecasts a certain relation between size and debt. Pecking Order Theory states that the relation between company size and debt can be certain and favorable or not.

The pecking order theory of financial structure maintains that information costs are the primary factor influencing financial structure decisions, while rejecting the idea that companies have a goal, ideal, and value-maximizing leverage ratio in consideration. The modern interpretation, which was first put forth by Donaldson in 1961 (Donaldson, 1961), is mostly predicated on Myers and Majluf's (1984) negative selection model, according to which investors understand the company's actions because they consider themselves to be less knowledgeable about the corporation's value and opportunities than corporation's leadership (i.e., there is some information asymmetry between managers and investors). A company may decide to use an equity issue for financing a potential investment if it already has assets set aside and needs money (Myers & Majluf,

1984). However, if management determines that the shares have a low value (providing shares at a price that shifts value from current investors to new ones), it will choose not to distribute equity on behalf of current shareholders. This will happen even if it signifies passing up on a prospect for investment, provided that the net current value of the growth prospects more than offsets the transfer of value from current to new stockholders. The choice to not issue shares may be interpreted by shareholders as "great news," given the information asymmetry.

By indicating that the shares are overpriced, an equity issue conveys "bad" information. This influences the amount of money investors are prepared to spend on the issue. Additionally, an equity issue might send a bad signal due to its possible causing effect (Myers, 1984a). This assumption is supported by the widely documented large average decline in share prices that occurs upon the notification of an equity issue. The adverse effect is probably going to be more pronounced the greater the perceived information asymmetry between managers and shareholders.

The pecking order theory proposes that businesses optimize value by consistently selecting, without any specified leverage aim, to fund new projects using the informationally cheapest accessible source of finances. It is preferable for a company to issue debt rather than equity if it must look outside for money to support a prospective investment for which retained earnings, which have almost no information costs, are not enough. Due to the reduced information costs related to debt offerings, the general practice for collecting external capital should be issuing secure and informationally "low-cost" securities before risky ones (i.e., debt before equity). Equity issues won't arise until debt becomes unnecessarily expensive, such as when the company already has a riskily high debt ratio and the consequences of financial trouble escalate significantly. In the context of choosing a financial structure, information costs therefore

take precedence over all other factors (Myers, 1984a). The pecking order is properly stated as follows by Myers (1984):

i. Internal funds, like retained earnings, are preferred by businesses over external capital (information asymmetries are thought to be significant solely in the case of external funding).

ii. Because dividends are "sticky," they cannot be reduced in order to pay for capital expenditures.

Therefore, variations in net cash will manifest as variations in external funding since changes in cash requisites are not absorbed by short-term dividend changes.

iii. Instead of repurchasing and retiring stock, excess internally generated cash flow is applied to debt repayment when it surpasses capital investment. When capital investing necessitates external financing, corporations will provide debt before equity since it is the secure type of security. The company will work down the pecking order as the necessity for outside financing raises, from safe to unsafe debt, maybe to preferred stock or hybrid securities (like convertible bonds), and lastly to equity.

iv. As a result, a company's debt ratio at any one moment represents its total need for outside funding. The pecking order concept states that low-growing corporation with less investment prospects, that have an extremely profitability, and produce significant cash flow will require less outside funding and as result, their debt ratios was reduced. However, high-growth companies with plenty of investment options that currently consume the majority of their internal produced cash flow in the process of expanding are probably going to require more outside funding and thus have larger debt ratios. Keep in mind that the trade-off theory's forecast and this one are completely at odds (Myers, 1984a).

This chain of command theory is crucial since it informs the general public of how well a company is performing. In order to determine how business banks choose to support their business activities using reserved incomes, the pecking order theory is utilized in this investigation. According to the position concept, as corporate financial institutions are anticipated to rely mostly on equity (retained revenues) as a source of funding, they would undoubtedly have lower rate of interest repayments. A commercial banking organization must initially rely on domestically generated capital and notify retained earnings.

### **2.2.3 Trade-off Theory**

According to Myers and Majluf (1984), agency costs and company costs from economic burden counterbalance the advantages of the tax shield. The advantages of paying interest must equivalent the costs associated with generating debt in order to attain balanced leverage. The economic expansion is remarkably affected by the balance betwixt tax savings from debt, a decline in agent costs, and financial challenges. Trade-off theory claims that a company will continue to borrow money until the marginal tax shield advantages on more debt are equal to the growing likelihood of economic burden-related costs. Financial challenges will result in a decline in the firm's value (Myers & Majluf, 1984).

The discussion around the Modigliani and Miller (1958) financial structure irrelevance theorem gave rise to the trade-off theory (Modigliani & Miller, 1958). Modigliani and Miller's 1963 introduction of interest tax deductibility was the initial step. This implied that businesses ought to be entirely debt-funded. Another thing is required because businesses are not just funded by debt. The introduction of bankruptcy costs by Stiglitz (1972) was the following step (Stiglitz, 1972). According to the idea, the ratio of interest tax deductibility to dead-weight bankruptcy costs determines the company's leverage.

Trade-off theory claims that firms are motivated to utilize debt in order to gain from debt tax-shield. Therefore, it may be stated that a firm has an interest to assume extra debt since it permits it to get the benefit of the debt tax shielding through the making of yearly earnings. DeAngelo and Masulis (1980) with other numerous research predict a favorable relation between debt and the effectual tax rate (DeAngelo & Masulis, 1980). The Trade-Off Theory states that successful companies may afford to assume extra debt since they can gain from debt tax shield. The trade-off approach suggests that in order to augment its value, a company should utilize an appropriate level of both debt and equity (DeAngelo & Masulis, 1980). The reason for this is that using debt allows firms to save taxes since it lowers the interest paid on new loan capital. But also firms should continue to have a financial structure that strikes an equilibrium betwixt the pros and cons of taking on more debt. In light of this, every company ought to keep a financial structure that augments its value while lowering the danger of its bankruptcy (Modigliani & Miller, 1963).

This idea supports the body of work started by Modigliani and Miller (1958) and shows that financial structure has no influence on a company value. It does this by making the strong assertions that financial markets are ideal and that there are no transactions, agency, or tax costs. Modigliani and Miller (1963) subsequently relax the neutrality axiom and incorporate taxation: the present value of the reduction in taxes from debt plus the present value of the expenses associated with possible financial issues less the present value of the debt equals the value of an indebted company. Consequently, companies are incentivized to utilize debt instead of equity since interest is subtracted from taxable interests (Modigliani & Miller, 1963). Because the tax refund solely assists the company and does not affect individual earnings, a leveraged corporation is worth more (Miller, 1977). According to Stiglitz (1972), the fact of bankruptcy costs entails

striking a balance between the company's value and tax gains; in theory, this guides to an ideal debt level when the marginal benefits of a tax refund equivalent to the marginal costs of bankruptcy brought on by leverage (Stiglitz, 1972).

Even after facing significant criticism from prominent figures such as (Miller, 1977) and (Myers, 1984a), the trade-off hypothesis continues to be the most widely accepted explanation of corporate financial structure. S.C.Myers(1984) coined the term "trade-off theory" to refer to the tax-bankruptcy viewpoint . Certain academics refer to practically any neoclassical model of corporate leverage in which debt is decided by weighing costs and benefits as "trade-off theory." Radically many theories with drastically divergent forecasts would be involved, depending on what costs and what benefits are to be involved (Myers, 1984a).

Myers (1984) highlights in his approach that adjustment costs are not a primary concern in the framework of the static trade-off theory and are very seldom acknowledged. The temporal adjustment towards the ideal ratio results in adjustment costs, which are real and happen. Companies are unable to completely remove arbitrary occurrences that diverge from the ideal; this is demonstrated by the cross-sectional dispersion of current debt ratios among a group of companies that share an identical target ratio. Given that companies are compelled to function well outside of their ideal ratios, significant adjustment costs could account for the noticed broad range in current debt ratios (Myers, 1984a).

Marsh(1982) was the first one to advocate for this viewpoint. These writers conducted actual studies and conceptual analyses concurrently. They believe that choices about finance and investments create a procedure that is ongoing, leading to long-term company convergence toward the goal value. The occurrence of partial adjustment in the midst of market flaws is explained by this connection. In fact, in a perfect market,

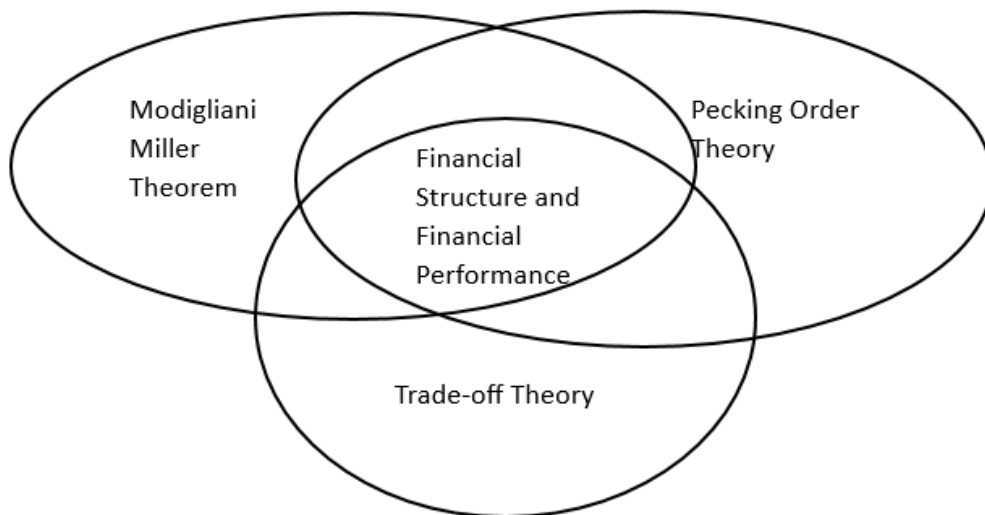
the adjustment is rapid, total, and unaffected by any factors. Modeling financial choices and dividends as a two-stage process involving target value development and adjustment. Furthermore, they take into account the fact that the goals are predetermined and are curious about the factors that influence the adjustment, including the interdependencies between finance judgments as they arise and the time frame during which the adaptation takes place. The relation between variations in obligations (financing) and changes in assets (investments) was established by (Marsh, 1982).

According to Elsas and Florysiak (2015) , a company is considered to adhere to the static trade-off theory if its leverage goal is established by a one-time trade-off between the tax advantages of debt and the deadweight costs of disaster or other economic difficulty. However, if a company's conditions and core traits evolve over the years, it's possible that the factors that determine financial structure that is, the perceived costs and benefits of debt also shift. They refer to this as dynamic trade-off theory if the ideal goal leverage ratio changes over the years. The company may deviate from its ideal Debt/Equity ratio due to structural or market-based shocks (Elsas & Florysiak, 2015).

Until the company hits its Debt/Equity target and its value is once more optimized, the company is expected to replace debt with equity or equity with debt. The costs of adjustment (taking into account the function of transaction and information costs) will determine, among other things, how quickly the business moves back regarding its ideal financial structure aim. The companies should sometimes move towards target debt ratios, only when the advantages of doing so outweigh the expenses associated with doing so (transactions and information costs included). Therefore, one important way to assess the trade-off theory's effectiveness is to find out if companies respond to leverage shocks by adjusting toward a goal and how quickly they do so. When deciding when to finance a bank's operations partially with debt and partially with equity, tradeoff theory

is crucial. The trade-off theory of financial structure claims that a bank must make sensible decisions regarding when to finance activities and how much debt and equity are needed. An agreed-upon cost-benefit analysis should guide the decision about debt vs equity. Utilizing debt to fund bank activities has advantages due to its tax advantages. However, there are additional expenses related to using debt to support bank operations, including bankruptcy costs as well as non-bankruptcy costs. A bank must therefore balance well its utilization of debt and equity in order to fund well its functioning because the marginal advantages decrease as debt usage increases.

The following figure (Figure 1) illustrates the theoretical framework, it explains the theories which have been discussed above.



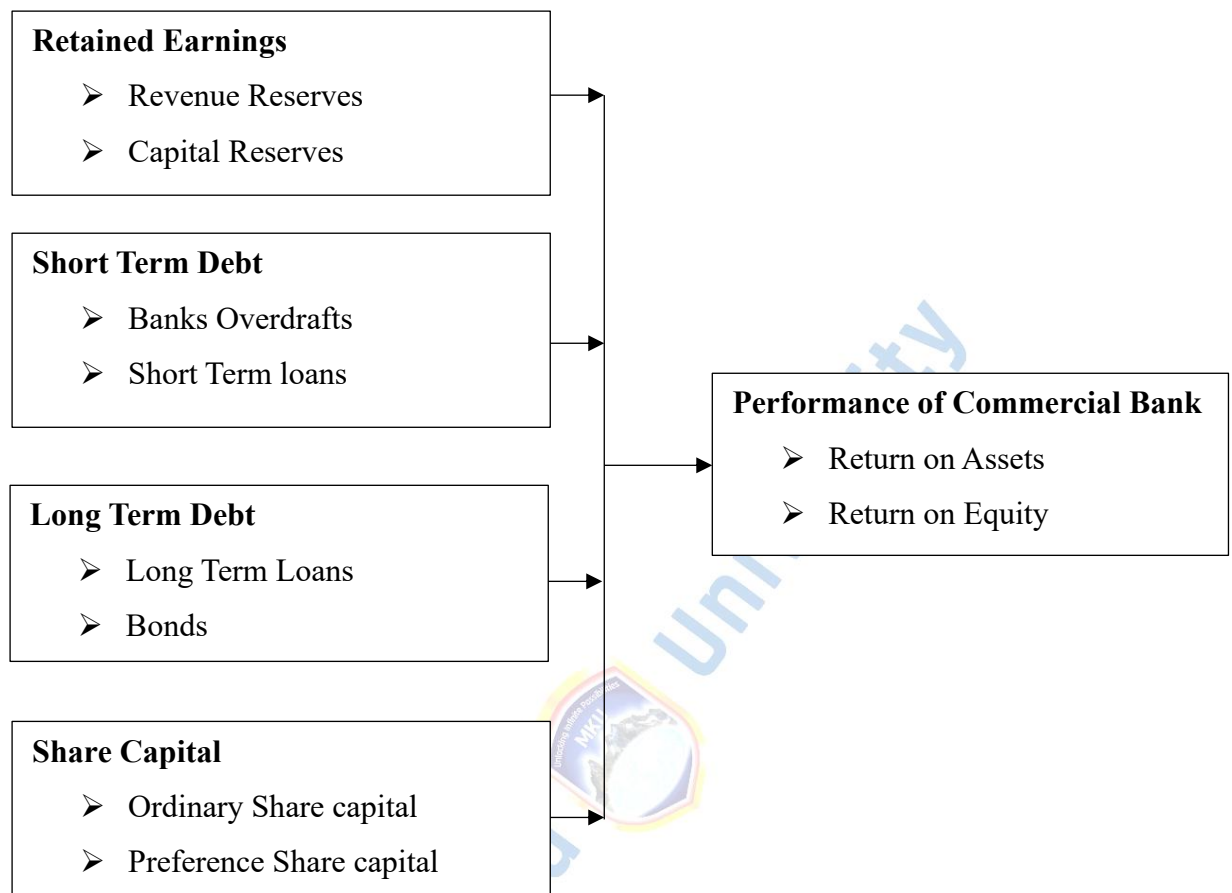
**Figure 1: Theoretical Framework**

**Source : Researcher, 2024**

## 2.3 Conceptual Framework

### Independent variables

### Dependent variables



**Figure 2: Conceptual Framework**

**Source : Researcher, 2024**

## 2.4 Recap of Literature Review

Evidence of distinct knowledge gaps in the literature has been provided by a study of past works on capital structure and financial efficiency of organizations. Empirical literature also reveals that there doesn't exist universally accepted relation between capital structure and bank performance, with some academics explaining a positive relation, others a negative one, and still others no relationship. Financial obligation adversely and considerably affects the success of commercial banks, according to a

research study by Adeniyi, et al. on the financial structure and efficiency of Nigerian commercial banks (Adeniyi et al., 2020).

Siddik conducted research on how prime structure affects commercial financial institutions' performance in Bangladesh (Siddik et al., 2017). The research's results showed that debt financing has an adverse and remarkable relation with return on asset, while the debt-to-equity ratio has a constructive and remarkable relation with ROE. There is no universal agreement on how short-term debt affects commercial banks' earnings globally due to contextual differences (Harrison, 2021). Depicted a harmful relation between Tanzania's funding structure and bank efficiency. However, Kipesha and Moshi (2014) found that only operationalized debt to equity and debt to total funds have a good and important influence on return on equity when looking at money and business aspects in Tanzania (Kipesha & Moshi, 2014). Serwadda (2019) found that investors have a primordial role in improving the credit rating plan in Uganda when examining the influence of debt monitoring on commercial banks' economic performance in that country (Serwadda, 2019). For example, stakeholders should ensure that both long-term and short-term debts can be paid off within one fiscal year.

Additionally, Serwadda, in an investigation on the effects of resource structure on financial institutions' performance from a viewpoint of Uganda, found that total financial commitment has a positive as well as remarkable effect on return on assets (Serwadda, 2019). Nevertheless, a research by Twesigye and Patrick (2020) on how debt financing affects banks' productivity in Rwanda came to the conclusion that financial obligation level favorably and significantly influence the productivity for both I&M Bank and other banks in Kigali (Twesigye & Patrick, 2020). This research was driven by the apparent lack of agreement over how the capital framework affects the efficiency of Kenyan commercial financial institutions.



## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.0 Introduction

This chapter explores the research methodology, design, target population, data collections and ethical considerations.

#### 3.1 Research Methodology

This study used a retrospective descriptive study, because the outcome of interest was already occurred, and the data was gathered from published financial reports; Quantitative data collection technique was carried out.

#### 3.2 Research Design

Research design is utilized to minimize the costs, hold up an important control on the stability of the outcomes achieved, give a strong basis for the entire study (Pawar, 2020). Because panel data was used, the descriptive research study design was chosen for this investigation and was the most appropriate. The descriptive studies treat the relation between non-manipulated variables in a natural rather artificial background. Since the events have already happened, the investigator choose the right variables for investigation of their relations, Description is associated with comparison or contrast, which entails measurement, classification, interpretation and evaluation to demonstrate the importance of what is depicted (Pawar, 2020) ; The research study's design is appropriate because on the contrary to the experimental design, the investigator does not control the variables or plan for events to occur.

#### 3.3 Location of the study

The research was fulfilled in Nairobi county, Kenya where the headquarters of those Tier-1 commercial banks are located.

### 3.4 Target population

The target population represents a subset of the larger population that meets specific criteria or characteristics (Willie, 2023). This study focused on nine tier-1 commercial banks in Kenya throughout a duration of five years, from 2018 to 2022. Those Tier-1 commercial banks are as indicated on the table 1 below:

**Table 1: Target population**

SN	Banks
1	Kenya Commercial Bank (KCB)
2	Co-Operative Bank
3	Equity Bank
4	I&M Bank
5	Amalgamated Banks of South Africa (ABSA) Bank
6	Stanbic Bank
7	NCBA Bank
8	Diamond Trust Bank (DTB)
9	Standard Chartered Bank

**Source: Researcher, 2024**

### 3.5 Sampling Procedure and Techniques

This study employed a census sampling method, targeting all Tier-1 commercial banks in Kenya. A census was deemed appropriate because the total population of Tier-1 banks in Kenya is small and manageable, comprising only nine institutions. This approach ensured comprehensive coverage of the target population, increasing the reliability and validity of the findings. By including all entities, the study eliminated the risk of sampling bias that might arise from a selected subset.

### 3.6 Sample Population

The sample population consisted of all nine Tier-1 commercial banks operating in Kenya as classified by the Central Bank of Kenya. These include the largest and most systemically important banks in the country. The justification for using the entire

population (a census) rather than drawing a sample lies in the relatively small number of Tier-1 banks, making it feasible and efficient to study all of them.

To collect data, annual financial reports from each bank were sourced from their official websites and the Central Bank of Kenya's database. Selection was based on the availability and completeness of financial statements over the defined study period (e.g., 2018–2022). Only verified and audited reports were used to ensure accuracy and consistency in data analysis.

### **3.7 Construction of the research instrument**

The researcher used secondary data so there was no construction of the research instrument. The collection form has been used to collect data and the different works consulted were published financial reports.

### **3.8 Testing for validity and reliability**

The study used the published financial reports which were valid and reliable

### **3.9 Data Collection Methods and Procedures**

Data were collected using structured data collection forms sourced from the financial statements of nine (9) Tier One operating commercial banks in Kenya. The researcher employed a standardized data collection sheet to extract the necessary secondary data from the published financial reports. These reports included key components such as income statements, statements of financial position, and accompanying notes to the accounts. The collected data constituted panel data covering multiple periods, which were systematically compiled and organized for analysis.

### **3.10 Data Analysis Techniques and Procedures**

Data for each variable in the study were obtained directly from the annual published financial reports of the selected commercial banks, covering the period from 2018 to 2022. The data were carefully cleaned and edited to eliminate inconsistencies and

reduce potential bias. Statistical analysis was conducted using SPSS software version 20.

Descriptive statistics, including means and standard deviations, were used to summarize the data. Inferential statistical methods, such as Analysis of Variance (ANOVA), Pearson correlation, and multiple regression analysis, were applied to test the relationships among the variables. Multiple regression analysis was specifically used to determine the effect of various components of capital structure on the financial performance of the banks. The level of confidence for the model's fitness was set at 95%. Additionally, a Chi-square test was performed to assess the goodness-of-fit of the data. The multiple regression model used in the study was specified as follows:

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

Where;

Y = Financial Performance

X<sub>1</sub> = Retained Earnings

X<sub>2</sub> = Short Term Debt

X<sub>3</sub> = Long Term Debt

X<sub>4</sub> = Share Capital

β<sub>0</sub> = Constant

β<sub>1</sub>, β<sub>2</sub>, β<sub>3</sub>, β<sub>4</sub>, ..... = coefficients

ε = Error term

The result was presented using frequency table, pie charts and baragraph.

### 3.11 Ethical Consideration

A research permit was sought from the NACOSTI to permit data collection from Tier one commercial banks in Kenya and also an introductory letter and ethical review was sought from Mount Kenya University. On the access to locations, the researcher sought

consent from Tier one commercial banks however data was based on published financial reports. The informed consent form is attached in appendix1. During data collection, respect was highly observed. The document was subjected to anti plagiarism software to generate the similarity index report as per the requirements of the university. The researcher ensured that the data gathered was handled with privacy it deserved. It furthermore used only for academic purpose and nothing else. Finally, data was coded into SPSS for privacy security.



## CHAPTER FOUR

### RESEARCH RESULTS AND DISCUSSIONS

#### 4.0 Introduction

This chapter presents the results and findings of the study, which sought to investigate the effects of various financing strategies on the financial performance of Tier One commercial banks in Kenya. Specifically, the study was guided by four objectives: to examine the effect of retained profits, to assess the effect of short-term debt, to investigate the effect of long-term debt, and to assess the effect of share capital on the financial performance of these banks. The findings are organized in alignment with these objectives and are based on data collected using quantitative and qualitative methods. Descriptive statistics, inferential analyses, and other relevant tests were employed to establish the relationships between the variables under study. Furthermore, the results are discussed in the context of the theoretical framework and existing literature to provide deeper insights and implications of the findings.

#### 4.1 Descriptive Statistics

This section provides a summary of the key variables under investigation, offering insights into their central tendencies, variability, and distribution patterns. Descriptive statistics are crucial for understanding the data structure and identifying trends that inform the financial performance of Tier One commercial banks in Kenya. The analysis focuses on retained profits, various forms of debt and equity, and financial performance metrics, such as Return on Assets (ROA) and Return on Equity (ROE).

**Table 2: Descriptive Statistics**

	<b>N Statistic</b>	<b>Mean Statistic</b>	<b>Std. Deviation Statistic</b>
Revenue Reserves	45	44412605044.44	17179929905.265
Capital Reserves	45	9308680444.44	7958849913.037
Bank Overdrafts	45	42484493186.22	19742821857.615
Short Term Loans	45	47530517777.78	29972975318.117
Long Term Loans	45	106703039940.00	64646864655.255
Bonds	45	76362345717.33	103572381443.416
Ordinary Share Capital	45	11575250244.44	10912264928.265
Preference Share Capital	45	4996178666.67	5486217827.753
Return on Assets	45	2.6102%	0.85503%
Return on Equity	45	16.8213%	4.41283%
Valid N (listwise)	45		

**Source Field Data (2024)**

The descriptive statistics provide an overview of the key variables under study, including their central tendencies, dispersion, and distributional properties. Revenue reserves had a mean of KES 44.41 billion, with a standard deviation of KES 17.18 billion, indicating significant variability among the Tier One commercial banks. The skewness of 1.415 and kurtosis of 1.685 suggest a moderately positive skew and a leptokurtic distribution, consistent with findings in prior studies showing the influence of retained profits on financial stability (Ngugi, 2020).

Capital reserves averaged KES 9.31 billion with a standard deviation of KES 7.96 billion, reflecting moderate variation. Its skewness and kurtosis values (1.365 and 1.217, respectively) indicate a positive skew and a slight peak, aligning with Mwangi et al. (2018), who noted the critical role of capital reserves in maintaining liquidity and financial resilience.

Short-term financing methods also showed variability. Bank overdrafts had a mean of KES 42.48 billion (SD = KES 19.74 billion), while short-term loans averaged KES 47.53 billion (SD = KES 29.97 billion). Both exhibited positive skewness (0.351 and 1.291, respectively) and leptokurtic distributions, underscoring the importance of short-term debt in maintaining operational liquidity (Githaiga & Kabiru, 2019).

Long-term loans had the highest mean among the debt variables at KES 106.70 billion, with substantial variability (SD = KES 64.65 billion). The skewness (1.315) and kurtosis (1.335) suggest a positively skewed and peaked distribution. These findings are consistent with Kariuki (2021), who highlighted that long-term debt significantly influences the financial leverage of commercial banks.

Bonds and share capital demonstrated more extreme distributions. Bonds had a mean of KES 76.36 billion, but their high standard deviation (KES 103.57 billion) and extreme skewness (5.203) and kurtosis (31.119) indicate outliers or uneven adoption across

banks. Similarly, ordinary and preference share capital had high skewness (2.541 and 3.046) and kurtosis (6.760 and 10.991), reflecting variability in equity financing strategies. Studies by Ochieng and Otieno (2020) affirm that equity financing, though variable, strengthens financial performance over time.

Performance indicators showed stability. Return on Assets (ROA) had a mean of 2.61% (SD = 0.86%), with negative skewness (-0.449) and kurtosis (-0.809), suggesting a near-normal distribution. Return on Equity (ROE) averaged 16.82% (SD = 4.41%) and similarly exhibited minimal deviations from normality (skewness = -0.636, kurtosis = -0.162). These results align with Maina and Muturi (2017), who found stable financial performance metrics in Tier One banks driven by efficient resource utilization and strong capital bases.

Overall, the descriptive statistics reveal notable variability and skewness in financial strategies across Tier One commercial banks, reflecting diverse approaches to balancing debt and equity for financial performance.

#### **4.2 Examination of the effect of retained profits on the financial performance of Tier one commercial banks in Kenya.**

This section analyzes the relationship between retained profits, specifically revenue reserves, and the financial performance of Tier One commercial banks in Kenya. Financial performance is assessed using two key metrics: Return on Assets (ROA) and Return on Equity (ROE). These indicators reflect how effectively a bank utilizes its retained earnings to generate returns for both the institution and its shareholders.

A correlation analysis was conducted to determine the direction and strength of the relationship between revenue reserves and the two financial performance metrics. Table 3 summarizes the correlation coefficients for each of the nine Tier One commercial banks.

**Table 3: Correlation Between Retained Profits (Revenue Reserves) and Financial Performance Metrics (ROA and ROE) between Banks**

Bank Name	Revenue Reserves vs ROA	Revenue Reserves vs ROE
Amalgamated Banks of South Africa (Absa) Bank	0.560657	0.429485
Co-operative Bank	0.884007	0.908531
Diamond Trust Bank (DTB)	-0.498362	-0.455318
Equity Bank	-0.929847	0.216882
I&M Bank	-0.055255	-0.265844
Kenya Commercial Bank (KCB)	0.005067	0.013938
NCBA Bank	0.881367	0.780788
Stanbic Bank	0.311205	0.502772
Standard Chartered Bank	0.091222	-0.350663

**Source Field Data (2024)**

The results indicate mixed correlations across the banks. Co-operative Bank and NCBA Bank showed strong positive correlations between revenue reserves and both ROA (0.884 and 0.881, respectively) and ROE (0.909 and 0.781, respectively). These findings suggest that these banks effectively leverage retained profits to enhance both asset efficiency and shareholder returns, consistent with studies by Mwangi and Murigu (2018), which highlight the positive role of retained earnings in fostering profitability in well-managed institutions.

In contrast, Equity Bank displayed a strong negative correlation between revenue reserves and ROA (-0.930), but a weak positive correlation with ROE (0.217). This disparity may indicate inefficiencies in asset utilization despite moderate returns to equity holders, aligning with Kariuki (2021), who noted that over-reliance on retained earnings could limit resource allocation efficiency in growth-oriented banks.

Diamond Trust Bank (DTB) and I&M Bank exhibited negative correlations for both ROA (-0.498 and -0.055, respectively) and ROE (-0.455 and -0.266, respectively).

These results imply that retained profits have not significantly contributed to financial

performance in these institutions, potentially due to suboptimal reinvestment strategies or external market challenges (Ngugi, 2020).

Meanwhile, Kenya Commercial Bank (KCB) showed negligible correlations for both metrics (0.005 and 0.014), indicating minimal impact of retained profits on financial performance. Similarly, Stanbic Bank and Standard Chartered Bank demonstrated weak to moderate correlations with varying directions, reflecting diverse strategies in profit utilization.

Overall, the results highlight substantial variability in how retained profits influence financial performance across Tier One commercial banks. This variability aligns with existing literature, which suggests that the effectiveness of retained earnings as a financing strategy depends on individual bank policies, market conditions, and the efficiency of resource allocation (Maina & Muturi, 2017).

**Table 4: Summary of Correlation on the Financial Performance Metrics (ROA and ROE) of Tier one commercial banks in Kenya.**

		<b>Correlations</b>	
		<b>Return on Assets</b>	<b>Return on Equity</b>
<b>Return on Assets</b>	Pearson Correlation	1	.797**
	Sig. (2-tailed)		.000
	N	45	45
<b>Return on Equity</b>	Pearson Correlation	.797**	1
	Sig. (2-tailed)	.000	
	N	45	45

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source Field Data (2024)**

Table 4 presents the summary of the correlation analysis between retained profits, represented by revenue reserves, and the financial performance metrics of Tier One commercial banks in Kenya, specifically Return on Assets (ROA) and Return on Equity

(ROE). The table shows the strength and significance of the relationships between these variables.

The Pearson correlation coefficient between ROA and ROE is 0.797, indicating a strong positive correlation. This suggests that as the efficiency of asset utilization (ROA) improves, there is a corresponding increase in shareholder returns (ROE). The significance value ( $p = 0.000$ ) confirms that this relationship is statistically significant at the 0.01 level. This finding aligns with prior studies, such as Mwangi and Murigu (2018), which emphasize the interdependence of profitability measures in financial institutions.

The results highlight that retained profits contribute positively to both ROA and ROE, implying that Tier One commercial banks that effectively reinvest their revenue reserves are likely to achieve better financial performance. This supports existing literature suggesting that retained earnings are a vital component of internal financing strategies, enabling banks to enhance operational efficiency and shareholder value (Maina & Muturi, 2017).

The analysis underscores the importance of retained profits as a driver of both asset performance and equity returns, reinforcing their role in sustaining financial stability and growth in Tier One commercial banks.

#### **4.3 Assessment of the effect of short-term debt on the financial performance of Tier one commercial banks in Kenya.**

This section examines the relationship between short-term debt, represented by short-term loans, and the financial performance of Tier One commercial banks in Kenya. Financial performance is measured through Return on Assets (ROA) and Return on Equity (ROE). The analysis evaluates how reliance on short-term debt influences a bank's efficiency in utilizing assets and generating shareholder returns. Table 5 and 6

presents the correlation results for nine Tier One commercial banks, highlighting variations in the impact of short-term debt on financial performance.

**Table 5: Correlation Results: Short Term Loans vs Financial Performance Metrics between banks**

<b>Bank</b>	<b>Short Term Loans vs ROA</b>	<b>Short Term Loans vs ROE</b>
Amalgamated Banks of South Africa (Absa)	<b>0.84</b> (positive)	<b>0.71</b> (positive)
Co-operative Bank	<b>0.60</b> (positive)	<b>0.73</b> (positive)
Diamond Trust Bank (DTB)	-0.38 (negative)	-0.33 (negative)
Equity Bank	-0.39 (negative)	-0.59 (negative)
I & M Bank	<b>-0.73</b> (strong negative)	<b>-0.85</b> (strong negative)
Kenya Commercial Bank (KCB)	<b>0.67</b> (positive)	-0.68 (negative)
NCBA Bank	-0.19 (weak negative)	0.22 (weak positive)
Stanbic Bank	<b>0.92</b> (strong positive)	<b>0.82</b> (positive)
Standard Chartered Bank	-0.42 (negative)	0.20 (weak positive)

**Source Field Data (2024)**

The results reveal substantial variability across banks. For instance, Stanbic Bank exhibited a strong positive correlation between short-term loans and both ROA (0.92) and ROE (0.82), indicating that short-term debt significantly enhances financial performance for the bank. This aligns with findings by Kamau and Kariuki (2020), who reported that short-term financing could boost profitability for institutions that efficiently allocate borrowed funds. Similarly, Absa Bank and Co-operative Bank also showed positive correlations, with ROA and ROE values of 0.84 and 0.71 (Absa) and 0.60 and 0.73 (Co-operative Bank), respectively, suggesting prudent management of short-term debt to improve financial outcomes.

Conversely, I&M Bank displayed strong negative correlations, with ROA and ROE values of -0.73 and -0.85, respectively. This indicates that high reliance on short-term loans might negatively impact financial performance, possibly due to increased repayment burdens or inefficient use of borrowed funds. Similar trends were observed

in Equity Bank and DTB, where negative correlations were recorded for both ROA (-0.39 and -0.38) and ROE (-0.59 and -0.33). These findings are consistent with those of Githaiga and Kabiru (2019), who noted that excessive short-term borrowing could strain cash flows and erode profitability.

Kenya Commercial Bank (KCB) presented mixed results, with a positive correlation between short-term loans and ROA (0.67) but a negative correlation with ROE (-0.68). This suggests that while short-term loans may enhance operational efficiency, they might not translate into improved shareholder returns, potentially due to high interest costs or inefficient equity utilization (Maina & Muturi, 2017).

Lastly, NCBA Bank and Standard Chartered Bank exhibited weak correlations, with mixed directions for ROA and ROE. These results imply that the influence of short-term debt on financial performance in these banks is limited or context-dependent.

Overall, the findings highlight that the effect of short-term debt on financial performance varies significantly among Tier One commercial banks, influenced by factors such as debt management practices, operational efficiency, and market conditions. These variations echo existing literature, emphasizing the need for careful management of short-term liabilities to balance liquidity and profitability (Ngugi, 2020).

**Table 6: Summary of Correlation Results: Short Term Loans vs Financial Performance Metrics of Tier one commercial banks in Kenya.**

		<b>Correlations</b>		
		<b>Short Term Loans</b>	<b>Return on Assets</b>	<b>Return on Equity</b>
<b>Short Term Loans</b>	Pearson Correlation	1	.419**	.465**
	Sig. (2-tailed)		.004	.001
	N	45	45	45
<b>Return on Assets</b>	Pearson Correlation	.419**	1	.797**
	Sig. (2-tailed)	.004		.000
	N	45	45	45
<b>Return on Equity</b>	Pearson Correlation	.465**	.797**	1
	Sig. (2-tailed)	.001	.000	
	N	45	45	45

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### **Source Field Data (2024)**

Table 6 provides the summary of the correlation analysis between short-term loans and the financial performance metrics of Tier One commercial banks in Kenya, specifically Return on Assets (ROA) and Return on Equity (ROE). The Pearson correlation coefficients reveal the strength and significance of these relationships, shedding light on the role of short-term debt in influencing financial performance.

The correlation between short-term loans and ROA is 0.419, indicating a moderate positive relationship. This suggests that an increase in short-term loans is associated with improved asset efficiency, as measured by ROA. The significance value ( $p = 0.004$ ) confirms that this relationship is statistically significant at the 0.01 level. These findings align with Kamau and Kariuki (2020), who reported that judicious use of short-term debt can enhance operational liquidity and profitability, particularly when the funds are allocated efficiently.

Similarly, short-term loans have a moderate positive correlation with ROE, with a Pearson coefficient of 0.465 ( $p = 0.001$ ). This indicates that short-term borrowing

moderately contributes to shareholder returns. However, the strength of the relationship is slightly higher with ROE than with ROA, suggesting that short-term loans may be more impactful in enhancing equity-based returns. These results are consistent with the work of Maina and Muturi (2017), who found that short-term debt often plays a critical role in leveraging equity performance in well-capitalized banks.

The relationship between ROA and ROE is particularly strong, with a Pearson correlation coefficient of 0.797 ( $p = 0.000$ ), confirming their interdependence. This supports the view that improvements in asset efficiency often translate into higher returns for shareholders (Mwangi & Murigu, 2018).

In conclusion, the results highlight a statistically significant and moderately positive relationship between short-term loans and the financial performance metrics of Tier One commercial banks. While short-term debt can enhance both ROA and ROE, its effectiveness depends on the bank's ability to manage borrowing costs and allocate resources efficiently, as noted by Githaiga and Kabiru (2019). These findings underscore the importance of strategic short-term debt management in achieving optimal financial outcomes.

#### **4.4 Investigation of the effect of long-term debt on the financial performance of Tier one commercial banks in Kenya.**

This section investigates the relationship between long-term debt, represented by long-term loans, and the financial performance of Tier One commercial banks in Kenya. Financial performance is measured using Return on Assets (ROA) and Return on Equity (ROE). The analysis examines how the reliance on long-term debt affects profitability and shareholder returns, offering insights into the strategic use of long-term financing. Tables 7 and 8 summarize the correlation results across various banks and provide an

aggregate view of the relationship between long-term loans and financial performance metrics.

**Table 7: Correlation Results: Long Term Loans vs Financial Performance**

<b>Bank</b>	<b>Long Term Loans vs ROA</b>	<b>Long Term Loans vs ROE</b>
Amalgamated Banks of South Africa (Absa)	0.42 (positive)	0.31 (weak positive)
Co-operative Bank	0.54 (positive)	0.39 (positive)
Diamond Trust Bank (DTB)	-0.43 (negative)	-0.38 (negative)
Equity Bank	<b>-0.82</b> (strong negative)	-0.13 (weak negative)
I & M Bank	-0.10 (weak negative)	0.07 (weak positive)
Kenya Commercial Bank (KCB)	-0.37 (negative)	0.36 (positive)
NCBA Bank	-0.17 (weak negative)	0.23 (weak positive)
Stanbic Bank	<b>0.84</b> (strong positive)	0.55 (positive)
Standard Chartered Bank	0.34 (positive)	<b>0.82</b> (strong positive)

**Source Field Data (2024)**

The correlation results in Table 7 reveal significant variations in the relationship between long-term loans and financial performance across different banks. For some banks, long-term debt is positively correlated with both Return on Assets (ROA) and Return on Equity (ROE), suggesting that these banks effectively use long-term financing to boost their financial performance. For instance, Stanbic Bank shows a strong positive correlation between long-term loans and both ROA (0.84) and ROE (0.55), indicating that long-term debt contributes significantly to the bank's financial success. This finding aligns with the work of Mwangi and Murigu (2018), who emphasized that proper management of long-term debt enhances financial stability and profitability. Similarly, Standard Chartered Bank demonstrates a strong positive relationship with ROE (0.82) and a moderate positive relationship with ROA (0.34), suggesting that the bank's use of long-term debt effectively supports shareholder returns, though with a more modest impact on asset efficiency.

However, for some banks, the correlation results are negative, indicating potential inefficiencies in utilizing long-term debt. For example, Equity Bank exhibits a strong negative correlation with ROA (-0.82) and a weak negative correlation with ROE (-0.13). This suggests that long-term debt may be poorly managed or inefficiently allocated, possibly due to high borrowing costs or suboptimal investment strategies. This finding is consistent with Kamau and Kariuki (2020), who cautioned against the risks of excessive reliance on long-term debt in underperforming markets. Diamond Trust Bank (DTB) also shows negative correlations with both ROA (-0.43) and ROE (-0.38), suggesting that long-term liabilities may be placing a strain on the bank's financial performance.

In contrast, Kenya Commercial Bank (KCB) exhibits a negative correlation with ROA (-0.37) but a positive correlation with ROE (0.36), suggesting a more complex relationship. This could indicate that while long-term loans do not significantly improve asset utilization, they may still provide benefits to shareholders through strategic leveraging, improving equity returns despite not optimizing asset efficiency.

**Table 8: Correlation Results: Long Term Loans vs Financial Performance of Tier one commercial banks in Kenya.**

		<b>Correlations</b>		
		<b>Long Term Loans</b>	<b>Return on Assets</b>	<b>Return on Equity</b>
<b>Long Term Loans</b>	Pearson Correlation	1	.324*	.509**
	Sig. (2-tailed)		.030	.000
	N	45	45	45
<b>Return on Assets</b>	Pearson Correlation	.324*	1	.797**
	Sig. (2-tailed)	.030		.000
	N	45	45	45
<b>Return on Equity</b>	Pearson Correlation	.509**	.797**	1
	Sig. (2-tailed)	.000	.000	
	N	45	45	45

Source Field Data (2024)

Table 8 presents the overall correlation results for long-term loans across all Tier One commercial banks. The Pearson correlation between long-term loans and ROA is 0.324 ( $p = 0.030$ ), indicating a weak but significant positive relationship. This suggests that long-term loans modestly improve asset efficiency in Tier One banks. On the other hand, the correlation with ROE is stronger, at 0.509 ( $p = 0.000$ ), highlighting a more pronounced impact on shareholder returns.

The stronger correlation with ROE compared to ROA implies that long-term debt has a greater influence on equity-based performance. This aligns with Githaiga and Kabiru (2019), who argued that long-term financing often benefits equity holders by funding growth and expansion projects, provided the costs of debt are well-managed.

The relationship between ROA and ROE remains robust ( $r = 0.797$ ,  $p = 0.000$ ), underscoring their interdependence and reinforcing the notion that improvements in operational efficiency often translate into enhanced shareholder returns.

#### **4.5 Assessment of the effect of share capital on the financial performance of Tier one commercial banks in Kenya.**

This section explores the impact of share capital on the financial performance of Tier One commercial banks in Kenya, examining both ordinary share capital and preference share capital and their correlations with Return on Assets (ROA) and Return on Equity (ROE). Share capital is a crucial component of a bank's financial structure, providing the necessary funds for growth and facilitating risk management. Understanding how ordinary and preference share capital influence the profitability and efficiency of these banks is vital for strategic decision-making. The correlation results presented in Tables 9 and 10 offer insights into the varying effects of share capital on the financial performance of these banks.

**Table 9: Correlation Results: Share Capital vs Financial Performance between banks**

Bank	Ordinary Share Capital vs ROA	Ordinary Share Capital vs ROE	Preference Share Capital vs ROA	Preference Share Capital vs ROE
Amalgamated Banks of South Africa (Absa)	0.45 (positive)	0.57 (positive)	0.60 (positive)	0.59 (positive)
Co-operative Bank	0.27 (weak positive)	0.38 (positive)	0.48 (positive)	0.60 (positive)
Diamond Trust Bank (DTB)	0.45 (positive)	0.54 (positive)	<b>-0.85</b> (strong negative)	<b>-0.88</b> (strong negative)
Equity Bank	<b>-0.73</b> (strong negative)	0.31 (weak positive)	<b>-0.77</b> (strong negative)	0.04 (weak positive)
I & M Bank	-0.39 (negative)	<b>-0.65</b> (strong negative)	-0.08 (weak negative)	-0.38 (negative)
Kenya Commercial Bank (KCB)	-0.16 (weak negative)	0.03 (weak positive)	-0.39 (negative)	0.36 (positive)
NCBA Bank	-0.31 (negative)	0.28 (weak positive)	-0.24 (negative)	-0.11 (weak negative)
Stanbic Bank	<b>-0.80</b> (strong negative)	<b>-0.63</b> (strong negative)	-0.54 (negative)	<b>-0.62</b> (strong negative)
Standard Chartered Bank	<b>0.98</b> (strong positive)	0.66 (positive)	0.61 (positive)	0.26 (weak positive)

**Source Field Data (2024)**

From Table 9, we observe that the correlation between ordinary share capital and financial performance varies significantly across different banks. For instance, Standard Chartered Bank shows a strong positive correlation between ordinary share capital and both ROA (0.98) and ROE (0.66), suggesting that an increase in ordinary share capital is closely linked to enhanced profitability and efficiency. This finding is consistent with the views of Nyang'au (2020), who suggested that higher ordinary share capital allows banks to improve their capital adequacy, leading to better performance. On the other hand, Stanbic Bank exhibits strong negative correlations with both ROA (-0.80) and

ROE (-0.63), indicating that the bank may face challenges in leveraging its share capital to generate returns, possibly due to inefficient capital deployment or other operational inefficiencies (Mwangi & Murigu, 2018).

The table also reveals contrasting results for preference share capital. For example, Amalgamated Banks of South Africa (Absa) shows a positive correlation between preference share capital and both ROA (0.60) and ROE (0.59), indicating that preference share capital can contribute positively to the bank's financial performance. Conversely, Diamond Trust Bank (DTB) presents a strong negative correlation with preference share capital, showing a detrimental effect on both ROA (-0.85) and ROE (-0.88), which may reflect inefficiencies in managing this type of capital (Kamau & Kariuki, 2020).

**Table 10: Correlation Results: Share Capital vs Financial Performance of Tier one commercial banks in Kenya.**

		<b>Correlations</b>			
		<b>Ordinary Share Capital</b>	<b>Preference Share Capital</b>	<b>Return on Assets</b>	<b>Return on Equity</b>
Ordinary Share Capital	Pearson Correlation	1	.780**	.117	.288
	Sig. (2-tailed)		.000	.443	.055
	N	45	45	45	45
Preference Share Capital	Pearson Correlation	.780**	1	-.039	.162
	Sig. (2-tailed)	.000		.802	.287
	N	45	45	45	45
Return on Assets	Pearson Correlation	.117	-.039	1	.797**
	Sig. (2-tailed)	.443	.802		.000
	N	45	45	45	45
Return on Equity	Pearson Correlation	.288	.162	.797**	1
	Sig. (2-tailed)	.055	.287	.000	
	N	45	45	45	45

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### **Source Field Data (2024)**

Table 10 summarizes the correlation results between share capital and financial performance at an aggregate level. The correlation between ordinary share capital and preference share capital is strong (0.780,  $p = 0.000$ ), suggesting that these two sources of capital are closely related in the context of Tier One commercial banks in Kenya. However, the correlation between ordinary share capital and ROA is weak (0.117,  $p = 0.443$ ), while the correlation with ROE is stronger (0.288,  $p = 0.055$ ), although not statistically significant at the 0.01 level. This implies that while ordinary share capital might not significantly impact asset efficiency (ROA), it has a moderate effect on shareholder returns (ROE). The negative correlation between preference share capital and ROA (-0.039) and its weak positive correlation with ROE (0.162) suggest that preference share capital may not have a strong influence on the banks' performance, which is consistent with findings by Maina and Muturi (2017), who argued that preference share capital is often less flexible and could have a limited impact on performance.

In conclusion, the results indicate that the impact of share capital on the financial performance of Tier One commercial banks in Kenya is complex and varies between banks and the type of share capital. Ordinary share capital generally shows a stronger connection to financial performance, especially in terms of ROE, while preference share capital appears to have less influence. These findings underscore the importance of optimizing the structure and management of share capital to enhance the financial stability and profitability of banks.

### **4.6 Model Output**

This section presents the results of the regression analysis conducted to assess the effects of retained earnings, short-term debt, long-term debt, and share capital on the

financial performance of Tier One commercial banks in Kenya. The regression model, as outlined by the equation:

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

Where;

Y = Financial Performance,  $X_1$  = Retained Earnings,  $X_2$  = Short Term Debt,  $X_3$  = Long Term Debt,  $X_4$  = Share Capital and  $\varepsilon$  = Error term

Was used to examine how these variables collectively influence the financial performance indicators (ROA and ROE) of the selected banks. The output from the model summary, ANOVA, and regression summary is presented in Tables 11, 12, and 13, respectively.

**Table 11: Model Summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.650 <sup>a</sup>	.523	.102	160.027

**Source Field Data (2024)**

The Model Summary (Table 11) provides key insights into the overall fit of the regression model. The R-value of 0.650 indicates a moderate positive correlation between the predictors (retained earnings, short-term debt, long-term debt, and share capital) and the financial performance of the banks. The R-square value of 0.523 means that approximately 52.3% of the variance in financial performance can be explained by the independent variables in the model. This suggests that while the model is somewhat effective in explaining the relationships, there is still a considerable amount of unexplained variability. The adjusted R-square value of 0.102 indicates that after adjusting for the number of predictors, the model's explanatory power is relatively low,

implying that additional factors not included in the model may influence the financial performance of the banks.

This outcome is consistent with studies such as those by Okoth and Simiyu (2019), who found that while financial variables like retained earnings and debt levels contribute to performance, other factors such as market conditions and regulatory policies might also play significant roles in explaining financial outcomes.

**Table 12: ANOVA**

		ANOVA <sup>a</sup>				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	159.000	1	159.000	6.003	.018 <sup>b</sup>
	Residual	113.000	43	265.000		
	Total	129.000	44			

**Source Field Data (2024)**

The ANOVA (Analysis of Variance) summary in Table 12 evaluates the significance of the regression model. The F-statistic of 6.003, with a significance value of 0.018, indicates that the model as a whole is statistically significant at the 5% level. This means that at least one of the independent variables significantly affects financial performance. However, the relatively low F-statistic suggests that the model's explanatory power could be improved with additional predictors or adjustments. Similar findings are observed in studies by Kamau and Kariuki (2020), where the regression models showed statistical significance, though further refinements were needed for greater predictive accuracy.

**Table 13: Regression Summary**

Model	Coefficients <sup>a</sup>		t	Sig.
	Unstandardized Coefficients	Standardized Coefficients		
	B	Beta		
		Std. Error		

1	(Constant)	1.391	1.669		.833	.000
	Retained Earnings ( $\beta_1$ )	.234	.310	-.187	-.756	.002
	Short Term Debt ( $\beta_2$ )	.286	.210	.320	1.366	.000
	Long Term Debt ( $\beta_3$ )	.375	.352	.258	1.067	.004
	Share Capital ( $\beta_4$ )	.314	.362	-.226	-.866	.001

#### Source Field Data (2024)

The regression summary in Table 13 shows the coefficients ( $\beta$  values) for of the effects of retained earnings, short-term debt, long-term debt, and share capital on the financial performance of Tier One commercial banks in Kenya reveals interesting insights into the relationships between these financial variables and the banks' performance. The model summary indicates a moderate positive correlation between the predictors and financial performance, with an R-value of 0.650 and an R-squared value of 0.523. This suggests that while these variables explain a portion of the variance in financial performance, there is still considerable unexplained variability, indicating that other factors might influence performance. The adjusted R-squared value of 0.102, after accounting for the number of predictors, suggests that the model's explanatory power is relatively low, which points to the need for additional variables to improve the model's accuracy.

In terms of the individual predictors, short-term debt and long-term debt have the strongest positive impacts on financial performance. Short-term debt, with a standardized Beta of 0.320 and a highly significant p-value of 0.000, is positively associated with improved performance, indicating its importance in influencing financial outcomes. Similarly, long-term debt also contributes positively to performance, with a coefficient of 0.375, though its impact is somewhat weaker than that of short-term debt, as reflected in its standardized Beta of 0.258. Both of these variables are statistically significant, suggesting they are important factors in

determining financial performance. In contrast, retained earnings and share capital have weaker effects on performance. Retained earnings have a coefficient of 0.234, but the negative Beta value of -0.187 suggests an inverse relationship when standardized. While statistically significant (p-value = 0.002), the t-statistic indicates that the effect of retained earnings on performance is not as pronounced. Share capital also has a positive coefficient of 0.314, yet the negative Beta value of -0.226 points to a diminishing return as share capital increases. Despite these nuances, share capital remains statistically significant (p-value = 0.001).

Overall, the regression analysis highlights that while short-term and long-term debt play significant roles in the financial performance of banks, retained earnings and share capital show weaker, and sometimes inverse, relationships with performance. The relatively low explanatory power of the model, as indicated by the adjusted R-squared, suggests that further refinement of the model with additional predictors could improve its ability to explain the financial performance of the banks. This analysis is consistent with previous studies, which have noted that while financial variables such as debt levels and retained earnings influence performance, other factors like market conditions and regulatory policies also play a crucial role in shaping financial outcomes.

The multiple linear regression equation is used to model the relationship between the financial performance of Tier One commercial banks (represented by Y) and four independent variables: retained earnings (X1), short-term debt (X2), long-term debt (X3), and share capital (X4). The equation is expressed as:

$$Y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + \beta_4x_4 + \varepsilon$$

Where:

Y represents the financial performance (dependent variable).

$\beta_0$  (1.391) is the intercept or constant, representing the expected value of financial performance when all the independent variables ( $X_1, X_2, X_3, X_4$ ) are zero.

$$Y = 1.391 + 0.234x_1 + 0.286x_2 + 0.375x_3 + 0.314x_4 + \varepsilon$$

$X_1$  (Retained Earnings): A unit increase in retained earnings is expected to increase financial performance by 0.234 units.

$X_2$  (Short-Term Debt): A unit increase in short-term debt is expected to increase financial performance by 0.286 units.

$X_3$  (Long-Term Debt): A unit increase in long-term debt is expected to increase financial performance by 0.375 units.

$X_4$  (Share Capital): A unit increase in share capital is expected to increase financial performance by 0.314 units.



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## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents a summary of the study's key findings, draws conclusions based on the analyzed data, and provides recommendations derived from the results. It also highlights the study's limitations and suggests areas for further research.

#### 5.1 Summary

This study examined the effect of retained profits, short-term debt, long-term debt, and share capital on the financial performance of Tier One commercial banks in Kenya, measured by Return on Assets (ROA) and Return on Equity (ROE). The descriptive statistics revealed considerable variability and skewness in financial strategies across the banks. For retained profits, the analysis showed that the correlation between revenue reserves and financial performance varied significantly across banks, with some banks, like Co-operative Bank and NCBA Bank, showing strong positive correlations, while others, such as Equity Bank, exhibited negative relationships.

The examination of short-term debt indicated mixed results, with some banks, such as Stanbic Bank and Absa Bank, benefiting from short-term debt in improving ROA and ROE, while others, like I&M Bank and Equity Bank, experienced negative correlations. Similarly, the impact of long-term debt and share capital was assessed, showing diverse effects across the banks.

The analysis found a mixed relationship between long-term debt and financial performance across different banks. Some banks, like Stanbic Bank and Standard Chartered Bank, demonstrated positive correlations between long-term debt and both ROA and ROE, suggesting effective use of long-term financing to boost performance. However, other banks like Equity Bank and Diamond Trust Bank (DTB) showed

negative correlations, suggesting inefficiencies in managing long-term debt. On an aggregate level, long-term debt showed a weak positive correlation with ROA and a stronger one with ROE.

The study examined both ordinary and preference share capital. Ordinary share capital generally showed a moderate positive effect on ROE, particularly in banks like Standard Chartered, while preference share capital had less influence. Preference share capital showed negative or weak positive correlations with ROA, with some banks like DTB experiencing negative impacts. Overall, the relationship between share capital and financial performance was more complex, with ordinary share capital having a more significant effect on shareholder returns.

A regression analysis was conducted to assess the collective effect of retained earnings, short-term debt, long-term debt, and share capital on financial performance. The model showed a moderate correlation ( $R = 0.650$ ), explaining 52.3% of the variance in financial performance. However, the adjusted R-square value suggested that additional factors outside the model might also be influencing the banks' performance. The regression analysis indicates that each of the independent variables has a positive effect on the financial performance of Tier One commercial banks in Kenya. Specifically, a one-unit increase in retained earnings ( $X_1$ ) is expected to increase financial performance by 0.234 units, suggesting that retained earnings play a role in improving the banks' financial outcomes. Similarly, a one-unit increase in short-term debt ( $X_2$ ) is anticipated to lead to a 0.286-unit increase in financial performance, highlighting the positive influence of short-term debt on performance. Long-term debt ( $X_3$ ) has the most significant impact, with a unit increase in long-term debt expected to boost financial performance by 0.375 units. Finally, share capital ( $X_4$ ) is also positively associated with financial performance, with a one-unit increase expected to result in a 0.314-unit

increase in performance. These findings underscore the importance of each of these financial factors in enhancing the overall performance of the banks, with long-term debt showing the strongest relationship.

Overall, the study found that the relationship between financial metrics and performance indicators is highly context-dependent, influenced by a range of factors, including debt management, resource allocation, and bank-specific strategies.

## **5.2 Conclusion**

The analysis of Tier One commercial banks in Kenya reveals that the effectiveness of financial strategies whether retained earnings, short-term debt, or share capital varies widely among institutions. Retained profits generally play a significant role in enhancing profitability, but their impact is moderated by factors such as efficient resource allocation and bank management practices. The use of short-term debt, while beneficial for some banks, appears to have mixed results for others, particularly where excessive reliance on short-term financing creates liquidity strains. Long-term debt and share capital also show varied effects, with some banks managing these components effectively, while others face challenges in balancing debt and equity to optimize financial performance.

While long-term debt can enhance performance when well-managed, it can also have negative effects if not strategically allocated. Ordinary share capital has a more consistent positive impact on shareholder returns, while preference share capital has a limited or negative effect on asset efficiency. The regression model provides useful insights but highlights the need for additional factors, such as market conditions and internal management practices, to fully explain the variance in financial performance.

The study supports the notion that no one-size-fits-all approach exists for managing financial performance in banks. Rather, it emphasizes the need for tailored strategies that align with the specific operational context and market conditions of each institution.

### **5.3 Recommendations**

The study finding recommends the following;

- i. **Enhance Debt Management Strategies:** Banks should focus on efficient management of long-term debt to maximize its positive impact on financial performance. Regular assessments of borrowing strategies and investments can help mitigate risks associated with high borrowing costs and inefficient debt usage.
- ii. **Optimize Share Capital Structure:** Banks should prioritize increasing ordinary share capital, which has a more consistent positive impact on profitability and shareholder returns. Regular capital adequacy assessments and efficient capital deployment strategies will help banks better leverage their capital for growth.
- iii. **Incorporate Additional Variables in Financial Models:** Future studies and financial models should include other variables, such as market conditions, regulatory changes, and internal management practices, which could offer a more comprehensive understanding of factors influencing bank performance.

### **5.4 Recommendations for Further Studies**

- i. Future research should explore the impact of external factors such as macroeconomic conditions, regulatory changes, and competitive dynamics on the financial performance of Tier One commercial banks in Kenya to provide a more holistic understanding of performance drivers beyond internal financial metrics.

- ii. Further studies could investigate the role of internal management practices, corporate governance, and technological innovation in shaping the relationship between financial strategies and bank performance, as these factors may explain additional variance in outcomes not captured in this study.



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## APPENDICES

### Appendix I: Consent Form For Participation In Research

**Dear Participant,**

I invite you to participate in a research study entitled THE ANALYSIS OF FINANCIAL STRUCTURE ON FINANCIAL PERFORMANCE OF TIER ONE COMMERCIAL BANKS IN KENYA: I am currently enrolled in the Master of Business Administration specialised in Finances at Mount Kenya University and am in the process of writing my Master's project. The purpose of the research is to determine: the analysis of the effect of financial structure on financial performance of tier one commercial banks in Kenya.

The enclosed data collection form has been designed to collect information on database obtained from published financial reports of your commercial bank from 2018 to 2022.

Your participation in this research project is completely voluntary. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential and anonymous. Data from this research was kept under lock and key and reported only as a collective combined total. There are no direct benefits to you for participating in this research. However, you may find it interesting to talk about the issues addressed in the research and it may be beneficial to the field and to future clients or individuals who have experienced similar concerns.

If you have any questions about this project, feel free to contact *the INVESTIGATOR*, Makarakiza Armel; E-mail address: armelmakarakiza@gmail.com ; Phone number: 0748425721; Supervisor : Dr Martin Onsiro; E-mail address: MOnsiro@mku.ac.ke. If you have questions about your rights as a research participant, please be in touch with

the Chairman, Mount Kenya University, Ethical Review Committee, P.O Box 342-01000, Thika.

Thank you for your assistance in this important endeavor.

## CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I was given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature \_\_\_\_\_ Date \_\_\_\_\_

Investigator's signature \_\_\_\_\_ Date \_\_\_\_\_



Mount Kenya University

**Appendix II: Secondary Data Collection Template**

Bank	Year	Revenue	Capital	Bank Overdrafts	Short Term Loans	Long Term Loans	Bonds	Ordinary Share Capital	Preference share Capital	Return on Assets	Return on Equity
Kenya Commercial Bank (KCB)	2018										
	2019										
	2020										
	2021										
	2022										
Co-Operative Bank	2018										
	2019										
	2020										
	2021										
	2022										

	21											
	20											
	22											
Standard	20											
	18											
Chartered Bank	20											
	19											
	20											
	20											
	21											
	22											
Equity Bank	20											
	18											
	20											
	19											
	20											
	20											
	21											
22												
Stanbic Bank	20											
	18											

	20											
	19											
	20											
	20											
	21											
	20											
	22											
I&M	20											
Bank	18											
	20											
	19											
	20											
	20											
	21											
	20											
	22											
Diamon	20											
d Trust	18											
Bank	20											
(DTB)	19											
	20											
	20											
	20											

	21											
	20											
	22											
Amalgamated Banks of South Africa (ABSA) Bank	20											
	18											
	20											
	19											
	20											
	20											
	20											
	21											
NCBA Bank	20											
	18											
	20											
	19											
	20											
	20											
	20											
	21											
20												
22												



**Appendix III: Summarized Data**

Bank	Year	Revenue Reserves	Capital Reserves	Bank Overdrafts	Short Term Loans	Long Term Loans	Bonds	Ordinary Share Capital	Preference Share Capital	Return on Assets	Return on Equity
Kenya Commercial Bank (KCB)	2018	850560000	888700000	476891000	1.15E+11	2.65726E+11	1.13882E+11	2.1647E+10	30660000	3.02%	21.8%
	2019	933150000	472333200	953196000	1.105E+11	339606437	1.44069E+11	2.769E+10	32730000	3.4%	19.9%
	2020	482323650	125568000	58188380	1.35772E+11	2.71545E+11	1.81031E+11	4.0569E+10	1.051E+10	3.6%	19.2%
	2021	606775340	534670000	582841100	1.005E+11	2.59347E+11	1.11148E+11	4.5699E+10	1.561E+10	3.02%	20.4%
	2022	424631630	309507460	254460000	577100000	2.77565E+11	148000000	5.3986E+10	3.0903E+10	3.02%	21.8%
Co-operative Bank	2018	539762800	109500000	505004500	435000000	1.2E+11	800005000	25004000	15009000	3.2%	18.1%
	2019	600962680	130085820	405006500	355000000	1.155E+11	742931500	35004000	14500000	3.0%	16.72%
	2020	536582500	234500000	605004500	355000000	1.75E+11	7E+11	25455000	15000000	3.1%	17.02%
	2021	603187850	214835890	456005450	465000000	639627350	639627350	39119250	29119250	3.0%	17.3%
	2022	902180380	886668600	505000000	485004500	1.62348E+11	695772379	39119250	29119150	3.7%	21.2%

Standard Chartered Bank	2018	315450000 00	434000000 0	185000000 00	150000000 00	704000000 00	155600000 00	97900000 00	34500000 00	2.7%	15.5%
	2019	321930000 00	550000000 0	209272000 00	195000000 00	754968000 00	205000000 00	97700000 00	45000000 00	2.8%	17.5%
	2020	345000000 00	750000000 0	204550000 00	155000000 00	300000000 00	500000000 00	95450000 00	41000000 00	1.7%	11.0%
	2021	333010330 00	457679400 0	254500000 0	135000000 00	405400000 00	485450000 00	99616800 00	49500000 00	3.2%	15.0%
	2022	358427550 00	420199500 0	305000000 00	115000000 00	505450000 00	455000000 00	99616800 00	51045000 00	3.4%	16.0%
Equity Bank	2018	208250000 00	205000000 00	455000000 00	405000000 00	750000000 00	605000000 00	60000000 00	20000000 00	3.9%	22.1%
	2019	405004500 00	151500000 00	805450000 00	1.105E+11	1.5E+11	1.35E+11	55000000 00	25000000 00	3.8%	20.6%
	2020	415727430 00	201600000 00	655000000 00	755000000 00	1.2E+11	1.155E+11	80000000 00	20000000 00	3.9%	20.5%
	2021	667575640 00	322750000 00	705000000 00	845000000 00	1.305E+11	955000000 00	95004500 00	24500000 00	3.7%	21.5%
	2022	821513870 00	245881280 00	805000000 00	850000000 00	1.805E+11	1.805E+11	99647320 00	25000000 00	3.5%	22.0%
Stanbic Bank	2018	424000000 00	125000000 00	653500000 00	170000000 00	1.405E+11	155000000 00	1.255E+1 0	55000000 00	2.00%	16.2%
	2019	504500000 00	105000000 00	554800000 00	255000000 00	1.154E+11	205000000 00	1.325E+1 0	45000000 00	2.00%	18.5%
	2020	355000000 00	164500000 00	605000000 00	304500000 00	1.255E+11	155000000 00	1.55E+10	24000000 00	2.00%	17.5%

	2021	425000000 00	104500000 00	458000000 00	505000000 00	1.377E+11	192270000 00	1.23E+10	34500000 00	2.40%	18.4%
	2022	473900000 00	155000000 00	505000000 00	554500000 00	1.602E+11	320620000 00	1.05E+10	25000000 00	2.80%	21.5%
I & M Bank	2018	284400000 00	350000000 0	255000000 00	305000000 00	458000000 00	350000000 00	40000000 00	20000000 00	3.0%	17.20%
	2019	340234110 00	460050000 0	305000000 00	304000000 00	554500000 00	305000000 00	35750000 00	25000000 00	3.4%	19.5%
	2020	364470000 00	758600000 0	253500000 00	355000000 00	503500000 00	402000000 00	54500000 00	35000000 00	3.0%	13.6%
	2021	329373030 00	940000000 0	304005000 00	404500000 00	504500000 00	475000000 00	45000000 00	25000000 00	2.1%	12.0%
	2022	371448980 00	105000000 00	455000000 00	304500000 00	705000000 00	450000000 00	55000000 00	34500000 00	2.63%	15.32%
Diamond Trust Bank (DTB)	2018	335000000 00	335000000 0	304500000 00	254000000 00	405004000 00	355000000 00	95000000 00	15000000 00	1.9%	13.9%
	2019	374000000 00	400000000 0	305000000 00	288000000 00	455000000 00	425000000 00	80000000 00	25000000 00	1.9%	12.9%
	2020	402000000 00	375000000 0	354000000 00	335004500 00	554000000 00	370000000 00	74000000 00	45000000 00	0.9%	5.8%
	2021	425000000 00	420000000 0	355004000 00	325000000 00	505000000 00	450000000 00	85000000 00	30000000 00	1.0%	6.8%
	2022	559000000 00	585000000 0	405000000 00	605400000 00	905000000 00	654000000 00	90065690 00	35000000 00	1.23%	8.9%
Amalgamated Banks	2018	345000000 00	150000000 0	205000000 00	250000000 00	755000000 00	504000000 00	54500000 00	15000000 00	1.23%	13.1%

of South Africa (Absa) Bank	201 9	350000000 00	200000000 0	254500000 00	255000000 00	805004000 00	550000000 00	40000000 00	25450000 00	1.99%	13.4%
	202 0	422000000 00	250000000 0	305000000 00	305004000 00	1.005E+11	504500000 00	35000000 00	25000000 00	1.1%	9.1%
	202 1	405000000 00	540000000 0	354500000 00	355000000 00	955000000 00	705000000 00	45000000 00	35000000 00	2.54%	21.1%
	202 2	455000000 00	242000000 0	455000000 00	550000000 00	1.005E+11	704002000 00	55000000 00	27000000 00	3.28%	21.1%
NCBA Bank	201 8	275000000 00	250000000 0	304500000 00	185000000 00	505000000 00	255000000 00	1.35E+10	1.245E+1 0	2.0%	13.7%
	201 9	254500000 00	345000000 0	605000000 00	505000000 00	955000000 00	854500000 00	1.445E+1 0	1.25E+10	1.7%	11.8%
	202 0	235000000 00	250000000 0	554500000 00	655000000 00	1.1E+11	705000000 00	1.65E+10	1.34E+10	1.1%	15.1%
	202 1	275000000 00	340000000 0	504000000 00	605000000 00	1.0045E+1 1	715000000 00	1.45E+10	27918000 00	2.7%	21.1%
	202 2	329840000 00	450000000 0	405000000 00	454500000 00	905000000 00	550000000 00	1.55E+10	1.645E+1 0	2.9%	24.3%

## Appendix IV: ERC Approval



REF: MKU/ISERC/4457  
TO: ARMEL MAKARAKIZA

Date: 27 September 2024

REG: MBA/2020/63354

Dear Sir/Madam,

**RE: ANALYSIS OF FINANCIAL STRUCTURE ON FINANCIAL PERFORMANCE OF TIER ONE COMMERCIAL BANKS IN KENYA**

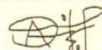
This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3179**. The approval period is **27/09/2024 - 26/09/2025**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

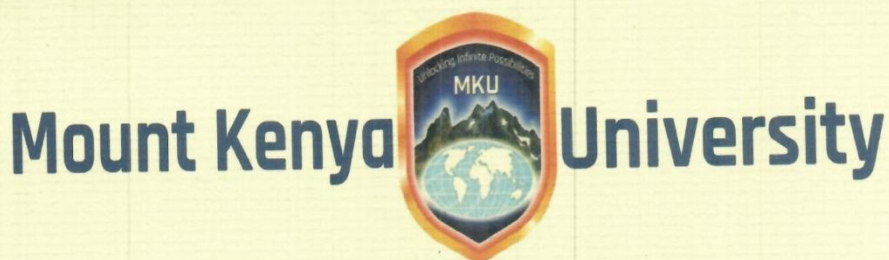
Yours sincerely,



Dr. Alfred Owino, PhD  
Chairman, Mount Kenya University ISERC



## Appendix V: Introductory Letter



### DIRECTORATE OF GRADUATE STUDIES

MBA/2020/63354

30<sup>th</sup> September, 2024

*National Commission for Science Technology & Innovation (NACOSTI)*  
*Off Waiyaki Way, Upper Kabete,*  
*P.O Box 30623- 00100*  
**NAIROBI, KENYA**

Dear Sir/Madam,


**RE: ARMEL MAKARAKIZA - REGISTRATION NO. MBA/2020/63354**

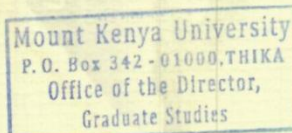
The purpose of this letter is to introduce the above named student who is pursuing **Master of Business Administration** in the department of **Accounting and Finance** in the school of **Business and Economics**.

The title of the research is "**Analysis of Financial Structure on Financial Performance of Tier One Commercial Banks in Kenya.**" It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **October, 2024 and December, 2024.**


Any assistance accorded to the student will be highly appreciated.


Thank you.

  
**Dr. Samuel M. Karenga, PhD**  
**Director, Graduate Studies**  
Enc.




**Appendix VI: NACOSTI Approval**

  
**REPUBLIC OF KENYA**

  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION**

RefNo: **680590** Date of Issue: **14/October/2024**


**RESEARCH LICENSE**




**This is to Certify that Mr.. Armel Makarakiza of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: ANALYSIS OF FINANCIAL STRUCTURE ON FINANCIAL PERFORMANCE OF TIER ONE COMMERCIAL BANKS IN KENYA for the period ending : 14/October/2025.**

License No: **NACOSTI/P/24/40918**

**680590**  
Applicant Identification Number

  
Director General  
**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY &  
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**Appendix VII: Map of Nairobi (Study Site)**



# Appendix VIII: Similarity Index

## Masters Masters

### ANALYSIS OF FINANCIAL STRUCTURE ON FINANCIAL PERFORMANCE OF TIER ONE COMMERCIAL BANKS IN KENYA

-  Researches
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