

**EFFECT OF FINANCIAL STRUCTURE ON FINANCIAL PERFORMANCE OF
DEPOSIT TAKING MICRO FINANCE BANKS IN KENYA**

BY

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MASTER OF SCIENCE IN COMMERCE

(FINANCE AND ACCOUNTING)

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**A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN
COMMERCE (FINANCE AND ACCOUNTING) IN THE SCHOOL OF BUSINESS
AT KCA UNIVERSITY**

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DECLARATION

I declare that this dissertation is my original work that has never been previously published or submitted elsewhere for award of a degree. I also declare that this dissertation contains no material written or published by other people except where due reference is made and author duly acknowledged.

Signature.....

Date.....

Billy Dorothy Ateya

I do hereby confirm that I have examined the master’s dissertation of

Billy Dorothy Ateya

And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

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ABSTRACT

Deposit Taking Microfinance Banks play a significant role in providing financial services to underserved segments of the population in Kenya. However, the financial performance of DTMFBs has been shown to be declining in recent years. The NPL (non-performing loan) ratio for DTMFBs increased from 9.8% in 2019 to 11.7% in 2020. The study sought to establish the effect of financing structure on financial performance of deposit taking microfinance banks in Kenya. Specifically, the study sought to determine the effect of short term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya; to assess the effect of long term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya; to evaluate the effect of retained earnings on the financial performance of Deposit Taking Micro Finance Banks in Kenya; and to evaluate the effect of share capital on financial performance of Deposit Taking Micro Finance Banks in Kenya. Signalling theory, dividend irrelevance theory, bird in hand theory, and pecking order theory will provide the theoretical foundation of the research. The correlational research design was adopted for the study. This research focused on the 14 DTMFBs. Data on financial structure and performance was gathered from secondary sources, with panel data covering the years 2017 through 2022. The data was analysed using statistical methods including multiple regression, correlation, and descriptive statistics using STATA (Version 16). The significance of the regression coefficients was examined using the t-statistic at the 5% level of significance. The analysis revealed that short term debt has a significant on financial performance of DTMFBs in Kenya ($\beta = .0588, p=0.000<.05$); long term debt has a positive but insignificant effect ($\beta = .0184, p=0.191>.05$) on financial performance; retained earnings have a positive significant effect on financial performance ($\beta = .0662, p=0.000<.05$) of the DTMFBs; share capital has a negative insignificant effect ($\beta = -.0281, p=0.077>.05$) on financial performance of the DTMFBs. The study suggests that DTMFBs in Kenya should carefully consider their short-term debt management strategies as an integral component of their financial operations.

DEDICATION

I dedicate this piece of work to my loving parents Zacharia and Joyce. A special sense of gratefulness to my brother Kyle and my best friends Marco and Asiche who have been a pillar throughout the process.

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ACRONYMS AND ABBREVIATIONS

BHT	Bird in Hand Theory
CMA	Capital Markets Authority
ERB	Ethics Review Board
JSE	Johannesburg Stock Exchange
NSE	Nairobi Securities Exchange
NACOSTI	National Commission of Science Technology and Innovation
ROA	Return on Assets
MFIS	Micro Finance institution
DTMFBs	Deposit Taking Microfinance Banks
DTMFIs	Deposit Taking Microfinance Institutions

TERMS AND DEFINITIONS

Long-Term Debt	These are debts within a firm that matures in more than a year (D'Mello <i>et al.</i> ,2018)
Ownership Concentration	The percentage of the ordinary shares that are held by the five largest owners of the firm (Jiang <i>et al.</i> , 2021)
Retained Earnings	The earnings that are retained within the firm for the purposes of reinvestment or for the debt repayment aspects (Ogata, 2020).
Share Capital	The funds that have been raised by the company in exchange for shares of the firm (Shikumo, 2021)
Short-Term Debt	The debts that are payable or due within a year (Emenike <i>et al.</i> , 2022)
Financial Performance	This is an umbrella phrase for describing a company's total financial stability (Thomas, 2021).

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Globally, the importance of microfinance institutions cannot be overemphasized. Microfinance institutions are financial entities that function as bankers and lenders, offering a range of financial services tailored to the needs of individuals and businesses with limited resources (Muriithi, 2016). These services encompass various offerings like deposits, loans, payment services, money transfers, and insurance. The significance of microfinance lies in its ability to bridge the gap by providing essential financial services to impoverished and low-income households, as well as budding entrepreneurs and nascent enterprises who would otherwise lack access to such services.

The role of microfinance institutions in bridging the financial gap is evergrowing (Ngumo, 2017) to the extent that some of them have transformed to deposit-taking microfinance banks (DTMFBS). Nevertheless, the definition of a microfinance organizations has evolved in recent times. In the past, its primary significance lay in its contribution to reducing poverty. However, today, microfinance companies encompass various entities such as government banks, non-governmental non-profit organizations, as well as large businesses and lenders. Their common goal is to address the financial requirements of the vast number of individuals worldwide who reside at or just above the poverty line (Idama, 2014). However, the performance of these DTMFBs has been shown to be affected by many factors including their financial structure.

The influence of the financial structure on the financial performance is a global concern in various countries .Within the context of the Dhaka stock exchange in Bangladesh, Islam *et al.* (2019) asserted the challenges of the financial performance aspects. The role of the retained earnings as indicated by the amount of dividend pay-out was identified to be negatively

associated to the financial performance aspects. In this regard, Islam *et al.* (2019) noted that the amount of the dividend pay-out which impacts on the retained earnings signals to the investors of the state of the firm which may then further create volatility in the share price aspects. In Bangladesh, Haque *et al.* (2018) also found negative correlation between the dividend pay-out (which has an impact on the retained earnings) and the financial performance aspects.

Experiences from Pakistan show the challenge of financial performance and its consequences to firms. Ahmad *et al.* (2019) asserted that in Pakistan the dividend pay outs impacts on the investor decision making aspects in respect to investing in the firm and hence leading to volatility of the shares. On the other, Siddique *et al.* (2020) asserted that debt was negatively related with the financial performance aspects. The debt levels were noted to influence the share price aspects with high levels of debts leading to low dividends which provides negative signal to the investors on the firm's value.

The role of the financial structure on the financial performance has also been noted in diverse African context. In Nigeria, Olatunde , Rasaki (2020) noted the challenges of the financial performance and noted the role of the retained earnings as a contributor to the financial performance aspects. Ifeanyichukwu (2021) further asserted that the dividend pay outs and consequently the retained earnings impact on the share price amounts. Still within the context Onyekwelu and Lucy (2019) noted that retained earnings enables the firms to invest in more capital investments leading to generation of more assets for the firm and thereafter influencing the share price dynamics. In South Africa, Wehncke (2018) discusses the framework of the financial performance and notes the role of the retained earnings on the price volatility aspects. In this perspective, Wehncke (2018) asserts that the financial performance affects the stability of the share price and consequently leading to the financial performance

aspects. In this regard, the earning retention or dividend pay-out decisions were argued to have a signalling effect to the investors on the future outlook of the firm.

In Rwanda, Gloria and Jonas (2018) noted some of consequences related with the financial performance aspects in the country. The financial performance was associated with changes in investment levels within the firm level due to the inability of the investors to know the right timing for purchase or sale of the firm shares. This leads to waning investor interests on the firm shares especially amongst the conservative shareholders.

1.1.1 Deposit Taking Micro Finance Banks in Kenya

Microfinance institutions that accept deposits are called deposit taking microfinance institutions (FauluKenya-Administrator, 2010). These institutions can provide savings and wealth creations to the market in addition to lending money to consumers that require credit at interest rates. A number of current microfinance organizations sought for licenses to enable them to accept deposits from members and the general public after the microfinance Act took effect on May 2, 2008. The Microfinance Act's main goal is to control the creation, administration, and operation of microfinance institutions in Kenya through licensing and monitoring.

Deposit-taking microfinance banks (DTMFBS) in Kenya play a critical role in the country's economy. They provide financial services to low-income and underserved households and businesses, which helps to boost economic growth and reduce poverty. In terms of employment, DTMFBs employ a significant number of people in Kenya. In 2020, the sector employed over 10,000 people directly and indirectly. These jobs are important for the Kenyan economy, as they provide income and opportunities for people who would otherwise not have them. In terms of GDP, DTMFBs contribute significantly to the Kenyan economy. In 2020, the sector contributed over Kshs 100 billion (USD 1 billion) to the Kenyan GDP. This contribution

is important for the Kenyan economy, as it helps to boost economic growth and create jobs (CBK, 2021).

According to a Central Bank of Kenya (2020) supervision report as at December 2019, there were thirteen Microfinance institutions in Kenya; 3 large, 1 medium and 8 Small ones. Since its inception in 2009, the microfinance sector in Kenya has experienced remarkable growth. The licensing of the first Microfinance Bank (MFB) marked the beginning of this expansion. As of December 2017, there were a total of 13 licensed MFBs operating across the country, with a collective presence of 114 branches. Notably, 11 of these MFBs have a nationwide reach, namely Faulu Kenya MFB, Kenya Women MFB, SMEP MFB, REMU MFB, Rafiki MFB, Century MFB, SUMAC MFB, Caritas MFB, Maisha MFB, Uwezo MFB, and U&I MFB. Additionally, two MFBs operate on a community-based level, namely Daraja MFB and Choice MFB.

1.1.4 Financial Structure of Deposit Taking Micro Finance Banks in Kenya

The financial structure of the company is defined as the blend of debt and equity used to finance both short- and long-term assets. The foundational elements of the company's financial structure are debt and equity. The most common term for a company's financial structure is its debt-to-equity ratio, which sheds light on how hazardous the business is.

The financial structure of a firm is the mix of equity, long-term debt, short-term debt, and other forms of financing it uses to meet its long-term and short-term working capital needs. According to Harjan (2020), the financial structure denotes to the mixture of the short term and long term sources of financing of the company. Major (2018) asserts that the financial structure relates to the determination of the optimum proportion of the debts and equity in the organizational financing. Hamam *et al.* (2020) views the financial structure to relate to the

manner in which the organization finances its assets. The financial structure has an influence on the financial performance (Islam *et al.*, 2019; Ahmad *et al.*, 2019).

The financial structure is seen to be composed of stockholder's equity, short term debt and long-term debt. The short term financing sources would include creditors and payment papers (Major, 2018). The long-term debts also have an influence on the financial performance. Retained earnings is another component with an influence on the financial performance. According to Junya (2018), the retained earnings refers to the profits after the dividends. On the other hand, share capital as defined by Achieng *et al.* (2018), is the monetary resources raised by a company through the issue of shares in exchange for cash.

Financial institutions in developing nations, and in East Africa in particular, struggle to gain access to credit and bear high expenses for loanable capital, such as interest. Fees and interest rates are steep. The high cost of living has modeled significant trials for microfinance institutions (MFIs). For DTMFBs in Kenya, high borrowing costs, a decline in deposits, and increased non-performing loans (NPLs) have impacted the sector. The DTMFBs struggle with borrowing money at high interest rates from commercial banks, making it difficult to offer affordable loans and generate profits. The pandemic has also led to a decrease in deposits as individuals face job losses and reduced incomes, further straining the financial resources of MFIs (Zheng & Zhang, 2021). Moreover, the repayment rates of MFI loans have suffered, with many borrowers unable to repay due to financial hardships caused by the pandemic. To address these challenges, MFIs are taking measures such as negotiating lower interest rates, encouraging savings through higher deposit rates, and working with borrowers on repayment plans and financial counseling. These efforts aim to ensure the continued provision of financial services to those in need despite the ongoing pandemic (Mwangi, 2022). There is no empirical evidence to support the hypothesis that the capital structure of DTMFIs impacts financial performance.

1.1.5 Financial Performance of Deposit Taking Micro Finance Banks in Kenya

Despite the positive financial performance and asset growth of Deposit Taking Micro Finance Banks (DTMFBS) in 2020, client's express dissatisfaction with the service provided by these institutions. This is attributed to several reasons. Firstly, clients often experience long waiting times when seeking assistance at DTMFBs. Secondly, the staff at these banks are not adequately trained, leading to a lack of quality service delivery. Furthermore, clients feel that there is a lack of transparency regarding the services offered by DTMFBs. In addition to these client-related concerns, DTMFBs themselves face significant challenges. They struggle with inadequate retained earnings, hindering their ability to invest in new products, expand operations, and meet customer demands. Moreover, the exorbitant interest rates imposed by commercial banks when DTMFBs borrow funds adversely impact their funding structure and ability to offer competitive rates. Additionally, DTMFBs encounter difficulties in accessing capital from traditional sources such as banks and government agencies. These combined challenges impede the DTMFBs' ability to provide satisfactory service to their clients and hinder business growth. To overcome these obstacles, DTMFBs should focus on enhancing operational efficiency, reducing costs, exploring alternative funding sources, and actively striving to improve client satisfaction.

The increase in profits was attributed to growth in interest income and reduction in operating expenses (CBK, 2021) However, the COVID-19 pandemic had an adverse impact on the sector's loan portfolio quality, with non-performing loans (NPLs) increasing from 9.8% in 2019 to 11.7% in 2020. This was mainly due to the economic disruptions caused by the pandemic, which affected the ability of borrowers to repay their loans (CBK, 2021)

The performance of DTMFBs is closely linked to the overall performance of the Kenyan economy. The pandemic-induced economic slowdown has affected the financial performance of many businesses, including DTMFBs. As a result, the sector's growth prospects remain

uncertain, particularly in the short term. Investors in the Kenyan securities exchange are likely to allow for the performance of DTMFBs when making investment decisions. The sector's profitability, loan portfolio quality, and growth prospects are important factors that investors may consider (Mutwiri *et al.*, 2021)

1.2 Statement of the Problem

Ideally, Deposit Taking Microfinance Banks play a significant role in providing financial services to underserved segments of the population in Kenya. They offer a range of financial products and services, including savings, loans, and insurance, to people who would otherwise not have access to them (Nzuve, 2016). For example, in 2020, DTMFBs had a total asset base of KES 113 billion (USD 1 billion), and they provided loans to over 2 million borrowers. This represents a significant contribution to the Kenyan economy, as DTMFBs help to stimulate economic growth and reduce poverty.

However, the financial performance of DTMFBs has been shown to be declining in recent years. The NPL (non-performing loan) ratio for DTMFBs increased from 9.8% in 2019 to 11.7% in 2020 (CBK, 2021). This phenomenon has made it more difficult for them to repay their loans, and it is likely that the NPL ratio will continue to increase in the coming years (Ngumo, Collins & David, 2020). Additionally, the DTMFBs have continued to encounter difficulties in accessing capital from traditional sources such as other banks and government agencies. These combined challenges impede the DTMFBs' ability to provide satisfactory service to their clients and hinder business growth hence affecting their financial performance.

There has been some attempt to link financial structure to financial performance of different organizations, but there is little evidence that has specifically focused at DTMFBs. For example, the short term debts were argued to impact on the financial performance through prevention of share price crash aspects (Cheng *et al.*, 2020). Mahindran (2018) asserts that the

long term debts impacts on the financial performance through restrictions that may be placed on the organization in respect to dividend payment aspects. Onyekwelu and Lucy (2019) noted that the retained earnings impacted on the firm's value creation and hence financial performance. Ogola (2018) examined determinants of long run share price performance; Kengere and Kule (2020) examined the firm characteristics determinants of share price movement; and Muthoni (2019) looked at share price reaction to the cash dividend announcement.

While several studies have attempted to link financing structure to financial performance, gaps still exist. Cheng *et al.* (2020) studied commercial banks which reveals a methodological gap. Elsewhere, Mahindran (2018) studied agricultural firms in Malaysia revealing a geographical and methodological gap. Kengere and Kule (2020) on the other hand focused on listed firms. This study fills a gap left by previous research by analysing the effect of financial structure on financial performance. Given the limited research in this area, the study aimed to address a knowledge gap by investigating the effect of financial structure on financial performance of DTMFBS.

1.3 Research Objectives

1.3.1 General Objective

The study's general objective was to establish the effect of financial structure on financial performance of Kenya's deposit-taking microfinance institutions.

1.3.2 Specific Objectives

The study was based on the following research objectives;

- (i) To evaluate the effect of short-term debt on financial performance of deposit-taking microfinance institutions in Kenya.
- (ii) To establish the effect of long-term debt on financial performance of deposit-taking microfinance institutions in Kenya.

(iii) Evaluate the effect of retained profits on financial performance of deposit-taking microfinance institutions in Kenya

(iv) Analyse the effect of share capital on financial performance of deposit-taking microfinance institutions in Kenya

1.4 Research Hypotheses

The study sought to test the following hypotheses;

H₀₁: Short-term debt has no significant effect on financial performance of deposit-taking microfinance institutions in Kenya.

H₀₂: Long-term debt has no significant effect on financial performance of deposit-taking microfinance institutions in Kenya.

H₀₃: Retained profits have no significant effect financial performance of deposit-taking microfinance institutions in Kenya

H₀₄: Share capital has no significant effect on financial performance of deposit-taking microfinance institutions in Kenya.

1.5 Significance of the Study

The study's results may be useful for theorists, empirical researchers, investors, investment advisors, and executives interested in financial structure and the stability of share prices.

This data will help theorists and researchers better understand the relationship between financial structure features and financial outcomes for DTMFBs. It will also serve as a foundation for them to do additional study into the same issue, focusing on a variety of variables to assess the economic plausibility of the links being studied and weed out any that aren't real.

Managers might use the findings as motivation to devote more resources to finding and managing such financing in the hope of maintaining stable share prices and, in turn, attracting more investment capital. Both new and seasoned investors can use it to help them

pick the best investments for their money and reap the highest possible profits. It's also a great tool for gauging each manager's contribution and deciding whether or not to keep them on staff. Investment advisers (brokerage firms, investment banks, and other professionals) would benefit from this because they will have a deeper understanding of the factors that go into making financial decisions, allowing them to better advise their clients on how to make investments that will yield the highest possible returns with the lowest possible risk.

1.6 Scope of the Study

The study's subject, geographical, and temporal scopes are all assessed. The study is narrow in scope, focusing only on capital structure and financing within the larger discipline of finance. Deposit taking microfinance banks will be surveyed for this article. As of January 2023, 14 deposit taking microfinance institutions in Kenya. The data collected was for the period January of 2018 and end in December of 2022.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter assesses the literature review associated with the specific objectives of the study. The reviewed studies examined the concepts and relationships between short-term debt, long-term debt, retained earnings, share capital and ownership concentration against the financial performance aspects. The chapter also examines the various theoretical framework that underpins the specific objectives of the study, and the operationalization of variables.

2.2 Theoretical Review

The theoretical underpinnings of the research are dissected here. The theoretical framework is the set of hypotheses about how the variables in a study are connected, as defined by Suresh (2010). But according to Gathii *et al.* (2019), the hypotheses that would inform the research are laid forth in the framework. Signalling theory, dividend irrelevance theory, bird in hand theory, and pecking order theory provided the theoretical foundation of the research. Details about them are provided below.

2.2.1 Signaling Theory

The signaling theory was developed in 1970 by (Arrow & Akerlof, 1970). They had published an article titled "*The Market for Lemon: Quality Uncertainty and Market Mechanism*". The theory was first developed to explain the role of information asymmetry in the labour markets. It served to provide a basis for making decisions under conditions of information asymmetry challenges. The theory was to further received diverse contributions by Michael Spence through various publications such as *Job Market Signaling* Spence (1978), Spence (1976) and Spence (1974), both titled "Informational Aspects of Market Structure: An Introduction," provide overviews of the topic. According to Elikanah (2019), a signal refers to a visible action or structure to indicate an aspect of quality.

A signal has also been viewed as a firm's action that convey information about the firm's capabilities. The signal is expected to have a positive impression on the receiver of the signal. The business transactions between a firm and its investors occur under the context of the information asymmetry (Al-Najjar & Kilincarslan, 2018). Within the context of a firm's operation, the firm's informational disclosures through various means are signals that are serve to reduce the material asymmetry between the firm's management and the potential investors. Since investment in shares is influenced and impacted by the information asymmetries, the firm information disclosures help in the reduction of the information asymmetries between the firm management and its potential investors (De Jong *et al.*, 2019). The investors are thus expected to use the reduced information asymmetry in evaluating the financial conditions of the firm and its future growth possibilities leading to making of investment decisions (Ahmad *et al.*, 2018).

The signaling theory articulates that performing firms could signal its value to the capital markets and as result help distinguish itself from non-performing firms. The signal of good performance and the value of the firm will be useful to the performing firm if the non performing is not able to duplicate the signal sent by the performing firm (Jaara *et al.*, 2018). The condition of the non performing firm inability to duplicate the signal sent by the performing firm is the cost implication of seeking to mimic the signal provided by performing firm.

The theory has been critiqued on the reliability of the diverse signals emanating from a firm and the interpretation of such signals. In this context, some of the signals can be displayed by both the performing and on performing firms thus leading to the difficulty in making investment decisions due to the inability to differentiate the firms (Ahmad *et al.*, 2018). The theory has also been noted that the firm management may send the wrong signals due to the agency challenges and moral hazard challenges in their actions.

The signaling theory has been applied by diverse scholars in the examination of the influence of the financial structure on the financial performance. This informs its use in this study. The scholars who used the theory in describing the financial performance include Pelcher (2019), Islam *et al.* (2019), Naz and Siddiqui (2020), Kengatharan and Ford (2019), and Wehncke (2018) amongst others. The idea can be applied to this research because of the potential signals sent to investors by the ratio of short-term debt to long-term debt as well as retained earnings. These undertaking of short and long term debts has varying information disclosures amongst the shareholders and serves to signal to them the financial stability of the firm which further influences their investment levels.

2.2.2 Dividend Irrelevance Theory

The dividend irrelevance theory was established in 1961 by Miller and Modigliani (Miller & Modigliani, 1961). This was through publication of a journal article titled “*Dividend policy, growth, and the valuation of shares*”. According to Ijeoma and Hayati (2020), the theory indicates the firm value is not affected by dividends. The theory thus posits that the firm dividends have no influence on the share price and the share price is not affected by the retained earnings as well as the dividend payouts (Rono & Omoro, 2020).

The theory notes that with the diverse factors held constant, the investor would be indifferent between receiving the returns in terms of dividend payouts or in terms of capital gains from reinvestment decisions (Bulla, 2021). This was attributed to the investors being more concerned with whether an income was generated by the firm’s investment decisions and not by the manner in which the income was distributed. Thus irrespective of the manner in which the firm distributes its income, the firm's worth is based on its earning potential and the choices it takes regarding its investments (Salawudeen *et al.*, 2020). The theory thus argued that the investors calculated the firm’s value based on the capitalized value of their future earnings and not on the firm’s dividend policies (Bulla, 2021). Roche (2021) thus asserts that

the investment policy is more importance to the investors than the dividend policy. This is premised on the investment policy leading to the growth of the income growth of the investors and adding of value to the investors.

The dividend irrelevance theory argues that the firm value is dependent on the firm's earning power that is cash flows and the risks involved in the firm sourcing of capital that is cost of capital aspects (Shahid *et al.*, 2020). In this context, the theory argues that the share value and hence price is a function of the firm's investment decision. The firm value was noted to have a positive correlation with the firm earnings rather than with the manner in which those earnings were distributed. In this context, if the firm opted to retain all their earnings then the investor will gain from capital gains which is the equivalent amount they would gain in dividend payouts if the firm opted to payout all its dividends (Dharmananda & Ganesh, 2020).

The dividend irrelevance theory has various assumptions. These assumptions include lack of difference distinction between taxes on dividends and capital gains, lack of transaction and floatation costs on securities trading, presence of symmetrical and costless information, lack of agency problems between firm managements and investors, and all market players being price takers (Ijeoma & Hayati, 2020; Bulla, 2021). In respect to the firm assumptions, Roche (2021) the theory assumes that there is a perfect financial market in which shareholders can design their own policies and make trades as they deem fit in the market. In this context, the investors are free to buy and sell as they deem fit in the market. In this perfect market, the investors in need for liquidity dispose-off their shares at no brokerage costs. The theory further assumes that there is no influence of signaling factors from the firm as a result of dividend payments that would have an impact on the financial performance (Cejnek *et al.*, 2021).

The theory justified on why the dividends were irrelevant to the firm value. In this context, the theory asserted that the dividend policy as to the retention of earnings and dividend

payments is not only based on the dividend declaration itself but also on other factors. These factors include financing and investment decisions. Thus when a firm has confidence on future firm growth then the firm may retain some of the earnings for future investment hence reducing the dividend payouts. In this context, the retained earnings become a byproduct of the firm's decisions on the capital structure and may lead to the share prices falling. Conversely, the firm may opt for debt financing and consequent dividend payout which would lead to the share price raising (Zainudin *et al.*, 2018). The dividend irrelevance theory thus argues that the dividend policies are by products of both financing and investment decisions. The financing decisions is related to the decisions on where, when and how a firm should be able to source for finances for the firm. On the other hand, the investment policies relate to the manner in which the investment of the firms should be undertaken (Ayalew, 2019).

Diverse scholars have used the dividend irrelevance theory to explain the factors influencing financial performance. This theory is utilized to address the objective examining the retained earnings aspects on the financial performance. The retained earnings come at the expense of issuance of dividends and the theory will be useful in detailing the manner in which the retained earnings influence the financial performance at the Deposit Taking Micro Finance Banks.

2.2.3 Bird in Hand Theory

The bird in hand theory together with the signalling theory are part of the dividend relevant theory (Bulla, 2021). The Bird in Hand Theory (BHT) components were first explored by Graham, Dodd and Cottle in 1934 through publication of a book titled *Security Analysis* (Graham *et al.*, 1934). Graham *et al.* (1934) argued through empirical demonstration that a unit dollar in dividend pay-out had at least four fold impact on the share price compared to a unit dollar in the retained earnings. From its origins, the theory was further developed by Gordon

in 1963 and Lintner in 1962 (Roche, 2021). The theory was further maintained by the dividend relevance theory by Gordon in 1959.

The theory thus posits that the dividend pay-out are worth more than retained earnings due to the uncertainty of the future payments from investment in retained earnings. There is thus a preference amongst the investors for dividends as opposed to future earnings from the retained earnings (Hussain, 2021). The dividend payments that is “*bird in hand*” are preferred over the future payments “*two birds in the bush*” made from the retained earnings due to the challenges of uncertain capital markets and information asymmetry challenges (Ohiaeri *et al.*, 2019). The investors have a preference for the dividend pay-outs which they are sure of compared to the probable capital gains from retained earnings that they are unsure of. Therefore, increasing of the dividend payments with the other aspects held constant may lead to the surge in the firm value (Muriungi, 2020).

The theory was developed as counter response to the dividend irrelevance theory. The theory thus argued that the investors are not indifferent, contrary to the dividend irrelevance theory claims, to the value of the dividends paid today compared to the capital gains at a later date (Kusuma & Samuel, 2019). Thus the investors would prefer the certainty of today’s dividend in comparison to the future capital gains. The centrepiece of the bird in hand theory is the presence of risks in the dividend pay-outs(Adam *et al.*, 2020). In this context, the investors view the dividend pay-outs as being less risky compared to the uncertain future earnings from capital gains and thus prefer dividend pay-outs to the future capital gains that are deemed risky. The current dividend pay-out thus serves to reduce information asymmetry and investor uncertainty resulting in high stock value of the firm (Camilleri *et al.*, 2019a). Thus increasing the firm’s dividend pay-outs may then be associated with the increase in the firm value. This was attributed to the high dividend pay-outs reducing uncertainty of the cash flow aspects and lower the cost of capital hence increasing value for share value.

There are several assumptions associated with the bird in hand theory. The first assumption was of the firm being financed wholly through equity financing with no debt financing being utilized (Bhatt & Jain, 2021b). The second assumption was that the retained earnings was the sole means of financing the firm with no alternative sources of financing available. The third assumption was on the presence of a constant retention ratio indicating presence of constant growth rate of earnings (Shahid *et al.*, 2020). The fourth assumption was on the cost of capital being constant and greater than the growth rate (Kurniasih & Heliantono, 2018).

A number of scholars have used the bird in hand theory in explaining the financial performance which informs its use in this study. These scholars include Anabila (2018), Ohiaeri *et al.* (2019), Shahid *et al.* (2020), Siddique *et al.* (2020), and Muriungi (2020) amongst others. In this context, Anabila (2018) asserts that the payment of dividends that is a bird in hand leads to high share prices as the investors have preference for the dividend pay-out aspects. The theory is useful in this study due to the variable that seek to studied the influence of the retained earnings on the financial performance aspects. The theory is used in the present study to link whether there is a preference for the dividends at the NSEs as opposed to the dividends payouts or vice versa and how it affects financial performance for the DTMFBs in Kenya.

2.2.4 Pecking Order Theory

The pecking order theory was advanced by Majluf and Myers in 1984 (Dommes *et al.*, 2019). The pecking order theory provides the preferences in which a firm would opt to finance its operations. Accordingly, the firm would first opt to finance its operations using internal funds and then use external funds only when the internal funds have been exhausted. In the context of the pecking order, the firm would first finance its activities using retained earnings, then new debt, and finally with new equity aspects (Rahma, 2021). In situation where the cash

demand for the projects is less than the internally generated funds such as retained earnings then the firm will exhaust its cash balances before seeking the external financing aspects. The external financing will have the securities first sought before equity financing is sought.

The theory further argues that a firm may not have a target financial structure but rather the achieved financial structure is the by-product of a series of short term financing decisions. These short-term financing decisions involves making decisions of the financing option in the pecking order that is desirable at a particular point in time (Simatupang *et al.*, 2019). Highly profitable firms make less use of debt financing owing to their huge retained earnings over time. The use of the retained earnings is also not costly in nature and do not dilute ownership of the firms. This limits their need for external funding in form of short term or long term debts. The pecking order theory is further concerned with the costing aspects of the financial sources which informs the financing decisions of the firm (Marimuthu & Singh, 2021; Simatupang *et al.*, 2019). In respect to the retained earnings, the marginal costs of financing new projects is mitigated by the presence of large retained earnings of the firm. The firms are able to use retained earnings for the financing of their projects and activities. The use of the retained earnings as the basis of financing enables the firms to save on the time and cost implications in launching new projects.

The theory undertakes that there is desired or targeted debt-equity ratio but rather the firms follow a hierarchical pathway in the financing decisions (Endri *et al.*, 2021). The hierarchical pathway starts from the firms utilizing the retained earnings, then debt financing, and external funding as last result. The preference of the financial structure is based on the relative costs of the sourcing for these funds and challenges associated with information asymmetry aspects. The pecking order theory explains the role of the financing decisions on the dividend pay-outs which has mediating influence on the share price movements and

volatility (Andow & Wetsi, 2018). Since the firms prefer the use of retained earnings for their financing needs then the firms would often prefer to retain their earnings as opposed to issuance of dividends.

The pecking order is applicable to this study due to the function of the retained earnings on the financial performance. The retained earnings thus impact on the financial performance with the dividend pay-outs as a mediating variable. The amount of the dividend pay outs has predictive influence on the financial performance aspects due to their elimination of the evidence gap between the firm managers and the investors. This theory will be applicable to this study to explain the short term debt, long term debt, and share capital have an impact on the financial performance aspects at the Deposit Taking Micro Finance Banks.

2.3 Empirical Literature Review

2.3.1 Short-Term Debt and Financial performance

The challenge of the financial performance has received scholarly attention from diverse scholars. Nguyen *et al.* (2020), who examined the impact of Vietnam's dividend program on the country's financial performance, also looked into the correlation between debt and financial outcomes. The study relied on information from the Hochiminh Stock Exchange (HOSE) in Vietnam, specifically 260 companies' financial records from 2009 to 2018. As part of the analysis into the effect of long-term debt on financial performance, the ratio of long-term loans to total assets was calculated. There was a modest positive correlation between long-term indebtedness and aspects of financial performance. While the study did find a correlation between long-term debt and financial results, it offered no explanation for this finding.

To determine the effect of capital structure and financial performance for industrial and allied sectors in the NSE during the period 2004 to 2008, Kaumbuthu (2011) found a negative effect of debt-to-equity ratio and ROE. The findings therefore suggest that

industrial firms prefer equity to debt again invalidating the pecking order theory. The proxies for capital structure and financial performance were debt to equity ratio and ROE respectively with regression as the technique of analysis. Again, it would have been imperative for the study to span beyond one sector for generalization of findings which is what this study seeks to do. No serious diagnostics were performed which would have had an implication on the findings.

To investigate the effect of working capital management on the performance of non-financial companies listed in the NSE, Mwangi *et al.* (2014) concluded that an aggressive financing policy had a significant positive effect on ROE and ROA. Explanatory non-experimental research design with secondary panel data of 42 non-financial firms for the period 2006-2012 was used. Makori and Jagongo (2013) while investigating the effect of working capital management and profitability of manufacturing and construction firms listed at the NSE concluded a negative effect of profitability and number of day's accounts receivable and cash conversion cycle, but a positive effect of profitability and number of days of inventory and number of day's payable. Pearson's correlation and ordinary least squares regression models were used for analysis using data for the period 2003-2012.

2.3.2 Long Term Debts and Financial performance

To better understand how dividend policy affects financial performance, Haque *et al.* (2019) conducted research within the setting of the Dhaka stock exchange. The impact of debts on many facets of financial performance was one of the factors considered. The effect of long-term indebtedness on financial performance was analyzed in detail. The research included information from the financial years of 2004 through 2014 from 35 publicly traded industrial companies. Annual reports were mined for secondary data, which was then analyzed. The research concluded that long-term debts have a positive and statistically insignificant effect on

financial performance metrics. This was associated with the companies with the long term debts paying little dividends hence impacting on volatility aspects.

The role of the long term debts on the financial performance within the context of Vietnam was explored by Bui (2019) in a study examining the association between dividend policy and financial performance. The study had conceptualized the financial performance as the systematic risks faced by the shareholders. In the context of sampling, the study had used 141 listed firms at Ho Chi Minh Stock Exchange (HOSE) and collected data over a six-year period from 2011-2016 financial years. Long-term debts were obtained by dividing long-term debts by total assets, an indicator known as the Long-Term Debt Ratio (LTD). It was discovered that the long-term indebtedness influenced the financial performance factors positively, but not significantly.

While investigating the effect of dividend policy on financial performance at the Dhaka stock exchange, Islam *et al.* (2019) also looked into the effect of long-term debt on the bottom line. The study viewed the financial performance as the rate of the share price increase and decrease for a set of returns. The financial performance was measured using the standard deviations of annualized returns in a given period of time. The study used a cross sectional research design and collected data from 2012-2017 period from 14 different categories of companies at Dhaka stock exchange. The study found that increase in the debt aspects was negatively correlated with the financial performance aspects. The study did not offer a discussion of the link between the debt and the financial performance aspects.

2.3.3 Retained Earnings and Financial performance

According to Ogata (2020), the retained earnings refers to the earnings that are retained within the firm for the purposes of reinvestment or for the debt repayment aspects. The retained earnings are those part of the dividends that have not been paid out. Since the dividend pay-

outs is negatively correlated with the retained earnings, several of the scholars interested with the retained earnings examined the role of dividend pay-out on the financial performance.

Neelanjana and Hassan (2019) set out to examine how dividend policy affects the bottom lines of Malaysian manufacturing firms. One area of investigation was the effect dividends have on various measures of financial performance. For the years 2008 through 2017, secondary data was collected from manufacturing firms. A favourable correlation was found between the study's conceptualization of financial performance as systemic risks that shareholders faced and the volatility of those risks. The research showed that dividend payments had a statistically significant inverse relationship with price fluctuations. It was also found that dividend payments have a negative correlation with financial success. The study did not offer any commentary on the observed relationships.

The purpose of the research conducted by Naz and Siddiqui (2020) was to analyze how dividend policy affected various metrics of financial success. The effect of dividend payments on the volatility of stock prices in Pakistan was one of the topics covered. Calculating the square root of the distinction of highest and lowest daily volatility in stock prices and dividing by the average daily volatility in stock prices yielded the study's measure of volatility. Ten companies with a history of dividend payments stretching back at least two years were utilized as a sample for the research. All of these companies are publicly traded on the Pakistan Stock Exchange. The research found that dividend payments significantly impacted various measures of stock price volatility. This was a result of investors being more informed about their investment options in the listed corporations in Pakistan thanks to the dividend pay-out disclosures.

Lydia (2019) examined the impact of dividend policy on the financial performance of companies listed on the Johannesburg Stock Exchange Limited (JSE). From 2007 to 2016, the

research panel analyzed data from 40 publicly traded companies. The dividend distribution was found to have a small but beneficial effect on the financial performance indicators. The study attributed the results to the study sample being derived from 40 well established firms at the JSE which had the shareholders confident on the firm's management and rendering the agency theory irrelevant in nature. The shareholders in these firms have confidence with the firm management on the adequacy of the distribution of the dividends and dividend pay-out aspects.

Provaty and Siddique (2021), following in the footsteps of Naz and Siddiqui (2020) and Lydia (2019), conducted research into the impact of dividend policy on certain characteristics of stock price volatility. The analysis concluded that stock price volatility posed a systemic danger to the company's investors. Methodologically, the research analyzed secondary data from 53 bourse-listed financial service businesses. The dividend payout was analyzed in terms of the dividend payout as a percentage of annual earnings. The rate of change in the price of a given share over time was used to conceptualize financial performance as systematic risks borne by investors holding ordinary shares in the study. The research concluded that dividend distribution had minimal effects on the studied measures of stock price volatility. According to the findings, companies can improve their financial success by focusing more on dividends.

2.3.4 Share Capital and Financial performance

Many researchers have looked into how much of an impact share capital has on a company's bottom line. The bonus issue has been used as the proxy for share capital in those studies. In order to better understand how the bonus problem affects stock price in the context of the Nepalese Equity market, Rai and Silwal (2017) conducted a study. In this context, the study's objective was the examination of the share price behavior as a result of the bonus issues aspects. The study had viewed the bonus issuance as the issuance of additional shares to existing shareholders that are proportionate to their existing shareholding in lieu of the cash dividends. The study was based on a ten years' data pooled cross-sectional data traded at the Nepalese

Equity Market. The study used the listed banks that had issued the bonus issues and secondary data collected from these commercial banks. The price behavior was examined by examining the share prices of the banks that had issued the bonus issue for 60 days that is 30 days before the issuance of the bonus share and the 30 days after the issuance of the bonus share. The study found that there was share price movements based on the investors reaction to the bonus share issuance. The share prices were responsive to the bonus issues. The study attributed the share price being responsive to the bonus issuance due to the transactional volumes that are undertaken after the bonus issue.

Satheesh and Vidya (2018) set out to investigate the effectiveness of the Indian stock market within its setting. The impact of bonus distribution on stock market performance was one of the factors studied. The purpose of the research was to determine whether or not bonus payouts are affected by the disclosure of internal company information. According to the research, the bonus issuance does not have any appreciable effect on the share price because of the business information that is made public. This is because no significant new information is released on the date of the bonus share issuance because the date of the bonus issue is known in advance.

In a study based in India, Marisetty (2021) studied the influence of the corporate dividend action on the stocks. In this context, the study's goal was the examination of the influence of the bonus issuance on the stocks in India. The bonus issue refers to the listed firm's action of issuance of additional shares to the existing shareholders free of cost and proportionate to the shares that they hold. The study focused on the select 9 companies that had issued bonus shares for the year 2017. The null hypothesis that was being tested was that bonus issue announcement has no statistically significant influence on the stock's average returns. The study found that the investors gained abnormal returns on the event day while

incurring negative returns on the second day after the event. The study did not offer any explanations on the observed results.

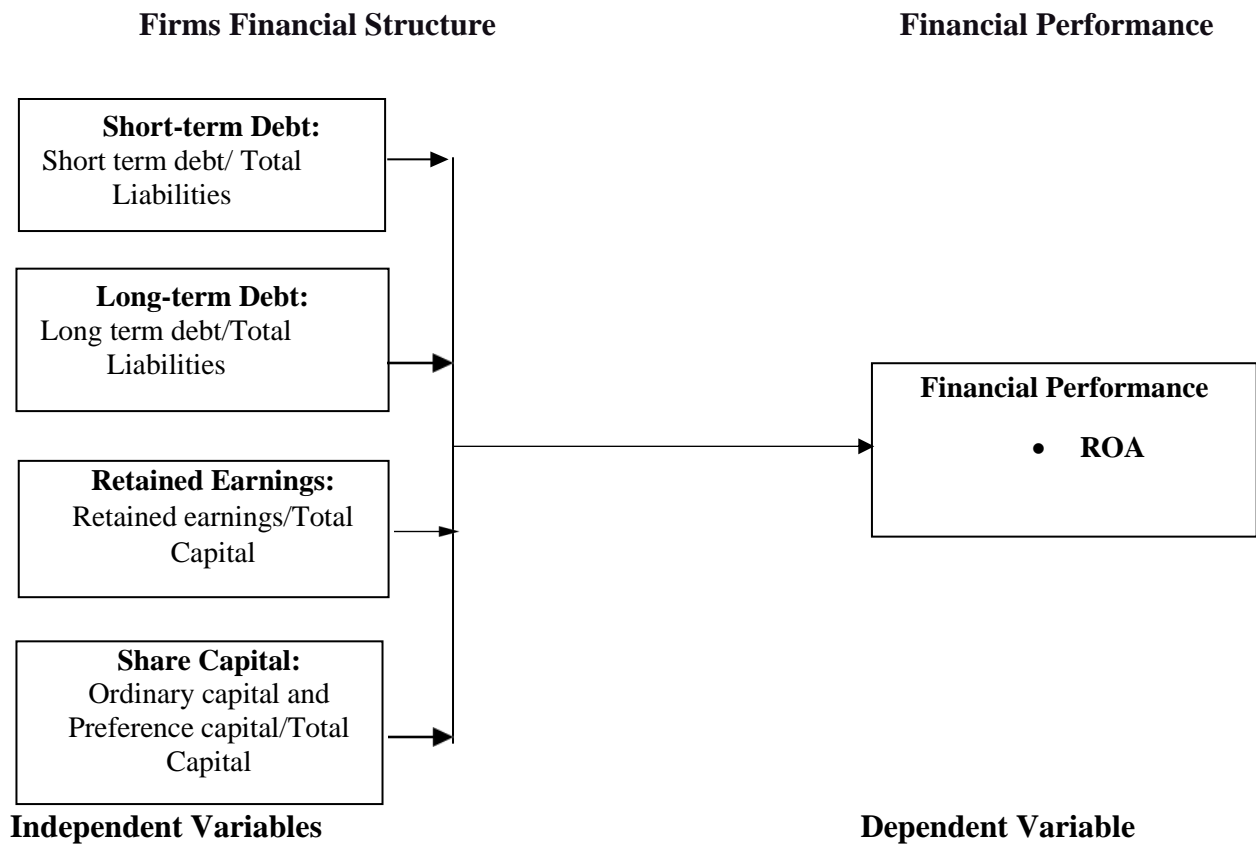
The role of the bonus issuance on the stock returns in Kenyan Nairobi Securities exchange was examined by Shikuku (2019) in a study that targeted all the listed firms for the period 2014 to 2018. The study had conceptualized the bonus share as the distribution of additional shares to stakeholders instead of the cash dividends. In the context of the methodological choices, the study used event study methodology design and a target population of all listed firms for the 2014-2018 period. The study found that a most of the firms recorded a positive abnormal returns over a 30 days window. However, the study also found mixed returns of firms that recorded a negative return over the period. The mixed results were attributed to various factors. The study noted that the stock prices respond to the public information leading to the impact on the stock prices aspects.

The impact of corporate governance procedures on the financial performance of publicly traded Nigerian companies was investigated by Ogbeide and Evbayiro-Osagie (2019). Secondary data was obtained from 198 companies that were listed on the Nigerian stock exchange between 2010 and 2015. The research showed that the degree of concentration of ownership was significantly correlated with the degree of volatility in share prices. The research also revealed that the ownership concentration influenced some facets of financial performance confidently but statistically insignificantly. The study did not offer an explanation for the influence between ownership concentration and financial performance aspects.

2.4 Conceptual Framework

A conceptual framework offers a visual representation of how various factors relate to one another. In this framework, Firm financial structure is the independent variable, while financial performance is the dependent variable as shown in Figure 1 below.

FIGURE 1
Conceptual Framework



2.5 Operationalization of Variables

TABLE 1
Operationalization of the Variables

Variable	Measurement	Scale	Source
Short-term Debt	$\frac{\text{Current Liabilities}}{\text{Total Liabilities}}$	Ratio	Della Seta, Morellec & Zucchi (2020).
Long-term Debt	$\frac{\text{Current Liabilities}}{\text{Total Liabilities}}$	Ratio	Yang & Zhang, (2022).
Retained Earnings	$\frac{\text{Current Liabilities}}{\text{Total Capital}}$	Ratio	Yemi & Seriki (2018)
Share Capital	$\frac{\text{Ordinary capital} + \text{Preference capital}}{\text{Total Capital}}$	Ratio	Barkai (2020)
Financial Performance	$\frac{\text{Net Profit}}{\text{Total Assets}}$	Ratio	Ichsan <i>et al.</i> (2021)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter, the research design, population and sampling are explained. In addition, the methods of data collection, research instrumentation and analysis are explained.

3.2 Research Design

The research design denotes to a framework or blueprint in which the research is undertaken covering aspects such as data collection, measurement and analysis to address the research phenomenon. The research design thus seeks to arrange and consider the various components of research in an orderly, logical and structured manner with a view of addressing the research phenomenon (Mugenda & Mugenda, 2019). The research design helps in clarifying the required activities in achieving the research objectives. In this study, a descriptive research design was employed, which aimed to depict the characteristics of variables exactly as they exist in a given situation, as explained by Kothari (2012). When utilizing a descriptive research design, the researcher has no influence over the variables and can solely document their current state or past occurrences. Furthermore, in descriptive research, the researcher endeavors to understand the factors behind the behavior of these variables, even though they cannot control their outcomes.

3.3 Target Population

The target population denotes to a set of people or items that the researcher will generalize the results about. The items or people often have a common distinguishable component that is of interest to the researcher (Mugenda & Mugenda, 2019). The target population has also been seen as a universe from which the sample will be collected from. The target population of this research was all the 14 Deposit Taking Micro Finance Banks in Kenya (Appendix II).

3.4 Sample and Sampling Technique

The sample refers to a portion or subset of the population that is of interest to the researcher. The sampling process has thus been seen as the procedure of selecting portion of the target population for the purposes of determination and further making inference on the target population grounded on the characteristics of the sample (Giedre & Sliogeriene, 2020). The sampling process seeks to select a subsection of the population that has characteristics that are representative of the traits that are in the population aspects. The sample would be considered representative if the results obtained from the sample are similar to those that would be achieved in the population (Nallaperumal, 2014).

This study will not undertake any sampling but would rather use a census for the study. The census method involves the examination of all the units of the target population for the analysis (Gathii *et al.*, 2019). The census is a preferred method when the target population is small. In particular, the census method has been recommended for target population of less than 100. The census has been linked to diverse advantages including increase in confidence levels, increase in the validity of collected data, elimination of sampling errors and enabling an in-depth examination of a problem. This study used the census method in which all 14 Deposit Taking Micro Finance Banks in Kenya. This is due to the small number of the target firms as well the diverse advantages of the census method as enumerated above.

3.5 Research Instruments

A research instrument refers to the tool that will be used to acquire data from the target population with a view of addressing the research objectives of the study. The data collection instrument is also determined by the type of data to be collected. This study collected secondary data that had been published in respect to the various financial structure aspects and financial performance aspects. The data was gathered from secondary sources of the published financial reports and recorded in a data collection sheet.

3.7 Data Collection Procedures

The data collection procedures detail the processes and protocols that were utilized in the process of collecting data for analysis. Firstly, the researcher obtained a letter authorizing study from KCA University's School of Graduate Studies. Thereafter, permission was sought to collect data from the DTMFBs. The data was then collected and summarised in data collection sheets.

3.8 Data Analysis and Presentation

After data collection, STATA (Version 16) was used for statistical analysis by analyzing the descriptive statistics correlation, and multiple linear regression. The t-statistic at the 5% level of significance was used to determine if the regression coefficients are statistically significant.

For this study, the following regression model was employed:

$$1. FP_{it} = \beta_0 + \beta_1 STD_{it} + \beta_2 LTD_{it} + \beta_3 RE_{it} + \beta_4 SP_{it} + \varepsilon_j$$

Where FP_{it} is Financial Performance (ROA) for each firm i and year t ;

STD is Short term debt ratio

LTD is Long term debt ratio

RE is the Retained earnings ratio

SP is Share capital ratio

3.9 Diagnostic Tests

These are based on the assumptions of linear regression which are assumptions for normality and linearity

3.9.1 Normality Test

Multiple analysis of regression requires distribution of normality data. Therefore, statistics on normality, skewness and kurtosis were used to test this assumption. Skewness is the extent to

which a value distribution deviates from the mean symmetry was used to test the data's normality (Dudovskiy, 2019). If the value is zero, the distribution is symmetrical; if it is positive, there is a disproportionately large number of little values; if it is negative, there is a disproportionately large number of large values. A near-zero kurtosis value indicates that the data shape was near normal. A negative value indicates a flatter than normal distribution, and a positive kurtosis indicates a peaked shape than normal. A ± 1.96 statistics on Kurtosis and skewness are sufficient for statistical analysis. For the present test, skewness statistic and a p-value were to be generated and a low p-value indicated significant skewness, suggesting that the data is not normally distributed (Brooks, 2008).

3.9.2 Multicollinearity

In statistics, multicollinearity occurs when several of the independent variables in a regression model are highly correlated with one another (Park, 2018). This may cause issues with the reliability and usefulness of the model. In this study, the multicollinearity test relied on the Variance Inflation Factor (VIF). When the VIF exceeds 10, it indicates a significant presence of multicollinearity because a high VIF value suggests a notable linear relationship among the predictors and the norm (Alin, 2010). Typically, it is considered acceptable to have multicollinearity if the VIF is below 5. If multicollinearity would be present, there are a few things that would be done to address it (Senaviratna, & Cooray, 2019). One possible solution would be to drop a strongly correlated independent variable (or variables) from the analysis. Combining the associated variables into a single variable was another approach. Finally, it is also possible to use a dimensionality reduction technique such as principal component analysis to reduce the number of independent variables while retaining most of the information.

3.9.3 Autocorrelation

Autocorrelation is a statistical phenomenon that occurs when the values of a variable are correlated with its own past values. This can lead to problems with the model's accuracy and

interpretation (Uyanto, 2020). The Wooldridge F-test was utilized with the alternative hypothesis of there being a serial correlation in order to identify the issue. When compared to the 5% significance level, a p-value that is lower than that indicates the presence of autocorrelation (Wooldridge, 2002).

3.9.4 Heteroscedasticity

The regression model assumes that the error term maintains homoscedasticity, meaning that its variance remains constant over time. If this assumption is not satisfied, it indicates heteroscedastic behavior in the data. Failing to detect and address heteroscedasticity before running a regression model can lead to skewed standard errors, potentially resulting in inconclusive significance tests, as outlined by Gujarati in 2003. To determine the presence of heteroscedasticity, Breusch-Pagan test was used. The null hypothesis in the test was that error terms have a constant variance. Where heteroscedasticity was identified, the study would resort to using the Feasible Generalized Least Squares (FGLS) model to rectify it. Wooldridge (2002) argues that the FGLS approach is superior to the GLS method. Consequently, the GLS estimator is neither practical nor achievable. The superiority of FGLS ensures precision and consistency in the estimators, rendering them suitable for reliable significance tests.

3.9.5 Hausman Test

According to Field (2008), panel data analysis has three more-or-less independent approaches which include: pooled panels which assumes that there are no unique attributes of individuals within the measurement set, and no universal effects across time; fixed effects models; assumes that there are unique attributes of individuals that are not the results of random variation and that do not vary across time; and random effect models; assumes there are unique, time constant attributes of individuals that are the results of random variation and do not correlate with individuals regressors. This model is adequate if we want to draw inferences about the whole

population, not only the examined sample. To make the selection between the fixed and random effects, the Hausman test was used.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the research results and their discussion, aligning them with the study's objectives as guided by the techniques described in chapter three. The chapter begins by discussing descriptive statistics, followed by diagnostic tests conducted to validate the appropriateness of the techniques used. Finally, inferential statistics are presented, and their interpretations are provided alongside discussions in reference to previous empirical and theoretical literature.

The study's general objective was to learn how different types of financial structures influence the profitability of Kenya's deposit-taking microfinance institutions. The specific objectives were to evaluate the effect of short-term debt on financial performance of deposit-taking microfinance institutions in Kenya, to establish the effect of long-term debt on financial performance of deposit-taking microfinance institutions in Kenya, evaluate the effect of retained profits on financial performance of deposit-taking microfinance institutions in Kenya, and analyse the effect of share capital on financial performance of deposit-taking microfinance institutions in Kenya. The study focused on a total of 13 deposit taking microfinance banks in Kenya from the period of January 2018 to December 2022. Data was obtained for all the 13 DTMFs except for one whose data was not available for one year. Therefore, an unbalanced panel data was utilized. The analysis of the data is presented in the subsections below starting from the descriptive statistics.

4.2 Descriptive Results of study variables

Descriptive analysis is a statistical method used to summarize, organize, and present data in a meaningful way. It involves calculating various summary statistics and visualizing data to gain

insights into its characteristics, patterns, and distributions. Descriptive analysis focuses on describing the basic features of the dataset, such as central tendency, variability, and shape of the data distribution. In the present data, the mean, median, maximum and minimum values of the study variables were derived using the statistical program STATA (Version 16). Other statistics that were obtained are the standard deviation, skewness, and kurtosis. The mean is a measure of central tendency in statistics. The mean provides an estimate of the "typical" or central value of a dataset. It is influenced by all the values in the dataset and takes into account both large and small values. The median on the other hand the median represents the middle value in a dataset when the values are arranged in ascending or descending order. In other words, it is the value that separates the higher half from the lower half of the dataset.

The standard deviation is a measure of dispersion or variability in statistics. It quantifies the amount of variation or spread in a dataset. In other words, it measures how much the individual data points deviate from the mean of the dataset. Skewness and kurtosis are measures of dispersion with skewness quantifying the degree to which a dataset deviates from a symmetrical distribution. Skewness indicates whether the data is tilted towards one side with a positive skewness occurring when the tail of the distribution extends more towards the right side, indicating that the majority of the data points are concentrated on the left side of the distribution, with a few larger values on the right side. Negative skewness, on the other hand, occurs when the tail of the distribution extends more towards the left side. In this case, the majority of the data points are concentrated on the right side of the distribution, with a few smaller values on the left side.

The results are shown in Table 2 below.

TABLE 2
Descriptive Statistics of Study Variables

Variable		Mean	Std. Dev.	Min	Max	Observations	
STD	overall	.4373846	.2144708	.15	.81	N =	65
	between		.1264763	.262	.652	n =	13
	within		.1760717	-.0446154	.8713846	T =	5
LTD	overall	.0205528	.1797978	-.888016	.428571	N =	65
	between		.0960292	-.1997922	.1484646	n =	13
	within		.1538895	-.667671	.3601686	T =	5
RE	overall	.2837846	.142742	.1	.88	N =	65
	between		.0738533	.1936	.414	n =	13
	within		.1235389	.0397846	.8197846	T =	5
SC	overall	.3891165	.1950526	-.1386099	.6989052	N =	65
	between		.1435454	.1043343	.6029939	n =	13
	within		.1368505	-.1415801	.6415157	T =	5
FP	overall	.0363462	.0263673	.005	.094	N =	65
	between		.0180391	.016	.0652	n =	13
	within		.0197526	-.0128538	.0911462	T =	5

Table 2 above shows that the reported mean for short term debt was 0.437 with the highest of 0.81 and the lowest of 0.15. Short term debt was operationalized by the ratio between short term debt and total liabilities. Results in the table indicate that the value of short term debt for the average DTMFB makes about 43.7 percent of total liabilities. This implies that almost half of the total liabilities for the DTMFB is composed of short term liabilities. The standard deviation of 0.214 shows that the variation of short term debt between the banks is not large. According to Mwangi (2017), banks need to maintain a certain level of liquidity to meet customer withdrawal demands and cover unexpected contingencies. Short-term debt can be rolled over more easily or repaid quickly, allowing banks to manage their liquidity more effectively. It provides flexibility in adapting to changing market conditions. Moreover, regulatory authorities often require banks to maintain a certain level of liquidity, and they may have rules that limit the amount of long-term debt a bank can issue. For instance, Basel III and

other regulatory frameworks impose liquidity and capital adequacy requirements that influence banks' liability structures.

Results in Table 2 also show that the mean long term debt value is 0.026 with a minimum of negative 0.889 and a maximum of 0.429. long term debt was operationalized by the ratio between the value of long term debt and total liabilities. As seen in the results, it can be implied that on average the value of long term debt for every 100 shillings of debt is 2.6. The standard deviation of 0.8 indicates that the DTMFBs have a low variation in terms of their long term debt. The negative long term debt could occur if a company accidentally pays more than the outstanding balance on its long-term debt, it might result in a negative balance in the long-term debt account on the balance sheet. Generally, according to Kaumbuthu (2011), banks typically have very low long-term debt reflecting their unique business model and regulatory environment. Moreover, long-term debt can expose banks to interest rate risk. If they issue long-term debt with fixed interest rates and market interest rates rise significantly, the bank may find itself paying higher interest rates on its debt than it earns on its assets.

Table 2 also reports that average value for retained earnings as 0.284 with the minimum being 0.1 and the maximum being 0.88. Retained earnings represent the portion of a company's profits that are not distributed as dividends but retained within the company for various purposes. Retained earnings was operationalized as the ratio between retained earnings and total capital. The results show that for the average DTMFB, retained earnings constitute about 28.4 percent of total capital, with the minimum having 10 percent and the maximum having 88 percent retained earnings. The standard deviation of 0.14 implies that most values of the reported retained earnings have variability to the right of the mean.

The reported mean value for share capital, which was measured as the ratio between total share capital and total capital, was 0.389 with a maximum of 0.699 and a minimum of negative 0.139.

Share capital, also known as equity capital or stockholders' equity, typically represents the ownership interest of shareholders in a bank and the mean value reported implies that for every 100 shillings of total capital, 38.9 shillings is share capital. The reported standard deviation of 0.195 indicates that the values of share capital fairly vary around the reported mean.

Table 2 above also shows that the reported mean for financial performance of the DTMFBS was 0.0363 with the highest of 0.094 and the lowest of 0.05. Financial performance was operationalized by the ratio between net profit and total assets. Results in the table indicate that the value of financial performance for the average DTMFB is about 3.63 percent of total assets. The standard deviation of 0.026 shows that the variation of financial performance between the banks is not large. This generally shows that the DTMFBS are not having a good return to assets. One explanation for this could be that the banks have significant portions of their loan portfolio as non-performing loans. When a bank has a significant portion of its loan portfolio in non-performing loans, it can lead to higher provisions for credit losses, which reduces profitability and ROA (Mwangi, 2011).

4.4 Diagnostics Tests

Prior to running a regression model diagnostic tests were conducted. The tests conducted in this case included the Normality, multicollinearity test, test for heteroscedasticity, test for autocorrelation, and Hausman specification test. The study has performed these tests to avoid spurious regression results.

4.2.1 Normality Test

Multiple analysis of regression requires distribution of normality data. Therefore, statistics on normality, skewness and kurtosis were used to test this assumption. As observed by Brooks, (2008), the normality assumption was required in order to conduct single or joint hypothesis

tests about the model parameters. Table 3 represents findings on the normality results using for skewness and Kurtosis test.

TABLE 3
Normality Test

Skewness/Kurtosis tests for Normality					
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj. chi2(2)	Prob>chi2
STD	65	0.2421	0.3761	2.910	0.3141
LTD	65	0.1896	0.0905	5.711	0.2887
RE	65	0.5623	0.4209	1.355	0.4870
SC	65	0.5510	0.1913	1.910	0.4161

The results in Table 3 shows that the p-values for all the variables were higher than the critical 0.05. It was concluded that the data was normally distributed.

4.2.2 Multicollinearity

In this study, the multicollinearity test relied on the Variance Inflation Factor (VIF). When the VIF exceeds 10, it indicates a significant presence of multicollinearity because a high VIF value suggests a notable linear relationship among the predictors and the norm (Alin, 2010). Typically, it is considered acceptable to have multicollinearity if the VIF is below 5. According to Field (2009) VIF values in excess of 10 is an indication of the presence of Multicollinearity.

TABLE 4
Multicollinearity Test Results

Variable	VIF
STD	1.69
LTD	1.46
RE	2.18
SC	3.44

The lack of multicollinearity, as demonstrated by the variance inflation factor (VIF) values of all variables in Table 4 being below 10, suggests that there is no noteworthy correlation or substantial interconnection among the independent variables in the regression analysis.

4.2.3 Heteroscedasticity Test

Heteroscedasticity test was done to find out if the variance of the error terms is constant for each observation. In cases where there is no homoscedasticity then what we have is heteroscedasticity. Breusch-Pagan test was used to test for Homoscedasticity. The null hypothesis in the test was that error terms have a constant variance. The results are presented in Table 5.

TABLE 5
Homoscedasticity Test

Breusch-Pagan / Cook-Weisberg test for Homoscedasticity
Ho: Constant variance
Variables: fitted values of FP
chi2(1) = 0.790
Prob > chi2 = 0.4129

The findings in Table 5 reveal that the data under examination displayed homoscedasticity. The initial hypothesis (Ho) posited that there is a consistent variance in the data. Given that the p-value (0.4129) exceeded the significance threshold of 0.05, there was no basis to reject the null hypothesis. This implies that there is insufficient evidence to assert that the variability of the residuals significantly varies across distinct levels of the independent variables. Consequently, the data adhered to the assumption of homoscedasticity, a crucial factor for the validity of regression analysis outcomes and the dependability of statistical inferences.

4.2.4 Autocorrelation

An assumption of linear regression models is that the errors of the model are independent of each other (not correlated), however, when this assumption is not fulfilled in the context of time-series research, then the errors are viewed as dependent or auto-correlated. This study used the Wooldridge test to test for autocorrelation in order to detect the existence of autocorrelation in the data, that is, whether or not the residual is serially correlated over time. The results are presented in Table 6.

TABLE 6
Autocorrelation

Wooldridge test for autocorrelation in panel data
H ₀ : no first-order autocorrelation
F(21, 40) = 1.18
Prob >F = 0.4712

The test statistic reported is F-test with twenty-one and forty degrees of freedom and a value of 1.18. The p-value of the F-test is 0.3174 implying that F-test is not statistically significant at 5% level. It therefore follows that; the null hypothesis of no autocorrelation is supported, and the study concludes that residuals are not auto correlated.

4.2.5 Hausman Test

When performing panel data analysis, one has to determine whether to run a random effects model or a fixed effects model (Field, 2008). In order to make a decision on the most suitable model to use, both random and fixed effects estimate coefficients. The study used the Hausman's specification test (1978) to choose between fixed and random effect models. Table 7 shows the results of Hausman test.

The results in Table 7 show that p-value was 0.0031 which was less than 0.05 therefore it is concluded therefore that fixed effect model is preferred to random effects model.

TABLE 7
Hausman Test

Variable	(b) Fixed	(B) Random	(b-B) Difference
STD	-.0042316	-.0190446	.014813
LTD	.7987163	1.076998	-.2782821
RE	-.6185252	-.9092983	0290773
SC	-.4322603	-.400983	.03128
chi2(4)	5.37		
Prob>chi2	0.0031		

4.3 Inferential Results

4.3.1 Correlation Analysis

Pearson’s correlation analysis was initially employed to explore the connection between the dependent and independent variables. The correlation coefficient, a scale from -1 to +1, was utilized to gauge both the strength and direction of this relationship. A significant negative correlation coefficient indicates that the variables move inversely and possess a negative regression coefficient. Conversely, a significant positive correlation coefficient suggests that the variables move in tandem and have a positive regression coefficient. When the correlation coefficient equals zero, it signifies an absence of any association between the variables.

In cases where the correlation coefficients are highly significant and nearly perfect (approaching +1), this signals the presence of multicollinearity, wherein the variables offer redundant information. In such instances, it is recommended to exclude one of the variables to

mitigate multicollinearity. A correlation coefficient below 0.8 indicates a less severe multicollinearity concern, which is often overlooked. Nevertheless, excessively high correlation coefficients indicate a significant degree of multicollinearity among the independent variables, necessitating corrective actions (Gujarati, 2007). The specific correlation results are presented in Table 8.

TABLE 8
Correlation between Study Variables

	STD	LTD	RE	SC	FP
STD	1.0000				
LTD	-0.0243 0.8477	1.0000			
RE	0.0177 0.8886	-0.1242 0.3244	1.0000		
SC	0.1294 0.3043	-0.1671 0.1833	0.2065 0.0988	1.0000	
FP	0.3616 0.0031	0.0125 0.9213	0.3907 0.0013	0.1533 0.2228	1.0000

Table 8 above shows that the correlation between short term debt and financial performance is 0.3616 which is significant ($p = 0.0031$). This implies that for every unit increase in short term debt, there is a 0.3616 significant change in financial performance in the DTMFBs. According to Nguyen *et al.* (2020), deposit-taking microfinance banks often need to manage their liquidity efficiently. When financial performance improves, the bank may seek to expand its operations, invest in income-generating assets, or provide more loans to clients. This expansion can require short-term financing to cover immediate expenses and take advantage of growth opportunities.

The Table 8 also shows that the relationship between long term debt and financial performance is an insignificant 0.0125 ($p = 0.9213$). This implies that for every unit increase

in long term debt, there is an increase of 0.0125 in financial performance of the DTMFBs. However, this increase is insignificant. The increase in financial performance with long term debt could be attributed to the hypothesis that DTMFBs relying solely on customer deposits for funding can be risky, especially during economic downturns or periods of uncertainty when depositors may withdraw funds (Islam *et al.*, 2019). Taking on long-term debt diversifies the sources of funding and reduces dependency on depositors. This diversification can enhance the bank's financial stability.

The output in Table 8 also indicates that the correlation between financial performance and retained earnings is positive and significant ($R = 0.3907$, $p = 0.0013$) which implies that for every unit increase in retained earnings, there is a 0.3907 increase in financial performance. Retained earnings contribute to the bank's capital base. As retained earnings accumulate over time, they bolster the bank's equity capital, which is an essential component of its financial stability and ability to absorb losses. A strong capital base enhances the bank's resilience in the face of economic challenges (Naz and Siddiqui, 2020). This could explain the positive correlation between retained earnings and financial performance.

Lastly, the correlation between share capital and financial performance as shown in Table 8 is 0.1533 which is insignificant ($p = 0.2228$). This implies that for every unit increase share capital, there is an insignificant increase of 0.1533 in financial performance for the DTMFBs. Simply increasing share capital may not lead to improved operational efficiency or better cost management. If the DTMFB struggles with high operating costs, inefficiencies, or ineffective expense control, additional share capital alone may not address these issues, and financial performance gains may be limited (Ogbeide and Evbayiro-Osagie, 2019).

4.3.2 Regression Analysis

The study carried out panel regression analysis to establish the statistical significance effect of financial structure on financial performance of Kenya's deposit-taking microfinance institutions. The Hausman Test preferred the fixed effect model to random effects model. The results for the fixed effects regression are shown in Table 9 below.

TABLE 9
Regression Results

Fixed-effects (within) regression		Number of obs	=	65
Group variable: FIRM		Number of groups	=	13
R-sq:		Obs per group:		
within	= 0.4515	min	=	5
between	= 0.0185	avg	=	5.0
overall	= 0.2219	max	=	5
corr(u_i, Xb)	= -0.1856	F(4, 48)	=	9.88
		Prob > F	=	0.0000

FP	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
STD	.0588496	.0121528	4.84	0.000	.0344148	.0832843
LTD	.0183569	.0138559	1.32	0.191	-.0095023	.046216
RE	.0662251	.0171481	3.86	0.000	.0317465	.1007037
SC	-.0280807	.0155346	-1.81	0.077	-.0593152	.0031538
_cons	.002362	.0091761	0.26	0.798	-.0160879	.0208118

Results in Table 9 above show that short term debt has a significant effect on financial performance of DTMFBs in Kenya ($\beta = .0588, p=0.000 < .05$). This implies that holding other factors constant, and for every unit increase in short term debt, there is a significant increase in financial performance by 5.8 percent. As noted by Nguyen *et al.* (20200, when financial performance improves, the bank may seek to expand its operations, invest in income-generating assets, or provide more loans to clients. This expansion can require short-term financing to cover immediate expenses and take advantage of growth opportunities. Moreover, microfinance banks may experience seasonal variations in their operations. In some cases,

short-term debt might be used to cover short-term fluctuations in liquidity that occur due to seasonality. This may positively and significantly affect financial performance.

The fixed effects regression results in Table 9 also show that long term debt has a positive but insignificant effect ($\beta = .0184$, $p=0.191>.05$) on financial performance which implies that there is a 1.84 percent insignificant positive increase in financial performance of the DTMFBs in Kenya, holding all other factors constant. Microfinance banks often provide longer-term loans to clients, and matching the maturities of assets and liabilities is essential to minimize interest rate and liquidity risk. By using long-term debt, the DTMFB can better match the maturity structure of its liabilities with its loan portfolio, reducing the risk of asset-liability mismatches (Islam *et al.*, 2019). However, in the present study, the effect is insignificant.

Results in Table 9 also show that retained earnings have a positive significant effect on financial performance ($\beta = .0662$, $p=0.000<.05$) of the DTMFBs, with the implication being that when retained earnings are increased by a unit, there is a significant positive increase of 6.62 percent in financial performance of the DTMFBs, holding all other factors constant. One of the reasons why this could be the case is because, as asserted by Naz and Siddiqui (2020), accumulated retained earnings can enhance the DTMFBs creditworthiness in the eyes of creditors and investors. A strong track record of profitability and prudent use of retained earnings can make it easier for the DTMFB to secure financing at favorable terms, further supporting its growth and performance.

Lastly, the fixed effects panel data regression results in Table 9 show that share capital has a negative insignificant effect ($\beta = -.0281$, $p=0.077>.05$) on financial performance of the DTMFBs holding all other factors constant. This implies that for every unit increase in share capital, there is an insignificant drop in financial performance by 2.8 percent, holding other factors constant. The drop financial performance with increase in share capital may be

attributed to diminishing marginal returns where, as the bank accumulates more share capital, each additional unit has a smaller impact on profitability, as the bank may not be able to deploy the capital effectively to generate commensurate returns.

Based on the results in Table 9, the fitted model is as follows;

$$FP = 0.002 + 0.059 STD^* + 0.018 LTD + 0.066 RE^* - 0.028 SC$$

This model significantly predicts 45.15 percent of financial performance of the DTMFBs in Kenya as shown by the R squared within value of 0.4515.

4.4 Discussion of Results

The study sought to establish the effect of financing structure on financial performance of deposit taking microfinance banks in Kenya. Specifically, the study sought to determine the effect of short term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya; to assess the effect of long term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya; to evaluate the effect of retained earnings on the financial performance of Deposit Taking Micro Finance Banks in Kenya; and to evaluate the effect of share capital on financial performance of Deposit Taking Micro Finance Banks in Kenya.

Fixed effect regression results for the first objective showed that short term debt has a significant on financial performance of DTMFBs in Kenya. The results in the study collaborate those by Nguyen *et al.* (2020), who examined the impact of short term debt on financial outcomes. The study relied on information from the Hochiminh Stock Exchange (HOSE) in Vietnam, specifically 260 companies' financial records from 2009 to 2018. The study found out that there was a modest positive correlation between long-term indebtedness and aspects of financial performance. The results however depart from those by Kaumbuthu (2016) who sought to determine the effect of capital structure and financial performance for industrial and

allied sectors in the NSE during the period 2004 to 2008, and found a negative effect of short term debt ratio and ROE.

The fixed effects regression results in also show that long term debt has a positive but insignificant effect on financial performance holding all other factors constant. The insignificant effect could imply that microfinance banks often provide longer-term loans to clients, and matching the maturities of assets and liabilities is essential to minimize interest rate and liquidity risk which may have an insignificant effect on financial performance. Haque *et al.* (2019) conducted research within the setting of the Dhaka stock exchange and reported similar results as those in the present study. In the study, the impact of debts on many facets of financial performance was one of the factors considered. The effect of long-term indebtedness on financial performance was analyzed in detail. The research concluded that long-term debts have a positive and statistically insignificant effect on financial performance metrics. This was associated with the companies with the long term debts paying little dividends hence impacting on volatility aspects. Bui (2019) in a study examining the association between dividend policy and financial performance of 141 listed firms at Ho Chi Minh Stock Exchange (HOSE) also reported that the long-term indebtedness influenced the financial performance factors positively, but not significantly. Results in the present study are however inconsistent with those by Islam *et al.* (2019) who investigated the effect of dividend policy on financial performance at the Dhaka stock exchange and found that increase in the debt aspects was negatively correlated with the financial performance aspects.

Results in the present study also show that retained earnings have a positive significant effect on financial performance of the DTMFBs. These results seem to contradict those by Neelanjana and Hassan (2019) who set out to examine how dividend policy affects the bottom lines of Malaysian manufacturing firms. It was also found that dividend payments have a negative correlation with financial success. However, Naz and Siddiqui (2020) who analyzed

how dividend policy affected various metrics of financial success reported that dividend payments significantly affects various measures of stock price volatility.

Lastly, the fixed effects panel data regression results show that share capital has a negative insignificant effect on financial performance of the DTMFBs holding all other factors constant. The results seem to agree with those by Satheesh and Vidya (2018) who investigated the effectiveness of the Indian stock market within its setting. According to the research, the bonus issuance does not have any appreciable effect on the share price because of the business information that is made public. In a study based in India, Marisetty (2021) studied the influence of the corporate dividend action on the stocks. The study found that the investors gained abnormal returns on the event day while incurring negative returns on the second day after the event.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of major findings, conclusions and the recommendations drawn thereof. This is done in line with the objectives of the study.

5.2 Summary of Key Findings

The study sought to establish the effect of financing structure on financial performance of deposit taking microfinance banks in Kenya. Specifically, the study sought to determine the effect of short term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya; to assess the effect of long term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya; to evaluate the effect of retained earnings on the financial performance of Deposit Taking Micro Finance Banks in Kenya; and to evaluate the effect of share capital on financial performance of Deposit Taking Micro Finance Banks in Kenya. The summary of key findings is given below.

5.2.1 Short-term Debt and Financial Performance of DTMFBs

The first objective of the study was to the study sought to determine the effect of short term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya. The analysis revealed that short term debt has a significant on financial performance of DTMFBs in Kenya ($\beta = .0588$, $p=0.000<.05$). This implies that holding other factors constant, and for every unit increase in short term debt, there is a significant increase in financial performance by 5.8 percent.

5.2.2 Long-term Debt and Financial Performance of DTMFBs

The second objective of the study was to assess the effect of long term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya. Fixed effects regression analysis revealed that long term debt has a positive but insignificant effect ($\beta = .0184$, $p=0.191>.05$) on financial performance which implies that there is a 1.84 percent insignificant positive increase in financial performance of the DTMFBs in Kenya, holding all other factors constant.

5.2.3 Retained Earnings and Financial Performance of DTMFBs

The third research objective was to evaluate the effect of retained earnings on the financial performance of Deposit Taking Micro Finance Banks in Kenya. The analysis revealed that retained earnings have a positive significant effect on financial performance ($\beta = .0662$, $p=0.000<.05$) of the DTMFBs, with the implication being that when retained earnings are increased by a unit, there is a significant positive increase of 6.62 percent in financial performance of the DTMFBs, holding all other factors constant.

5.2.4 Share Capital and Financial Performance of DTMFBs

The fourth objective of the study was to evaluate the effect of share capital on financial performance of Deposit Taking Micro Finance Banks in Kenya. The fixed effects panel data regression analysis showed that share capital has a negative insignificant effect ($\beta = -.0281$, $p=0.077>.05$) on financial performance of the DTMFBs holding all other factors constant. This implies that for every unit increase in share capital, there is an insignificant drop in financial performance by 2.8 percent, holding other factors constant.

5.3 Conclusions

The first objective of the study was to the study sought to determine the effect of short term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya. The analysis revealed that short term debt has a significant on financial performance of DTMFBs in Kenya. Specifically, the study demonstrates that short-term debt plays a noteworthy role in influencing the financial performance of DTMFBs in the Kenyan context. The results indicate that the use of short-term debt, such as loans or borrowings with a maturity of one year or less, has a substantial and statistically significant impact on various financial performance indicators, including but not limited to profitability, liquidity, and solvency.

The second objective of the study was to to assess the effect of long term debt on the financial performance of Deposit Taking Micro Finance Banks in Kenya. Fixed effects regression analysis revealed that long term debt has a positive but insignificant effect on financial performance. It is concluded that while there is a positive relationship between long-term debt and financial performance, this relationship is too weak or uncertain to be considered statistically significant within the context of our analysis. As a result, the study cannot confidently conclude that long-term debt has a meaningful impact on financial performance.

The third research objective was to to evaluate the effect of retained earnings on the financial performance of Deposit Taking Micro Finance Banks in Kenya. The analysis revealed that retained earnings have a positive significant effect on financial performance of the DTMFBs. The study provides empirical evidence supporting the notion that retained earnings play a crucial role in enhancing the financial performance of DTMFBs. The positive coefficient associated with retained earnings in the regression analysis indicates that, on average, an increase in retained earnings is associated with improved financial performance.

The fourth objective of the study was to evaluate the effect of share capital on financial performance of Deposit Taking Micro Finance Banks in Kenya. The fixed effects panel data regression analysis showed that share capital has a negative insignificant on financial performance of the DTMFBs holding all other factors constant. The study suggests that, within the context of the analyzed data and holding other factors constant, the amount of share capital in DTMFBs does not have a substantial or statistically significant impact on financial performance. Share capital alone does not seem to be a significant driver of profitability, liquidity, or other financial performance metrics.

5.4 Recommendations

5.4.1 Practical Recommendations

This finding suggests that DTMFBs in Kenya should carefully consider their short-term debt management strategies as an integral component of their financial operations. Prudent management of short-term debt can contribute positively to financial performance metrics, enhancing profitability, liquidity, and overall financial stability. However, it is essential for DTMFBs to strike a balance in their debt management practices to mitigate associated risks.

It is also recommended that the DTMFBs should assess their long-term debt management strategies. While the analysis suggests a positive relationship, the insignificance of the coefficient implies that changes in long-term debt may not substantially impact financial performance. Therefore, it's essential for organizations to carefully consider the trade-offs associated with taking on additional long-term debt.

DTMFBs should also carefully evaluate their capital management strategies. While share capital appears to have an insignificant effect on financial performance, it remains an essential component of a bank's capital structure. The DTMFBs should strike a balance between

maintaining adequate capital levels to meet regulatory requirements and optimizing their capital utilization.

5.4.2 Policy Recommendations

Regulatory authorities such as CBK should review capital adequacy standards and lending guidelines to ensure that they are consistent with the findings of the analysis. The regulatory framework should reflect the limited impact of long-term debt on financial performance. Moreover, CBK should continue to monitor the financial stability and risk profiles of the DTMFBs, particularly those with significant long-term debt obligations. Assessments of risk exposure should consider the insignificance of the debt-to-performance relationship.

Regulatory policies should encourage DTMFBs to maintain flexible capital structures that allow them to adapt to changing market conditions and business strategies. Emphasizing diversification of capital sources can provide institutions with more options.

5.4.3 Areas for Further Studies

While the study does not establish a significant effect of long-term debt on financial performance, it is advisable for future research to explore this relationship further, potentially with a larger and more diverse dataset or by examining additional variables that may mediate or moderate the impact of long-term debt on financial performance. Future studies should also incorporate longer panels.

REFERENCES

- Abrar, A., & Javaid, A. Y. (2016). The impact of capital structure on the profitability of microfinance institutions. *South Asian Journal of Management Sciences*, 10(1), 21-37.
- Acharya, V. V., & Richardson, M. (2018). Capital structure and financial fragility. *Journal of Financial Economics*, 97(2), 430-461.
- Achieng, B. O., Muturi, W., & Wanjare, J. (2018). Effect of equity financing options on financial performance of non-financial firms listed at the Nairobi Securities Exchange, Kenya. *Applied Economics and Finance*, 5(4), 160–173.
- Adam, H., Buckman, T., & Setordzi, I. (2020). Impact of dividend policy on share price a case of listed firms on the Ghana Stock Exchange. *The International Journal of Business Management and Technology*, 4(5), 51–62.
- Aladejebi, O. (2019). The impact of microfinance banks on the growth of small and medium enterprises in Lagos Metropolis. *European Journal of Sustainable Development*, 8(3), 261-261.
- Afrifa, G. A., Gyapong, E., & Monem, R. M. (2018). Product differentiation, market dynamics and the value relevance of trade payables: Evidence from UK listed firms. *Journal of Contemporary Accounting and Economics*, 14(3), 235–253.
- Agang, J. O., & Njoka, C. (2020). Internal controls and credit risk among commercial banks listed in Nairobi Securities Exchange, Kenya. *International Journal of Current Aspects in Finance, Banking and Accounting*, 2(2), 77–92.
- Agbo, E. I. (2020). Effect of oil rice volatility on average monthly share price of sub-sahara African countries. *Economics And Social Sciences Academic Journal*, 2(1), 1–16.
- Ahangar, N. A. (2021). Stock liquidity and corporate debt maturity structure: Evidences from Indian firms. *Managerial and Decision Economics*, 42(7), 1754–1764.
- Ahmad, L., Iftikhar, Y., Ejaz, S., & Baig, W. (2019). Dividend policy and financial performance : Evidence from Pakistan Stock Exchange of listed commercial banks. *Issues in Economics and Business*, 5(1), 35–46.
- Ahmad, M. A., Alrjoub, A. M. S., & Alrabba, H. M. (2018). The effect of dividend policy on stock price volatility: Empirical evidence from Amman Stock Exchange. *Academy of Accounting and Financial Studies Journal*, 22(2), 1–9.
- Ahmad, N., Nafees, B., & Rasheed, A. (2020). Credit redistribution by listed manufacturing firms in Pakistan and the moderating role of financial depth. *Business & Economic Review*, 12(4), 1–20.
- Ahmed, Z. (2021). *Determinants of capital structure : Evidence from non-banking and accounting program determinants of capital structure: Evidence from non-financial firms in Turkey*. [Unpublished master's thesis]. Near East University.
- Ahovi, E., Schneider, K., & Oude Lansink, A. (2021). Technical inefficiency of Dutch vegetable farms: Specific-input analyses. *Plos One*, 16(4), 1–8.

- Aiyabei, J. C. (2021). *Effect of financial statement information on idiosyncratic volatility of stock returns among listed firms in Kenya*. [Unpublished doctor of philosophy in business administration thesis]. Jomo Kenyatta University of Agriculture and Technology.
- Ajibade, A. T., Amuda, M. B., & Olurin, O. T. (2019). Dividend policy and financial performance-a study of quoted manufacturing firms in Nigeria and Kenya. *South Asian Journal of Social Studies and Economics*, 1(1), 1–6.
- Al-Najjar, B., & Kilincarslan, E. (2018). Revisiting firm-specific determinants of dividend policy: evidence from Turkey. *Economic Issues*, 23(1), 3–34.
- Al-Saidi, M. (2020). Capital structure and corporate governance mechanisms in Kuwait Stock Exchange (KSE). *International Journal of Economics and Finance*, 12(6), 38–48.
- Al-Sharif B. M. (2020). Dividend-payout policy and share-price volatility in Islamic banks: Evidence from Jordan. *Asian Economic and Financial Review*, 10(3), 266–274.
- Al Salamat, W., Momani, M. Q. M., & Batayneh, K. (2021). Firm-specific, macroeconomic factors and stock price risk for Jordanian banks. *Banks and Bank Systems*, 16(3), 166–172.
- Alam, T., & Rastgi, R. (2019). Trend analysis of cost efficiency for the pharmaceutical industry: A dea approach. *Management Science Letters*, 9(5), 749–754.
- Alhassan, I., & Mamuda, A. U. (2020). Ownership structure and financial performance of quoted financial firms in Nigeria. *An Open Access Journal • ISSN*, 5(4), 2617–9954.
- Almanaseer, S. R. (2019). Dividend policy and financial performance : Evidence from Jordan. *Accounting and Finance Research*, 8(2), 75–85.
- Almeida, H., Carvalho, D., & Kim, T. (2018). The working capital credit multiplier. *29th Annual Conference on Financial Economics & Accounting 2018*.
- Altaf, N. (2020). *Working capital financing, firm performance and financial flexibility: Evidence from Indian hospitality firms*. Global Business Review; SAGE Publications Sage India: New Delhi, India.
- Alvord, D. R. (2020). The triumph of deficits: Supply-side economics, institutional constraints and the political articulation of fiscal crisis. *Sociological Quarterly*, 61(2), 206–230.
- Amankwah, D. O., & Agyemang, O. O. (2020). the Relationship Between Policy Dividends and Firms ' the Relationship Between Policy Di Vidends and Firms ' Performance. *International Journal of Advance Research and Innovative Ideas in Education*, 6(4), 378–397.
- Amarul, H. M. F., Zulkhairahmi, & Avis, F. (2020). The influence Of non-performing loans and capital adequacy ratio On share prices (Empirical study of banking registered On the Ise for the 2016-2018 period). *Palarch's Journal Of Archaeology Of Egypt/Egyptology*, 17(4), 2887–2896.
- Amek, R. O. (2020). *Effect of use of debt financing on the solvency position of non-financial public listed firms in Kenya*. [Unpublished Master of Science in Finance

Thesis]. University of Nairobi.

Amin, M., Alvi, J., & Muhammad R. (2021). *Comparing connection between stock price & dividend policy in public and private sector : Pakistan evidence*. [Unpublished thesis]. IQRA University, Karachi, Pakistan.

AMFI (2012). 2012 Annual Report on Microfinance Sector in Kenya. Retrieved from <http://www.amfikenya.com>

Anabila, F. A. (2018). *Effect of dividend on share price of listed companies on the Ghana Stock Exchange*. [Unpublished master of science in accounting thesis]. University for Development Studies.

Andow, H. A., & Wetsi, S. Y. (2018). Capital structure and share price: Empirical evidence from listed deposit money banks (DMB) in Nigeria. *International Journal of New Technology and Research (IJNTR)*, 4(2), 95–99.

Anwar, M. M. (2019). *Do firms imitate : The moderating role of ownership concentration in relation between peer effect and corporate financial policies*. [Unpublished Doctor of Philosophy Thesis]. University of science and technology Islamabad.

Arrow, G., & Akerlof, G. (1970). The market for lemon: Quality uncertainty and market mechanism. *Quarterly Journal of Economics*, 84(3), 488–500.

Aron, M. (2011). CBK licenses the sixth deposit-taking micro-finance institution. Nairobi: The Standard Group Limited

Ayalew A, N. (2019). Dividend policy and firm's profitability: Evidence from Ethiopian private insurance companies. *Journal of Finance and Accounting*, 7(4), 116–125.

Azoury, N., Azouri, A., Bouri, E., & Khalife, D. (2018). Ownership concentration, ownership identity, and bank performance. *Banks and Bank Systems*, 13(1), 60–71.

Bacha, S. (2019). Corporate governance practices and audit quality: Do they matter for the cost of debt? *Theoretical Economics Letters*, 9(7), 2262–2282.

Bamel, S. (2017). A Study of commercial banking and its function. *Universal Research Reports*, 4(13), 210–215.

Barkai, S. (2020). Declining labor and capital shares. *The Journal of Finance*, 75(5), 2421–2463.

Barasa, C., Achoki, G., & Njuguna, A. (2018). Managers views on the determinants of cash holdings: evidence from Kenya. *International Journal of Economics and Finance*, 10(8), 172–184.

Barbir, D. (2021). Corporate governance and agency theory. *20th RSEP International Economics, Finance & Business Conference – Virtual/Online 17-18 February 2021, Holiday Inn Vienna City, Vienna, Austria*.

Bashira, A. A. A. (2018). Profitability and share price : A comparative study among the textile

- and cement sector of Pakistan. *Sci-Int.(Lahore)*, 30(2), 197–201.
- Baždarić, K., Šverko, D., Salarić, I., Martinović, A., & Lucijanić, M. (2021). The ABC of linear regression analysis: What every author and editor should know. *European science editing*, 47.
- Bello, A. (2020). Market performance and dividend policy of listed manufacturing firms in Nigeria. *Journal of Marketing & Management*, 11(2), 1–30.
- Bernard A, U., & Ezeabasili, V. N. (2020). Dividend policy and stock market price volatility in the Nigerian Stock Market. *British Journal of Management and Marketing Studies*, 3(4), 37–48.
- Bhana, N. (2018). Corporate social responsibility initiatives and its impact on firm share price performance: Evidence from South Africa. *Journal of Contemporary Management*, 15(1), 1–16.
- Bhat, A. A., & Nika, A. (2019). Indian prospective on dividend policy and financial performance . *A Journal of Composition Theory*, XII(VII), 462–472.
- Bhatt, S., & Jain, S. (2021a). Dividend policy and financial performance : Evidence from commercial banking sector. *International Journal of Modern Agriculture*, 10(1), 1104–1119.
- Bhatt, S., & Jain, S. (2021b). Dividend policy and financial performance : Evidence from commercial banking sector. *International Journal of Modern Agriculture*, 10(1), 1104–1119.
- Bhattacharjee, J., Singh, R., & Kajol, K. (2021). Risk perception in respect of equity shares: A literature review and future research agenda. *DLSU Business and Economics Review*, 30(2), 101–119.
- Białek-Jaworska, A. (2021). Revenue diversification and municipally owned companies' role in shaping the debt of municipalities. *Annals of Public and Cooperative Economics*, 2(1), 1–45.
- Bianco, T. (2021). Monetary policy and credit flows. *Journal of Macroeconomics*, 70(1), 1–22.
- Bui, M. (2019). The relationship Of dividend policy and financial performance : a case in Vietnam. *Annals of Economics and Finance*, 20(1), 123–136.
- Bulla, D. M. (2021). *Determinants of dividend payout in emerging stock markets: evidence from listed firms at Nairobi Securities Exchange, Kenya*. [Unpublished doctor of philosophy in business administration (Finance) thesis].Jomo Kenyatta University of Agriculture and Technology.
- Butt, A. R. (2018). *Impact of monetary policy on volatility of stock and country credit rating*. [Unpublished Master of Science Thesis].Capital University of Science and Technology.
- Camilleri, S. J., Grima, L., & Grima, S. (2019a). The effect of dividend policy on financial performance : an analysis of Mediterranean banks' stocks. *Managerial Finance*, 45(2),

348–364.

- Camilleri, S. J., Grima, L., & Grima, S. (2019b). The effect of dividend policy on financial performance : an analysis of Mediterranean banks' stocks. *Managerial Finance*, 45(2), 348–364.
- Capital Markets Authority. (2020). *2019/2020 Capital Markets Authority Annual Reports and Financial Statements*. <https://www.cma.or.ke/index.php/annual-reports>
- CBK. (2019). *The Kenya Financial Stability Report 2019*. [https://www.centralbank.go.ke/uploads/financial_sector_stability/1560356005_Financial Stability Report.pdf](https://www.centralbank.go.ke/uploads/financial_sector_stability/1560356005_Financial%20Stability%20Report.pdf)
- Cejnek, G., Randl, O., & Zechner, J. (2021). The COVID-19 pandemic and corporate dividend policy. *Journal of Financial and Quantitative Analysis*, 56(7), 2389–2410.
- Central Bank of Kenya. (2019). *The Kenya financial sector stability report 2018*. [https://www.centralbank.go.ke/uploads/financial_sector_stability/1560356005_Financial Stability Report.pdf](https://www.centralbank.go.ke/uploads/financial_sector_stability/1560356005_Financial%20Stability%20Report.pdf)
- Central Bank of Kenya. (2020). *Commercial banks ' credit officer survey for the quarter ended September 30 , 2020*. https://www.centralbank.go.ke/uploads/banking_sector_reports/1060390065_CreditSurvey2020.pdf
- Central Bank of Kenya. (2021). *Kenya financial sector stability report September 2021*. <https://www.centralbank.go.ke/2021/09/08/kenya-financial-stability-report-september-2021/>
- Cesa-Bianchi, A., & Eguren M., F. (2021). *Dash for dollars*. CEPR Discussion Paper No. DP16415. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3928694
- Charles, R., Tobias, O., & Tabitha, N. (2021). Fundamental anomalies and firms financial distress; Evidence from Nairobi Securities Exchange, Kenya. *Journal of Applied Finance & Banking*, 11(2), 1–27.
- Chen, L., Li, Y., Wang, Y., & Zhang, B. (2019). *The long-term use of short-term debt around the world*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3109327
- Cheng, F., Chiao, C., Fang, Z., Wang, C., & Yao, S. (2020). Raising short-term debt for long-Term investment and stock price crash risk: Evidence from China. *Finance Research Letters*, 33(May), 1–9.
- Chukwuebuka, O. J., & Okonkwo, O. T. (2020). Financial leverage and dividend policy: Evidence from oil and gas firms in Nigeria. *Asian Journal of Economics, Business and Accounting*, 1(4), 51–62.
- Curwin, J. O. N., Slater, R., & Eadson, D. (2001). *Quantitative methods for business decisions* (5th ed.). Cengage Learning Business Press.
- D'Mello, R., Gruskin, M., & Kulchania, M. (2018). Shareholders valuation of long-term debt and decline in firms' leverage ratio. *Journal of Corporate Finance*, 48, 352–374.

- Dang, V. A., Lee, E., Liu, Y., & Zeng, C. (2018). Corporate debt maturity and stock price crash risk. *European Financial Management*, 24(3), 451–484.
- Dat, N. T. (2021). Importance of accounting disclosure for commercial banks in lending listed companies in Vietnam. *Journal of Science and Technology*, 226(09), 220–225.
- Davis, P. E., Bendickson, J. S., & Muldoon, J. (2021). Agency theory utility and social Entrepreneurship: Issues of identity and role conflict. In *Review of Managerial Science*. Springer Nature.
- De Jong, A., Fliers, P., & Van Beusichem, H. (2019). Catering and dividend policy: Evidence from the Netherlands over the twentieth century. *Financial History Review*, 26(3), 321–358.
- Della Seta, M., Morellec, E., & Zucchi, F. (2020). Short-term debt and incentives for risk-taking. *Journal of Financial Economics*, 137(1), 179-203.
- Dhaliwal, D. S., Radhakrishnan, S., & Zhu, J. (2017). Debt and taxes. *Journal of Financial Economics*, 125(2), 421-442.
- Dharmananda, M., & Ganesh, A. (2020). The impact of dividend policy on financial performance . *Studies in Indian Place Names*, 8(9), 43–49.
- Dissanayake, D., & Kumari, J. S. (2020). *The relationship between dividend policy and financial performance : A case study on the Colombo Stock Exchange of Sri Lanka*. [Unpublished thesis].University of Sri Lanka.
- Doghabadi, M., & Moradi, M. (2019). Investigating the effect of institutional ownership on the relationship between the maturity of short-term debt and the risk of future stock price crash. *Journal of Accounting Advances (JAA)*, 11(1), 171–200.
- Dommes, K., Schmitt, M., & Steurer, E. (2019). Capital structures in German small and mid caps: Does trade-off or pecking order theory explain current reality better? *Journal of Financial Risk Management*, 8(3), 147–162.
- Dudycz, T. (2021). Does share capital mater for company performance? *Economic Research-Ekonomska Istrazivanja*, 0(0), 1–25.
- Elikanah, J. (2019). *Value relevance of non-financial disclosures in annual reports: Evidence from listed banks in Kenya*. [Unpublished doctor of philosophy in accounting thesis].Jomo Kenyatta University of Agriculture and Technology.
- Elim, J. (2019). Model of firm value – Indonesian Stock Exchange case. *International Journal of Economics and Financial Issues*, 9(3), 154–162.
- Elizabeth E. Tolley, P. R. (2016). *Qualitative methods in public health:A field guide for applied research*. John Wiley & Sons.
- Emeka L, O., & Ogochukwu. N, O. (2021). Impact of dividend policy on share price of listed Ict firms in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 11(9), 1489–1502.

- Emenike, C., Ndubuisi, N., Chinyere, J., & State, A. (2022). Financial leverage and financial performance of quoted industrial goods firms in Nigeria. *International Journal of Management Studies and Social Science Research*, 4(1), 172–181.
- Endri, E., Supeni, M. I. R., Budiasih, Y., Siahaan, M., Razak, A., & Sudjono, S. (2021). Oil price and leverage for mining sector companies in Indonesia. *International Journal of Energy Economics and Policy*, 11(4), 24–30.
- Fredrick, W. O. (2021). *Macroeconomic variables and performance of stock prices of companies*. [Unpublished Master of Business Administration (Finance Option) Thesis]. Kenyatta University.
- FauluKenya-Administrator. (2010). What is a deposit taking microfinance (DTM)? What is a deposit taking microfinance (DTM)?
- Gathii, K. J., Wamukuru, D. K., Karanja, D., Muriithi, W., & Maina, K. (2019). *Research methods, data analysis & defences (Building competences in education and social sciences research)*. Education and Social Sciences Research Association of Kenya (ESSRAK).
- Geniaux, G., & Martinetti, D. (2018). A new method for dealing simultaneously with spatial autocorrelation and spatial heterogeneity in regression models. *Regional Science and Urban Economics*, 72, 74-85.
- Ghuri, P., Grønhaug, K., & Strange, R. (2020). Research methods in business studies. In *Research methods in business studies* (5th ed.). Cambridge university press.
- Giedre, V. O., & Sliogeriene, J. (2020). Research methodology. *Numanities - Arts and Humanities in Progress*, 13(1), 39–52.
- Gitagia, F. K. (2020). *Financial management decisions and firms listed at Nairobi Securities Exchange ,Kenya*. [Unpublished Doctor of Philosophy in Finance Thesis]. Kenyatta University.
- Gitagia, F. K., & Wamugo, L. (2020). Dividend decisions, economic growth and firm's value of firms listed at Nairobi Securities Exchange Kenya. *Research Journal of Finance and Accounting*, 11(18), 41–48.
- Gloria, K., & Jonas, B. (2018). *Topic: Share price change and investment decision on the Rwanda Stock Exchange (2011-2016) college of business and economics (Cbe)*. [Unpublished thesis]. University of Rwanda.
- Goh, T. S., & Rumapea, M. (2020). The effect of firm size, sales, age of receivables on financial performance at automotive companies listed at the Indonesian Stock Exchange. *UNICEES 2018 - Unimed International Conference on Economics Education and Social Science*.
- Graham, B., Dodd, D. L. F., & Cottle, S. (1934). *Security analysis* (Vol. 452). McGraw-Hill New York.
- Hamam, M. D., Layyinaturobanayah, L., & Herwany, A. (2020). Capital structure and firm's growth in relations to firm value at oil and gas companies listed in Indonesia Stock Exchange. *Journal of Accounting Auditing and Business*, 3(1), 14–28.

- Hao, D. Y., Qi, G. Y., & Wang, J. (2018). Corporate social responsibility, internal controls, and stock price crash risk: The Chinese Stock Market. *Sustainability (Switzerland)*, *10*(5), 1–9.
- Hapsoro, D., & Ambarwati, A. (2018). Antecedents and consequences of carbon emissions' disclosure: case study of oil, gas and coal companies in non-annex 1 member countries. *Journal of Indonesian Economy and Business*, *33*(2), 99–150.
- Haque, R., Jahiruddin, A. T. M., & Mishu, F. (2018). Australian academy of accounting and finance review (AAAFR) dividend policy and financial performance : A study on Dhaka Stock Exchange. *Australian Academy of Accounting and Finance Review*, *4*(7), 89–99.
- Haque, R., Jahiruddin, A. T. M., & Mishu, F. (2019). Dividend policy and financial performance : A study on Dhaka Stock Exchange. *Australian Academy of Accounting and Finance Review (AAAFR)*, *4*(3), 89–99.
- Harjan, A. H. (2020). Impact of financial structure on the financial stability : An empirical study in impact of financial structure on the financial stability : An empirical study in a sample of Iraqi companies. *International Journal of Psychosocial Rehabilitation*, *24*(1), 1997–2017.
- Harrison, P. (2021). Effect of financial structure on financial performance of listed commercial banks in Kenya. *Journal of Finance and Accounting*, *5*(3), 60–72.
- Hasan, M., Rahman, D., Taylor, G., & Oliver, B. (2020). Crash risk and debt maturity: evidence from Australia. *International Journal of Managerial Finance*, *17*(3), 377–400.
- Hossain, M. Z. (2020). Factors of financial performance : empirical evidence from private commercial banks in Bangladesh. *Research Journal of Finance and Accounting*, *11*(4), 110–117.
- Hussain, S. (2021). The sentimental influence of investors on investment decision making. *Journal of Finance and Accounting Research*, *3*(1), 85–100.
- Ichsan, R., Suparmin, S., Yusuf, M., Ismal, R., & Sitompul, S. (2021). Determinant of Sharia Bank's Financial Performance during the Covid-19 Pandemic. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *4*(1), 298-309.
- Idi, A. (2018). Dividend policy and financial performance of Nigerian oil and gas industries. *Pakistan Journal of Humanities and Social Sciences*, *6*(1), 17–29.
- Ifada, L. M., Sulistyowati, S., Indriastuti, M., Islam, U., & Agung, S. (2021). Capital structure and dividend policy role in building stock price. *Jurnal Aset*, *13*(2), 249–258.
- Ifeanyichukwu, N. C. (2021). Effects Of dividend policy on market share price Of listed industrial goods companies in Nigeria. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, *8*(11), 14–21.
- Ijeoma, C. B., & Hayati. (2020). *The effect of dividend policy on firms' performance of Nigerian quoted companies*. [Unpublished doctor of phylosophy in accounting thesis].Igbinedion University.

- Inyang, W., Goodwill, F., & Inah, E. (2020). Dividend payout ratio and earnings per share as correlates of retained earnings in Nigeria Breweries Plc. *South East Asia Journal of Contemporary Business, Economics and Law*, 23(1), 237–244.
- Islam, M. A. (2019). Dividend policy and share price: Evidence from some selected pharmaceutical and chemical companies in Bangladesh. *International Journal of Research in Engineering, Science and Management*, 2(4), 177–182.
- Islam, R., Hossain, M. E., Hoq, M. N., & Alam, M. M. (2018). Impact of working capital management on corporate profitability- empirical evidence from pharmaceutical industry of Bangladesh. *International Journal of Economics and Finance*, 10(9), 136–145.
- Islam, S., Faruk, O., & Sarkar, U. (2019). The impact of dividend and dividend related issues on financial performance : A case of Dhaka Stock Exchange. *Journal of The Cost and Management*, 47(1), 31–47.
- Jaara, B., Alashhab, H., & Jaara, O. (2018). The determinants of dividend policy for non-financial companies in Jordan. *International Journal of Economics and Financial Issues*, 8(2), 198–209.
- Jakobsson, R. J. M., & Lundberg, L. (2018). *The effect of ESG performance on financial performance* . [Unpublished Thesis].Umeå University.
- Jcu, R. (2020). *Second-Tier stock market efficiency and dynamic impacts on macroeconomic development : Evidence from tropical economies*. [Unpublished doctor of phylosophy thesis].James Cook University.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, M. C., & Meckling, W. H. (1992). *Specific and general knowledge and organizational structure*.In *contract economics*. Blackwell Publishing.
- Jensen, M. C., & Meckling, W. H. (2009). Specific knowledge and divisional performance measurement. *Journal of Applied Corporate Finance*, 21(2), 49–57.
- Jiang, X., Shen, J. H., & Lee, C. C. (2021). Toward an empirical investigation of the long-term debt and financing deficit nexus: evidence from Chinese-listed firms. *Applied Economics*, 53(33), 3832–3853.
- John O. Messo, R., & Byaruhanga, J. (2019). Earnings announcement and the performance of security prices of companies listed on the Nairobi Securities Exchange, Kenya. *International Journal of Business and Management*, 14(9), 188–198.
- Jose, C. L. J., Didier, T., & Schmukler, S. L. (2018). Corporate borrowing in emerging markets: Fairly long term, but only for a few. In *World Bank Research and Policy Briefs*. World Bank.
- Jumanne, B. B. (2018). *Ownership concentration and corporate performance in East African Community (Eac) : The role of technical efficiency on foreign ownership among publicly listed companies*. [Unpublished Doctor of Philosophy in Finance thesis].Universiti Tunku Abdul Rahman.

- Junya, I. (2018). *Firm value and retained earnings: Optimal dividend policy with retained earnings*. <https://www.rieti.go.jp/jp/publications/dp/18e052.pdf>
- Kaluarachchi, D. G. P. (2019). Impact of dividend announcement on stock price: Empirical evidence of Colombo Stock Exchange. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, 5(1), 213–225.
- Kasaya, E. N., & Maniagi, G. M. (2020). Effect of price earnings ratio on financial performance of firms listed on Nairobi Securities Exchange. *The Strategic Journal of Business & Change Management*, 7(3), 1444 – 1453.
- Kengatharan, L., & Ford, J. S. D. (2019). Factors determining the financial performance : Evidence from listed companies in Sri Lanka. *Indonesian Management and Accounting Research*, 18(2), 106–126.
- Kengatharan, L., & Ford, J. S. D. (2021a). Dividend policy and financial performance : Evidence from listed non-financial firms in Sri Lanka. *International Journal of Business and Society*, 22(1), 227–239.
- Kengatharan, L., & Ford, J. S. D. (2021b). Factors determining the financial performance : Evidence from listed companies in Sri Lanka. *Indonesian Management and Accounting Research*, 18(2), 106–126.
- Kengere, A. O., & Kule, J. W. (2020). Influence of industry and firm characteristics on share price movement in Nairobi Securities Exchange, Kenya. *The International Journal of Business & Management*, 8(5), 292–301.
- Khan, M. A. (2019). Impact of dividend policy on financial performance for companies listed on Pakistan Stock Exchange. *International Transaction Journal of Engineering , Management , & Applied Sciences & Technologies*, 10(17), 1–10.
- Khurana, B. (2021). *Impact of dividend policy and its determinants on financial performance and market value of the firm in Indian Corporate Sector*. [Unpublished Doctor of Philosophy In Accountancy & Law Thesis]. Dayalbagh Educational Institute.
- Kibunja, P. N., & Fatoki, O. I. (2020). Effect Of debt financing On financial performance Of listed non-financial firms In Kenya. *Archives of Business Research*, 8(7), 485–496.
- Kielmann, K., Cataldo, F., & Seeley, J. (n.d.). *Introduction to Qualitative Research Methodology: A Training Manual*.
- Kimani, M. S., & Olweny, T. (2020). Relationship between dividend policy and stock price volatility among listed commercial banks in Kenya. *International Journal of Social Sciences and Information Technology*, VII(II), 27–33.
- Kimaru, I. W., & Kinyua, G. (2018). Relationship between Financial Resources and Performance of Credit Only Microfinance Institutions in Kenya. *International Journal of Innovative Research and Advanced Studies*, 5(11), 1-6.
- Kindness, D. (2020). *Financial management : Cost of capital meaning of cost of capital the cost of capital is an opportunity cost of making a specific investment . It is the rate of making investment . Whenever , the finance he is required to pay a cost or return to the*

fund. <https://www.investopedia.com/terms/w/wacc.asp>

- Kipnetich, S. B. (2021). Financing cash flow, discretionary accruals and stock return of firms listed in Nairobi Securities Exchange, Kenya. *Journal of Economics, Finance And Management Studies*, 04(12), 2471–2481.
- Kithandi, C., & Katua, C. (2020). Financial leverage and financial performance of the energy and petroleum sector companies listed in the Nairobi Securities Exchange. *International Journal of Scientific and Research Publications (IJSRP)*, 10(3), 9972–9982.
- Kolawole, E., Sadiq, M. S., & Lucky, O. (2018). Effect of dividend policy on the performance of listed oil and gas firms in Nigeria. *International Journal of Scientific and Research Publications (IJSRP)*, 8(6), 289–302.
- Kutto, C. (2020). *Effects Of Financial Structure On Financial Performance Of Listed Non-financial Firms In Kenya*. [Unpublished Master of Science in Finance Thesis]. University of Nairobi.
- Lamont, C., & Boduszynski, M. P. (2020). *Research methods in politics and international relations*. books.google.com.
- Lasisi, I. O., Apochi, J. G., & Badawiyu, K. (2020). Dividend policy and financial performance : Evidence from listed deposit money banks in Nigeria. *Gusau Journal of Accounting and Finance*, 1(2), 1–16.
- Law, M. K., Low, Y. T., Ng, H. H., Saw, C. M., & Tan, S. X. (2018). *Asymmetric information and dividend policy towards financial performance in Malaysia's consumer product industry*. [Unpublished thesis]. Universiti Tunku Abdul Rahman.
- Li, Z., Wang, Y., Tan, Y., & Huang, Z. (2020). Does corporate financialization affect corporate environmental responsibility? an empirical study of China. *Sustainability (Switzerland)*, 12(9), 1–9.
- Lim, H. J., & Mali, D. (2018). Does relative efficiency matter? An analysis of market uncertainty. *Investment Analysts Journal*, 47(2), 127–148.
- Lin, Y., & Xu, G. (2019). Capital structure and risk analysis of listed companies expected to bonus issue and transferring. *2019 3rd International Conference on Informatization in Education, Management and Business (IEMB 2019)*.
- Longbottom, D., & Lawson, A. (2016). *Alternative Market Research Methods: Market Sensing*. Taylor & Francis.
- Lumala, A. (2019). *The long-run share price performance resulting from mergers & acquisitions in South Africa: A calendar-time approach*. [Unpublished master of commerce specialising in investment Management Thesis]. University of Cape Town.
- Mache, V. O., & Omodero, C. O. (2021). Working capital management and firms ' profitability (A study of selected consumer goods manufacturing companies in Nigeria). *Acta Universitatis Danubius. Economica*, 17(5), 182–205.
- Mahaboob, B., Praveen, J. P., Rao, B. A., Haranadh, Y., Narayana, C., & Prakash, G. B. (2020).

- A study on multiple linear regression using matrix calculus. *Advances in Mathematics Scientific journal*, 9(7), 1-10.
- Mahindran, N. K. (2018). *The impact of dividend policy and climate change on financial performance : A study on the plantation sector of Malaysia*. [Unpublished Master of Science (Finance) Thesis].Universiti Utara Malaysia.
- Major, H. I. (2018). *Effect of financial structure on financial performance of listed consumer goods manufacturing firms in Nigeria: 2001-2016*. [Unpublished Doctor of Philosophy in Banking Finance Thesis].Nnamdi Azikiwe University.
- Makau, M. M. (2021). *Macro risk factors,investor sentiments and performance of equity market at Nairobi Securities Exchange , Kenya*. [Unpublished doctor of philosophy in business (Finance) Thesis].Kenyatta University.
- Makeni, E. N. (2018). *The effect of foreign direct investments on stock market returns At the Nairobi Securities Exchange*. [Unpublished Master of Science in Finance Thesis].University of Nairobi.
- Malhotra, N. k, & Birks, D. F. (2006). *Marketing Research: An Applied Approach*. Pearson Education Limited.
- Maniagi, G. M. (2018). *Influence of financial risk on financial performance of commercial banks in Kenya*. [Unpublished Doctor of philosophy in business administration (Finance Option) thesis].Jomo Kenyatta University of Agriculture and Technology.
- Manjunatha, T., & Vikas, K. M. (2021). An empirical examination of financial pattern of infrastructure sectors in India. *Asian Journal of Management*, 12(2), 221–227.
- Marigu, M. L. (2020). Capital structure and financial performance of companies listed under manufacturing and allied sector at Nairobi Securities Exchange in Kenya. *Journal of Finance and Accounting*, 4(1), 24–38.
- Marimuthu, F. (2021). Determinants of debt financing in South African state-owned entities. *Accounting and Financial Control*, 3(1), 40–52.
- Marimuthu, F., & Singh, S. C. (2021). Do South African state-owned entities follow the pecking order theory of capital structure? *Public and Municipal Finance*, 10(1), 25–33.
- Marisetty, N., & M, S. B. (2021a). An empirical study on expected return models with reference to bonus issues and stock splits in Indian share market. *International Journal of Management*, 11(5), 1612–1630.
- Marisetty, N., & M, S. B. (2021b). Impact of corporate (Dividend) action on stocks in India. *SSRN Electronic Journal*, 5(12), 347–354.
- Masood, S. (2018). Determinants of retained earnings in profitable steel companies in India: A study of steel sector. *International Journal of Research*, 6(1), 389–399.
- May, T. Y., Fah, C. F., & Hassan, T. (2018). Impacts of ownership concentration and liquidity on stock momentum profitability in Malaysia. *Asian Academy of Management Journal of Accounting and Finance*, 14(1), 57–81.

- Myers, S., & Majluf, (1984). Corporate financing and investment decision when firms have information that investors do not have. *Journal of Financial Economics*.
- Megawati, M. (2019). Effect of current ratio and leverage ratio on share price currency value as a moderating variable: Case study at pt. bank Sinarmas Tbk. *East African Scholars Journal of Economics, Business and Management*, 2(11), 680–688.
- Miller, M. H., & Modigliani, F. (1961). Dividend policy, growth, and the valuation of shares. *The Journal of Business*, 34(4), 411–433.
- Mohammad, H. S., & Bujang, I. (2020). Capital structure and financial performance : Evidence from three Malaysian industries. *International Journal of Business and Society*, 21(3), 1153–1171.
- Mugenda, O., & Mugenda, A. (2019). *Research Methods: Quantitative, Qualitative & Mixed Methods Approaches* (3rd ed.). Centre for Innovative Leadership & Governance.
- Mundi, H. S., & Gautam, J. (2021). Impact of firm-specific variables on capital structure decisions. Evidence from the Indian hospitality sector. In *FIIB Business Review*. SAGE Publications Sage India: New Delhi, India.
- Muriungi, A. (2020). Dividend theory and empirical evidence: A theoretical perspective. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, 6(3), 120–134.
- Musah, A., & Aryeetey, M. (2021). Determinants of share price of listed firms in Ghana. *Economic Insights-Trends & Challenges*, X(1), 57–71.
- Muthoni, G. G. (2019). Share price reaction to cash dividend announcement: An event study of listed firms in Kenya. *International Journal of New Economics and Social Sciences*, 9(1), 119–127.
- Muthoni, K. G. (2019). *Financing decisions and shareholder value creation of non-financial firms quoted at the Nairobi Securities Exchange in Kenya*. [Unpublished doctor of philosophy in business (Finance) Thesis].Kenyatta University.
- Mutwiri, N. M., Omagwa, J., & Wamugo, L. (2021). Systematic risk and performance of stock market in Kenya. *International Journal of Research in Business and Social Science*, 10(4), 204–214.
- Mwangi, V. N. (2022). *Effect of Covid-19 Pandemic on Financial Performance of the Deposit-taking Microfinance Institutions in Kenya* (Doctoral dissertation, University of Nairobi).
- Mwongeli, W. M., Ariemba, J., & Wambua, M. M. (2018). Effect of capital structure on financial sustainability of deposit-taking microfinance institutions in Kenya. *Business, Management and Economics Research*, 4(1), 1–10.
- Nairobi Securities Exchange. (2022). *Listed companies - Nairobi Securities Exchange PLC*. <https://www.nse.co.ke/market-statistics/>
- Nallaperumal, K. (2014). *Engineering Research Methodology A Computer Science and*

Engineering and Information and Communication Technologies Perspective. December 2013.

- National Treasury. (2020). *Republic of Kenya 2020 budget review and outlook paper*. <https://www.treasury.go.ke/wp-content/uploads/2020/11/Final-2020-Budget-Review-and-Outlook-Paper.pdf>
- National Treasury. (2021). *Quarterly economic and budgetary review*. <https://www.treasury.go.ke/quarterly-economic-budgetary-review-qebr/>
- Naz, M., & Siddiqui, D. A. (2020). *The effect of dividend policy on financial performance in Pakistan*. file:///C:/Users/user/Downloads/SSRN-id3681292.pdf
- Neelanjana, B. H., & Hassan, H. (2019a). The impact of dividend policy on the volatility of share price of manufacturing companies in Malaysia. *International Journal of Recent Technology and Engineering*, 7(5), 212–224.
- Neelanjana, B. H., & Hassan, H. (2019b). The impact of dividend policy on the volatility of share price of manufacturing companies in Malaysia. *International Journal of Recent Technology and Engineering*, 7(5), 212–224.
- Nenu, E., Vintilă, G., & Gherghina, Ș. (2018). The impact of capital structure on risk and firm performance: empirical evidence for the Bucharest Stock Exchange listed companies. *International Journal of Financial Studies*, 6(2), 41–55.
- Newby, P. (2013). *Research Methods for Education*. Taylor & Francis.
- Ngumo, K. O. S., Collins, K. W., & David, S. H. (2020). Determinants of financial performance of microfinance banks in Kenya. *arXiv preprint arXiv:2010.12569*.
- Ngulube, P. (2019). *Handbook of research on connecting research methods for information science*. IGI Global.
- Ngure, E. (2020). *Relationship between capital structure and performance of listed firms in Nairobi Securities Exchange*. [Unpublished masters degree in business administration Thesis].Kenya Methodist University.
- Ngure, E. G., Mutea, F., & Muema, W. (2018). Relationship between financial structure and financial performance of listed firms in Nairobi Securities Exchange in Kenya. *Journal Of Advanced Research in Engineering & Management (IJAREM)*, 4(8), 1–40.
- Nguyen, T., Nguyen, H., Tran, Q., & Le, Q. (2020). Dividend policy and financial performance : Empirical evidence from Vietnam. *Accounting*, 6(2), 67–78.
- Ni, Y., Huang, P., & Chen, Y. (2019). Board structure, considerable capital, and stock price overreaction informativeness in terms of technical indicators. *North American Journal of Economics and Finance*, 48(February), 514–528.
- Njogu, S. (2020). *The effect Of dividend payment method on financial performance in the Nairobi Securities Exchange*. [Unpublished thesis].KCA University.
- Noor, A. M. (2020). *Equity financing and financial performance of small and medium*.

- [Unpublished master of business administration finance Option Thesis].Kenyatta University.
- Nzau, S. K., & Musa, G. (2022). Effect of ownership structures on financial performance of listed manufacturing firms in Kenya. *International Journal of Current Aspects in Finance, Banking and Accounting*, 4(1), 35-55.
- Nzuve, R. M. (2016). *Impact of macroeconomic factors on financial performance of deposit-taking micro finance institutions in Kenya* (Doctoral dissertation).
- Obia, C. E. (2018). Effect of financial leverage on firms' financial performance: A study of listed companies in agricultural sector. *Journal of Economics and Sustainable Development*, 9(2), 156–170.
- Odinaka, O. H. (2020). Effect of retained earnings, cash reserve ratio and statutory reserve on earnings of deposit money banks in Nigeria. *International Journal of Advanced Finance and Accounting*, 1(2), 1–19.
- Ogata, O. B. (2020). *The role of corporate tax on relationship between financing sources and profitability of manufacturing firms listed in Nairobi Securities Exchange ,Kenya*. [Unpublished master of business administration (Finance) Thesis].Kisii University.
- Ogbeide, S. O., & Evbayiro-Osagie, E. I. (2019). Corporate governance mechanisms and financial performance of quoted firms: Insights from Nigeria. *International Journal of Accounting & Finance*, 8(1), 50–58.
- Ogbuigwe, D. T. (2021). *Hybrid ownership structures and cross-border acquisition completion of emerging market firms: An institutional and signalling theory perspective*. [Unpublished doctor of philosophy in international business thesis].Victoria University of Wellington.
- Ogola, F. O. (2018). *The determinants of long run share price performance of initial public offerings-a case of firms listed at the Nairobi Stock Exchange-time frame-2000-2015*. [Unpublished Master in business administration Thesis].Strathmore University.
- Ohiaeri, N. V, Akinbowale, F. I., & Ogumeru, B. (2019). The impact of dividend policy on the share price Of quoted companies In Nigerian Stock Exchange. *International Journal of Economics and Management Studies*, 6(8), 145–156.
- Ohiani, D. L., Agbi, E. S., & Mustapha, L. O. (2018). Effect of ownership structure on financial performance of listed insurance firms in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4(1), 123–148.
- Oke, J. A., Akinkunmi, W. B., & Etebefia, S. O. (2019). Use of correlation, tolerance, and Variance Inflation Factor for multicollinearity test. *GSIJ*, 7(5).
- Olatunde O. J, Rasaki S, J. A. (2020). Dividend policyand financial performance (a study of some selected deposit money Banksin Nigeria). *International Journal of Advanced Research in Management and Social Sciences*, 9(7), 30–46.
- Olatunde O. J, Rasaki S, J. A. B. (2020). Dividend policyand financial performance (a study of some selected deposit money Banksin Nigeria). *International Journal of Advanced*

Research in Management and Social Sciences, 9(7), 30–46.

- Omollo, B. A., Muturi, W. M., & Wanjare, J. (2018). Effect of debt financing options on financial performance of firms Listed at the Nairobi Securities Exchange, Kenya. *Research Journal of Finance and Accounting*, 9(10), 10–19.
- Omotosho, S. D. (2018). *Corporate Dividend Policy and Financial performance in Nigerian Listed Conglomerates*. [Unpublished Master of Science in Finance Thesis]. Kwara State University.
- Onguka, D. (2021). *Corporate governance, capital structure, ownership structure, and corporate value of companies listed At the Nairobi Securities Exchange*. [Unpublished Doctor of Philosophy in business administration thesis]. University of Nairobi.
- Onyango, E. B. (2019). *The effect of debt financing on profitability of listed non financial firms In Kenya*. [Unpublished Master of Business Administration Thesis]. University of Nairobi.
- Onyekwelu, U. H. L., & Lucy, U. (2019). Effect of retained earnings, dividend payout and total assets on market share price of oil and gas firms in Nigeria. *Journal of Accounting Information and Innovation*, 5(6), 1–17.
- Oseifuah, E. K. (2018). *Impact of working capital management on the performance of non-financial firms listed on the Johannesburg Stock Exchange (JSE)*.
- Otajah, A. (2020). *Selected macroeconomic variables and stock market volatility: Evidence from the Nairobi Securities Exchange*. [Unpublished Master of Science in Finance Thesis]. University of Nairobi.
- Otekunrin, A., Nwanji, T., Fagboro, D., Olowookere, J., & Adenike, O. (2021). Does working capital management impact an enterprise's profitability? evidence from selected Nigerian firms. *Problems and Perspectives in Management*, 19(1), 477–486.
- Park, J. (2018). Tolerance intervals from ridge regression in the presence of multicollinearity and high dimension. *Statistics & Probability Letters*, 121, 128-135.
- Park, B. J., & Lee, K. H. (2021). The sensitivity of corporate social performance to corporate financial performance: A “time-based” agency theory perspective. *Australian Journal of Management*, 46(2), 224–247.
- Passer, M. (2020). *Research methods: Concepts and connections*. Macmillan Higher Education.
- Pathak, H. P., & Gupta, S. (2018). Rights offering and its effect on share price movement: A study of commercial banks. *Journal of Nepalese Business Studies*, 11(1), 1–13.
- Paurav, S. (2008). *Essentials of Marketing Research*. Bookboon.com.
- Pelcher, L. (2019). The role of dividend policy in financial performance . *Journal of Economic and Financial Sciences*, 12(1), 1–9.
- Pelcher, Lydia. (2019). The role of dividend policy in financial performance . *Journal of Economic and Financial Sciences*, 12(1), 1–9.

- Pertiwi1, P. T. D. (2020). The impact of dividend payout ratio (DPR), leverage and firm size on stock price volatility in manufacturing companies listed on the Indonesia Stock Exchange. *Modos de Ver*, 21(1), 1–9.
- Phan, Q. T. (2018). Corporate debt and investment with financial constraints: Vietnamese listed firms. *Research in International Business and Finance*, 46(1), 268–280.
- Phuong, L. C. M. (2021). How Covid-19 affects the share price of Vietnam's pharmaceutical industry: Event study method. *Entrepreneurship and Sustainability Issues*, 8(4), 250–261.
- Polit, D. F., & Beck, C. T. (2014). *Essentials of Nursing Research Seventh Edition Appraising Evidence for Nursing Practice*. Lippincott Williams & Wilkins.
- Provaty, S. S., & Siddique, K. A. (2021). Impact of dividend policy on stock price volatility : An empirical study on financial service industry of Bangladesh literature review and theories of dividend policy. *Journal of Financial Markets and Governance*, 1(1), 16–32.
- Rahma, S. N. N. (2021). Capital structure analysis using the theory of pecking order approach on Usaha Mikro Berkah collection production in Surabaya. *IJTI International Journal of Transportation and Infrastructure*, 5(1), 44–52.
- Rahmawati, A., Moeljadi, M., Djumahir, D., & Sumiati, S. (2018). How do agency theory, stewardship theory and intellectual capital as a solution for agency conflict? *Journal of Management Research*, 10(2), 1–94.
- Rai, R. K., & Silwal, P. (2017). Impacts of bonus issue on stock price in Nepalese Equity Market. *International Research Journal of Management Science*, 2(1), 106–117.
- Rashid, M. M. (2020). Financial reporting quality and share price movement-evidence from listed companies in Bangladesh. *Journal of Financial Reporting and Accounting*, 18(3), 425–458.
- Restrepo, F., Cardona-Sosa, L., & Strahan, P. E. (2019). Funding liquidity without banks: Evidence from a shock to the cost of very short-term debt. *Journal of Finance*, 74(6), 2875–2914.
- Rishika T., & Chandrakant V. (2021). An event study of pre and post bonus announcement for position investors. *Journal of Modern Accounting and Auditing*, 17(2), 53–59.
- Robert, K., Richard, K., & P.K., R. (2020). The effect of capital structure on financial performance of firms in Kenya: Evidence from firms listed At the Nairobi Securities Exchange. *Scientific Research Journal*, 08(01), 1–7.
- Roche, C. J. (2021). *Relationship between market anomalies and financial distress of listed firms in NSE, Kenya*. [Unpublished doctor of phylosophy in business administration thesis].Jomo Kenyatta University of Agriculture and Technology.
- Rono, C. C., & Omoro, N. O. (2020). Dividend policy and financial performance among insurance companies listed at Nairobi Securities Exchange. *Business, Management and Economics Research*, 6(1), 1–12.
- Ross, S. A. (1977). The determination of financial structure: The incentive-signalling approach.

The Bell Journal of Economics, 8(1), 23–40.

- Salawudeen, A., Aminu, M., Moshoud, I., & Salaudeen, Y. (2020). Shareholders' preference and dividend policy: An empirical analysis of listed industrial goods companies in Nigeria. *Research Journal of Finance and Accounting*, 11(24), 70–80.
- Satheesh, & Vidya A. (2018). Testing of efficient market hypothesis : A study on semi -strong form efficiency of Indian stock market. *Journal of Accounting & Marketing*, 7(5), 44–50.
- Senaviratna, N. A. M. R., & A Cooray, T. M. J. (2019). Diagnosing multicollinearity of logistic regression model. *Asian Journal of Probability and Statistics*, 5(2), 1-9.
- Shahid, S., Inam, S. G., & Ghaffar, A. (2020). Better dividend policy effects financial performance : An empirical study on better dividend policy effects financial performance : An empirical study on automobile sector of Pakistan. *Jinnah Business & Economics Research Journal (JBERJ)*, 1(2), 83–95.
- Shibutse, R. L., Kalunda, E., & Achoki, G. (2019). Effect of liquidity and dividend pay-out on financial performance of deposit taking SACCOs in Kenya. *Integrated Journal of Business and Economics*, 3(3), 297–307.
- Shikuku, M. N. (2019). *The effect of bonus issues announcement on the stock*. [Unpublished master of science in finance thesis]. University of Nairobi.
- Shikumo, D. H. (2021). *Effect of share capital on financial growth of non-financial firms listed at the Nairobi Securities Exchange*. <https://arxiv.org/abs/2108.10244>
- Siddique, D. M., Siddique, M., Ali, K., & Anwar, S. (2020). Effect of dividend policy decision on financial performance (SPV) of Modaraba companies listed in Pakistan Stock Exchange (PSX). *Journal of Independent Studies and Research-Management, Social Sciences and Economics*, 18(2), 175–189.
- Simatupang, H. J., Purwanti, L., & Mardiaty, E. (2019). Determinants of capital structures based on the pecking order theory and trade-off theory. *Jurnal Keuangan Dan Perbankan*, 23(1), 84–96.
- Simu, N., & Pangaribuan, A. M. (2020). Determinants of Indonesian share price: Do capital structure, sales growth, and profitability matter? *International Journal of Economics and Management Studies*, 7(1), 174–181.
- Solomon, S. J., Bendickson, J. S., Marvel, M. R., McDowell, W. C., & Mahto, R. (2021). Agency theory and entrepreneurship: A cross-country analysis. *Journal of Business Research*, 122(August), 466–476.
- Soyres, C. de. (2018). *The maturity structure of sovereign debts within a solidarity zone*. <http://hdl.handle.net/10230/35522>
- Spence, M. (1974). Competitive and optimal responses to signals: An analysis of efficiency and distribution. *Journal of Economic Theory*, 7(3), 296–332.
- Spence, M. (1976). Informational aspects of market structure: An introduction. *The Quarterly Journal of Economics*, 90(4), 591–597.

- Spence, M. (1978). Job market signaling. In *Uncertainty in economics*. Elsevier.
- Stokes, D. M. (2012). Research methods in health communication. *Topics in Clinical Nutrition*, 27(1), 21–33.
- Sultana, J. (2021). *Impact of dividend policy on financial performance : A comparative study of the manufacturing companies listed in Dhaka Stock Exchange*. [Unpublished master's program in economics thesis]. University of Texas.
- Sunday, A. A., & Kwenda, F. (2021). Corporate ownership structure and firm value: Empirical evidence of Jse-listed firms, South Africa. *Eurasian Journal of Economics and Finance*, 9(2), 89–106.
- Sureiman, O., & Mangera, C. M. (2020). F-test of overall significance in regression analysis simplified. *Journal of the Practice of Cardiovascular Sciences*, 6(2), 116.
- Syofyan, R., Putra, D. G., & Aprayuda, R. (2020). Influence of company value information, dividend policy, and capital structure on stock price. *Journal of Accounting and Business*, 5(2), 152–165.
- Taghizadeh-Hesary, F., Yoshino, N., & Fukuda, L. (2021). A model for calculating optimal credit guarantee fee for small and medium-sized enterprises. *Economic Modelling*, 95(1), 361–373.
- Tanko, U. M., Siyanbola, A. A., & Bako, P. M. (2021). Capital structure and firm financial performance: Moderating effect of board financial literacy in Nigerian listed non-financial companies. *Journal of Accounting Research Organization and Economics*, 4(1), 1–11.
- Tarus, J. K. (2020). Ownership concentration, board education diversity, and environmental accounting disclosure in Kenyan listed firms. Moderation approach. *Journal of Wellbeing Management and Applied Psychology*, 3(1), 1–10.
- Topak, M. S., & Dereli, H. (2018). The effect of dividend policy on stock price: Evidence from an emerging country. *Journal of Business Research*, 10(4), 1186–1197.
- Tripathi, V. (2019). Agency theory, ownership structure and capital structure: An empirical investigation in the Indian automobile industry. *Asia-Pacific Management Accounting Journal*, 14(2), 1–22.
- Tripathi, V. (2021). Capital structure, financial performance and agency theory in the automobile industry in India. *IUP Journal of Accounting Research & Audit Practices*, 20(2), 58–78.
- Trung, T. Q., Liem, N. T., & Thuy, C. T. M. (2020). The impact of short-term debt on accruals-based earnings management—evidence from Vietnam. *Cogent Economics and Finance*, 8(1), 1–9.
- Tunio, F. H., Agha, K., Khan, M. A., & Kishore, M. (2020). The impact of cash flow on share price of firms : A case study on gas & oil marketing industry of Pakistan. *PalArch's Journal of Archaeology of Egypt / Egyptology*, 17(9), 7290-7300.
- Turner, P. (2020). Critical values for the Durbin-Watson test in large samples. *Applied*

Economics Letters, 27(18), 1495-1499.

- Uyanto, S. S. (2020). Power comparisons of five most commonly used autocorrelation tests. *Pakistan Journal of Statistics and Operation Research*, 119-130.
- Vigoda-Gadot, E., & Vashdi, D. R. (2020). *Handbook of research methods in public administration and management*. Edward Elgar publishing.
- Virginia, E. (2018). Application of GARCH model to forecast data and volatility of share price of energy (Study on adaro energy Tbk, LQ45). *International Journal of Energy Economics and Policy*, 8(3), 131–139.
- Vo, D. Van, Tran, T. V. T., & Dang, N. T. P. (2020). The impact of ownership structure on listed firms' performance in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(11), 195–204.
- Wachira, M. (2019). Corporate governance and risk disclosures: An empirical study of listed companies in Kenya. *African Journal of Business Management*, 13(17), 571–578.
- Wafula, F. O. (2018). *Influence of heterogeneity of investors' behaviour on corporate external financing decision by listed companies in Kenya*. [Unpublished Doctor of philosophy in business administration (Finance) thesis]. Jomo Kenyatta University of Agriculture and Technology.
- Wang, B., Ho, K. C., Liu, X., & Gu, Y. (2021). Industry cash flow volatility and stock price crash risk. *Managerial and Decision Economics*, 1(1), 1–16.
- Wang, L.-H. (2018). Which Firm Characteristics Affect foreign analyst coverage? evidence from the Taiwan Stock Market. *Journal of Mathematical Finance*, 08(01), 64–85.
- Wang, M., Han, M., & Huang, W. (2020). Debt and stock price crash risk in weak information environment. *Finance Research Letters*, 33(May), 1–6.
- Wang, Z., Xie, Z., & Chen, C. (2021). Executives with economic management education backgrounds and stock price crash risk: Evidence from Chinese A-share markets. *Emerging Markets Finance and Trade*, 1(2), 1–19.
- Wehncke, F. C. (2018). *Dividend policy and financial performance : Evidence from the Johannesburg stock exchange*. [Unpublished master of commerce thesis]. University of South Africa.
- Widiantari, P. E. P., & Sukartha, I. M. (2021). The effect of dividend payout ratio, leverage and assets growth on stock price volatility (Empirical study on LQ45 company on the Indonesia stock exchange 2016-2019). *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 5(2), 180–186.
- Widyartati, P., & Prabowo, T. J. W. (2021). Examining community trust to the audit board of the republic of Indonesia. *Proceedings of the 3rd International Conference on Banking, Accounting, Management and Economics (ICOBAME 2020)*.
- Wilson, J. (2021). *Understanding research for business students: A complete student's guide*. SAGE Publications.

- Wu, C. (2021). Corporate governance environment, corporate debt maturity structure and sustainable development. *International Journal of Management and Education in Human Development*, 1(04), 95–104.
- Xiang, X., Dong, F., & Chen, J. (2021). Financing constraints and stock price volatility empirical evidence from Shanghai and Shenzhen A-share listed companies. *International Conference on New Energy Technology and Industrial Development (NETID 2020)*, 235.
- Yang, Y., & Zhang, Y. (2022). The Impact of the Green Credit Policy on the Short-Term and Long-Term Debt Financing of Heavily Polluting Enterprises: Based on PSM-DID Method. *International Journal of Environmental Research and Public Health*, 19(18), 11287.
- Yemi, A. E., & Seriki, A. I. (2018). Retained earnings and firms' market value: Nigeria experience. *The Business & Management Review*, 9(3), 482-496.
- Yin, Y. (2020). Model-free tests for series correlation in multivariate linear regression. *Journal of Statistical Planning and Inference*, 206, 179-195
- Zheng, C., & Zhang, J. (2021). The impact of COVID-19 on the efficiency of microfinance institutions. *International Review of Economics & Finance*, 71, 407-423.

APPENDIX I: SECONDARY DATA COLLECTION SHEET

Bank	Year	Short Term Debt	Total Assets	Short Term Debts/Total Assets	Long Term Debts	Long Term Debts/Total Assets	Retained Earnings	Retained Earnings/Total Debts	Ordinary Capital	Preference Capital	Financial performance

APPENDIX II: LIST OF LICENSED MICROFINANCE BANKS IN KENYA

NR.	Microfinance Bank	Year Licensed
1	Caritas Microfinance Bank Limited	2015
2	Century Microfinance Bank limited	2012
3	Choice Microfinance Bank Limited	2015
4	Daraja Microfinance Bank Limited	2015
5	Faulu Microfinance Bank Limited	2009
6	Kenya Women Microfinance Bank PLC	2010
7	Rafiki Microfinance Bank Limited	2011
8	Key Microfinance Bank PLC	
9	SMEP Microfinance Bank Limited	2010
10	Sumac Microfinance Bank Limited	2012
11	U &I Microfinance Bank Limited	2013
12	Uwezo Microfinance Bank Limited	2010
13	Maisha Microfinance Bank Limited	2016
14	Muongano Microfinance Bank	