

EFFECT OF FINANCIAL PERFORMANCE ON CAPITAL STRUCTURE OF LISTED FINANCIAL FIRMS IN KENYA

Eunice Wanja.

MBA Student, Department of Accounting and Finance, School of Business and Economics, Catholic University of Eastern Africa, GABA Campus, Kenya.

Dr. Irene Cherono.

Lecturer, Department of Accounting and Finance, School of Business and Economics, Catholic University of Eastern Africa, GABA Campus, Kenya.

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ABSTRACT

This study examined the effect of financial performance on the capital structure of financial institutions listed on the Nairobi Securities Exchange in Kenya. Capital structure refers to the combination of debt and equity used by firms to finance their operations and investments. The study focused on how financial performance influences financing decisions within listed financial institutions, particularly in a regulated financial environment. Although many studies have explored the relationship between financial performance and capital structure, the findings remain inconclusive, especially within Kenya's financial sector. This created the need for further investigation. The main objective of the study was to determine the effect of financial performance on the capital structure of listed financial institutions in Kenya. Specifically, the study examined the effect of Earnings per Share (EPS), Market-to-Book Value of Equity (MTBV), Return on Assets (ROA), and Return on Capital Employed (ROCE) on capital structure. In addition, firm size was included as a moderating variable to determine whether it influenced the relationship between financial performance and capital structure. The study adopted a quantitative causal research design and relied on secondary data collected from audited annual reports, publications from the Central Bank of Kenya, and filings from the Nairobi Securities Exchange. The target population consisted of all listed financial institutions between 2015 and 2025, including commercial banks, insurance companies, and investment firms. Purposive sampling was

used to select firms with complete and reliable financial data during the study period. Data analysis was conducted using Stata software. Both descriptive and inferential statistics were used in the analysis. Descriptive statistics included means and standard deviations, while inferential statistics involved correlation and regression analysis. Several diagnostic tests were also carried out to ensure the validity and reliability of the regression model. These included the Shapiro–Wilk normality test, autocorrelation test, heteroscedasticity test, stationarity test, collinearity test, Granger causality test, cointegration test, and Hausman test. The findings revealed that all the financial performance indicators had statistically significant effects on capital structure. Earnings per Share had a positive and significant effect on capital structure ($\beta = 0.022996$, $p\text{-value} = 0.0301$), indicating that firms with stronger earnings performance were more likely to increase debt financing. Return on Assets also had a positive and significant relationship with capital structure ($\beta = 0.519900$, $p\text{-value} = 0.0000$), suggesting that profitable firms had greater ability to access debt financing. On the other hand, Market-to-Book Value of Equity had a negative and significant effect on capital structure ($\beta = -0.261416$, $p\text{-value} = 0.0047$), while Return on Capital Employed also showed a negative and significant relationship ($\beta = -0.045099$, $p\text{-value} = 0.0000$). These findings imply that firms with stronger market valuation and higher returns on capital employed were less likely to rely heavily on debt financing. The study

concluded that financial performance plays an important role in determining the capital structure of listed financial institutions in Kenya. The findings provide useful insights for financial managers, regulators, policymakers, and investors in making financing and investment decisions. The study also contributes to existing literature on capital structure in emerging markets. Future studies should examine other sectors and

incorporate additional variables and qualitative approaches to provide a broader understanding of the factors influencing capital structure decisions.

Key words: Capital Structure; Earnings Per Share (EPS); Financial performance; Firm Size; Market-to-Book Value (MBV); Return on Assets (ROA); Return on Capital Employed (ROCE).

INTRODUCTION

Background of the Study

Capital structure refers to how a firm finances its operations through a mix of debt and equity. For financial institutions, capital structure decisions are especially important, as they affect profitability, risk exposure, and compliance with regulatory standards like those set by the Central Bank of Kenya Circulars. Choosing between short-term debt, long-term debt and equity impacts a firm's ability to generate returns while managing financial risks (Thugge, Koech, & Nyaoma, (2026). Traditional theories have sought to explain how firms make these financing decisions.

The Trade-Off Theory (Kraus & Litzenberger, 1973) argues that firms balance the tax benefits of debt against bankruptcy and agency costs to arrive at an optimal capital structure. The Pecking Order Theory (Myers & Majluf, 1984) suggests that firms prefer internal funds first, then debt, and lastly equity, due to information asymmetry and cost concerns. In addition, Abbadi, & Abu-Rub. (2012) introduced a Reverse Causality Perspective, suggesting that it may be a firm's performance that shapes its capital structure. Under this approach, the efficiency risk hypothesis suggests that better-performing firms are able to take on debt due to perceived stability, while the Franchise Value Hypothesis argues that high-performing firms avoid excessive debt to protect their future earnings and reputation.

A company's capacity to create revenue, effectively manage expenses, and provide value to stakeholders may be evaluated based on its financial performance, which is an essential metric. A broad variety of variables, including access to money, macroeconomic stability, and regulatory regimes, all have a role in determining the financial success of institutions on a global scale. Institutions are able to adopt varied capital structures in developed economies such as the United States and Europe because of robust corporate governance and broad financial markets

(Modigliani & Miller, 1958; Frank & Goyal, 2009). These structures are often adjusted to maximise profits. The global financial crises, on the other hand, have brought to light the risks that are associated with excessive leverage, which has resulted in the implementation of more careful debt management techniques and improved regulatory frameworks.

Because of the disparities in economic growth, financial infrastructure, and institutional maturity that exist throughout the African continent, the financial performance of institutions varies greatly from one establishment to the next. Financial institutions in South Africa and Nigeria have shown resilience by diversifying their operations, introducing innovative regulatory policies, and strategically structuring their capital portfolios. However, in many countries with low incomes, financial flexibility and performance results are limited due to the presence of immature capital markets, political instability, and environments with high interest rates (Biglaiser & McGauvran, 2022). Research conducted by Abor (2005) and others has shown that businesses in Africa have a tendency to rely more on short-term debt since they have limited access to long-term funding. This may be detrimental to both sustainable growth and profitability.

On a regional scale, the financial services industry in East Africa is continuing to develop, driven by digital innovation, attempts to increase financial inclusion, and regional integration. Despite this improvement, banks continue to confront obstacles including fluctuating interest rates, the constraints of regulatory compliance, and exposure to credit risk. According to the findings of research conducted by Kayo and Kimura (2011), East African businesses continue to struggle with optimizing their capital structure owing to the restricted financial instruments available to them and their dependent dependence on bank loans. Consequently, the manner in which capital is organized and used continues to have a significant impact on the region's financial success.

Financial companies that are publicly traded in Kenya play a significant part in the country's economic growth by encouraging people to save money, providing loans, and providing support for investment. Despite this, the performance of the industry as a whole is not uniform, and the profitability of the business is affected by a variety of variables, including market rivalry, taxes, and interest rate policy. The annual reports of the CBK (2023) indicate that organizations that effectively manage their capital tend to perform better on measures such as return on assets and return on equity. Nevertheless, most businesses have a difficult time striking a balance between their levels of debt and their profitability, especially in light of the fact that credit prices are on the rise and there is a need for enough capital. As a result of this setting, the study of capital structure and financial performance is very pertinent to the Kenyan market.

As an additional moderating variable, the size of the company, which is calculated by taking the natural logarithm of the total assets, is also taken into consideration. It is possible that larger institutions have greater access to financing, lower relative risk, and tighter financial controls, which might possibly change the way that capital structure influences performance. Taking into

account the size of the company enables the research to capture this differential impact and determine whether or not scale has an effect on the risk-return dynamics of leverage operations. The research will provide empirical evidence on whether certain capital structure decisions contribute positively or negatively to financial performance by analyzing the interaction between these variables through regression models. This will help confirm or challenge existing theories within the context of the Kenyan financial sector at the same time.

Statement of the problem

Determining the financial success of a firm is dependent on the choices that are made about its capital structure. These choices are even more significant for financial institutions since they have a direct impact on their capacity to continue operating a profitable business and to maintain their stability. In spite of the fact that capital structure theories such as the trade-off theory and the pecking order theory provide explanations on how businesses should choose between debt and equity (Myers & Majluf, 1984; Kraus & Litzenberger, 1973), the actual impact of these choices on financial performance is still unknown in many emerging economies, including Kenya. There has been a lot of uncertainty over whether increased debt levels enhance or hinder a company's profitability (Baker & Wurgler, 2002). This confusion has been caused by the inconsistent outcomes shown in worldwide research. Because of this, it is difficult for financial managers to determine which capital combination is the most appropriate to implement.

After the time after the Central Bank rate cap and the COVID-19 economic downturn, financial institutions in Kenya are confronted with a one-of-a-kind operating environment, which makes it particularly difficult for them to make judgements on financing activities. Because of this, it is possible to conduct a fair and objective analysis of the consequences of capital structure under a variety of macroeconomic and regulatory variables in Kenya. On the one hand, the Central Bank of Kenya mandates that they keep their capital adequacy levels at a consistent level, which restricts the amount of debt that they are permitted to employ. On the other hand, these institutions are required to manage an economy that is characterized by a high degree of unpredictability, which is characterized by rates of exchange that fluctuate, growing non-performing loans, and global financial shocks. It is possible for these factors to have a direct impact on the manner in which these institutions organize their capital and, ultimately, how they perform financially. These variables have an effect on the cost and availability of both debt and equity. However, despite the significance of these challenges, relatively little study has been conducted to investigate how the characteristics of financial performance influence the capital structure decisions made by listed financial institutions in Kenya. Most of the research that have been done so far concentrate on other industries or investigate just one side of this connection.

As a result of this gap, it is still unclear how performance measures like earnings per share, return on assets, market value, or return on capital used influence the choices that financial institutions that are operating under Kenya's stringent regulatory and economic conditions make about

funding. Therefore, the purpose of this research is to get an understanding of how the capital structure of Kenya's listed financial institutions is affected by financial performance, taking into consideration the specific limits and risks that these institutions confront.

The majority of the studies that have been conducted in Kenya have mostly concentrated on the link between business performance and capital structure in non-financial industries such as manufacturing, real estate, and small and medium enterprises (SMEs). This has resulted in a limited amount of research being conducted inside the financial sector. For instance, Ogono, Abong'o, & Mreji (2024). investigated the impact that the capital structure of Kenyan manufacturing companies had on the financial performance of those business entities. The purpose of the research was to test the hypothesis that the ratio of debt to equity that a company employs does not necessarily define the value of the company; rather, the value of the company is determined by the future revenue that is produced from its assets. In a similar vein, Yabs (2015) conducted research on the link between the capital structure of real estate companies in Kenya and their financial success. The research highlighted the fact that choices regarding investments and financing are among the most significant decisions that companies make. This is due to the fact that the manner in which an organization is funded influences both the decisions taken by management and the interests of those who give funding.

In addition, Maina (2014) investigated the impact that the capital structure of small and medium-sized enterprises (SMEs) in the dairy industry in Kiambu County had on their financial performance. The survey found that small and medium-sized enterprises (SMEs) in Kiambu have shown extraordinary development over the course of the preceding four years. Nevertheless, in spite of the fact that capital structure is widely acknowledged to be significantly important, the results indicated that its impact on financial performance is not always clear. This is due to the fact that there are instances in which financial performance may also affect choices about capital structure, resulting in a situation of reverse causation. The findings of these studies indicate that while a significant amount of research has been carried out on the subject of capital structure and company performance in Kenya, the majority of these studies have focused on non-financial sectors and have primarily considered capital structure to be the primary factor in determining financial success. In addition, they did not take into consideration the specific economic and regulatory factors that have an impact on the decisions that are made about financing choices in the financial industry. Listed financial institutions in Kenya, on the other hand, are subject to stringent rules imposed by the Central Bank of Kenya and the Capital Markets Authority. These institutions are also impacted by economic issues such as inflation, variations in currency rates, and growing levels of non-performing loans, all of which have the potential to influence the choices that they make about their capital structure configuration. In spite of these one-of-a-kind circumstances, there is still a dearth of empirical evidence concerning the ways in which financial performance indicators like Earnings per Share (EPS), Return on Assets (ROA), Return on Capital Employed (ROCE), and Market-to-Book Value influence decisions regarding capital structure

within listed financial institutions in Kenya. In the literature, this results in a glaring vacuum in both the contextual and methodological aspects. As a result, the purpose of this research is to address this vacuum by investigating the reverse connection that exists between financial performance and capital structure among financial institutions that are listed on the Nairobi Securities Exchange. The purpose of this research is to investigate the ways in which financial performance indicators impact capital structure choices within a highly regulated financial environment. This environment is much different from the circumstances that are encountered by businesses operating in the manufacturing, real estate, and small and medium-sized enterprise (SME) sectors.

Objective of the study

To conduct research on the impact that financial performance has on the capital structure of Kenyan financial institutions that are listed on the stock exchange

Research Objectives

- i. To investigate the effect of earnings per share on capital structure of listed financial institutions in Kenya.
- ii. To assess the effect of market to book value of equity on capital structure of listed financial institutions in Kenya.
- iii. To examine the effect of return on assets on capital structure of listed financial institutions in Kenya.
- iv. To assess the effect of return on capital Employed on the capital structure of listed financial institutions in Kenya.
- v. To evaluate the moderating effect of firm size on the effect of financial performance on capital structure of listed financial institutions in Kenya.

General Research Question

What is effect of financial performance on capital structure of listed financial institutions in Kenya?

Specific Research Questions

- i. What is the effect of earnings per share on capital structure of listed financial institutions in Kenya?
- ii. What is the effect of market to book value of equity on capital structure of listed financial institutions in Kenya?
- iii. What is the effect of return on assets on capital structure of listed financial institutions in Kenya?
- iv. What is the effect of return on capital Employed on the capital structure of listed financial institutions in Kenya?

- v. What is the moderating effect of size on the effect of financial performance on capital structure of listed financial institutions in Kenya?

Hypothesis

- i. H01: Earnings per share has no significant effect on Capital structure of listed financial institutions in Kenya.
- ii. H02: Market to Book value of equity has no significant effect on capital structure of listed financial institutions in Kenya.
- iii. H03: Return on Assets has no significant effect on capital structure of listed financial institutions in Kenya.
- iv. H04: Return on Capital Employed as no significant effect on capital structure of listed financial institutions in Kenya.
- v. H05: Firm size has no significant moderating effect on the relationship between financial performance and capital structure of listed financial institutions in Kenya.

RESEARCH METHODOLOGY

Data

Secondary data was obtained from the annual reports and financial statements of companies that are listed on the Nairobi Securities Exchange (NSE), this methodology was deemed suitable for accomplishing the goals of the study. Additionally, the purpose of the research was to investigate the causal link that exists between the major variables that were being investigated. Due to the fact that it enabled the researcher to examine previously collected financial data and arrive at findings based on statistical testing, the technique proved to be very beneficial. In addition, the use of statistical hypothesis testing made it feasible to obtain larger findings on the characteristics of the demographic that was being targeted, as indicated by Harwell (2011).

Target Population

All of the financial institutions that were listed on the Nairobi Securities Exchange (NSE) between the years 2015 and 2025 were among the subjects of the research. A total of eleven commercial banks, five insurance companies, and five investment and holding corporations were included among these particular institutions. In order for the institutions to be eligible for participation in the study, they were required to fulfil the following conditions: they had to be regulated by either the Central Bank of Kenya (CBK) or the Capital Markets Authority (CMA), they had to be consistently listed on the National Stock Exchange (NSE) throughout the duration of the study, and they had to have audited financial statements that were accessible to the public. Some of the institutions that were not included in the research were those that had been delisted, merged, or did not have adequate financial data. Therefore, the target population consisted of twenty-one financial institutions, which had the potential to either constitute the whole research population or serve as the foundation for the selection of samples.

Data analysis Procedures

Measurement of Study Variables

In this research, the moderating variable that was being used was the size of the company. According to prior research on financial performance and capital structure (Yeh, 2010; Margaritis and Psillaki, 2010; Yinusa, Somoye, Alimi, & Ilo, 2016), the selection of this moderating variable was influenced by the relevance and importance of firm-specific characteristics that have the potential to influence the performance of enterprises. The operationalization of company size has been operationalized using a variety of different variables in empirical research. Measures such as the natural logarithm of total assets, the natural logarithm of total sales, and the natural logarithm of total employees have been utilised extensively and successfully in empirical research (Kodongo, Mokoaleli-Mokoteli, & Maina, 2014; Mwangi, Muathe, & Kosimbei, 2014). These measures have been used to depict the size of the company. When doing this research, the natural logarithm of total assets was used to determine the size of the company. At the same time, the variables of choice are summarised together with their respective measurements in table 1.

Table 1: Measurement of Variables

Variable	Measurement/Formula
Independent Variables	
Earnings Per Share (EPS)	Net Income / Number of Shares
Market to Book Value of Equity	Market Value / Book Value of Equity
Return on Assets (ROA)	Net Income / Total Assets
Return on Capital Employed (ROCE)	EBIT / Capital Employed
Dependent Variable	
Debt to Equity Ratio	Total Debt / Total Equity
Moderating Variable	
Firm Size	Natural Log of Total Assets

Model specification and formulation

In accordance with the existing body of research on the efficiency-risk and franchise value hypotheses, the purpose of this study was to investigate the reverse causation link between company performance and capital structure. Specifically, the study sought to determine if the financial performance of businesses impacts the decisions that they make about their capital structure. The efficiency-risk hypothesis is a component of capital structure theory that proposes that a company's capacity to fulfil debt commitments may be inferred from its good historical financial performance. As a consequence of this, businesses that have greater performance are more likely to have access to debt financing, which results in a mutually beneficial link between the success of the business and its capital structure. On the other hand, the franchise-value theory contends that businesses strive to shield the value and reputation they have developed over the course of their existence from the influence of third parties, particularly when it comes to loan holders. Therefore, companies that have a high level of performance may choose equity financing

over debt financing in order to lower their exposure to financial risk and have a higher degree of control over their organisation. This suggests that there is a negative association between the performance of the company and the financing of debt. This research employed a theoretical framework that explains how company performance may impact capital structure choices. The framework was derived from the works of Berger and Udell (1994), Berger and Udell (1994), Margaritis and Psillaki (2007, 2010), and Yinusa et al. (2016). Each of these authors contributed to the development of this framework. The link between company performance and capital structure was stated using a leverage model that was developed by a multiple regression equation, which is provided below. This model was based on these ideas and earlier investigations:

This can be formulated as follows:

Model Formulation

i) Simple regression form

$$CR = \beta_0 + \beta_1 EPS_{it} + \mu_{it} \dots \dots \dots 3.1$$

$$CR = \beta_0 + \beta_1 MBV_{it} + \mu_{it} \dots \dots \dots 3.2$$

$$CR = \beta_0 + \beta_1 ROA_{it} + \mu_{it} \dots \dots \dots 3.3$$

$$CR = \beta_0 + \beta_1 ROCE_{it} + \mu_{it} \dots \dots \dots 3.4$$

ii) Model without moderation (Control model)

$$CR = \beta_0 + \beta_1 EPS_{it} + \beta_2 MBV_{it} + \beta_3 ROA_{it} + \beta_4 ROCE_{it} + \beta_5 Z_{it} + \mu_{it} \dots \dots \dots 3.5$$

iii) Model with moderation

$$CR = \beta_0 + \beta_1 EPS_{it} + \beta_2 MBV_{it} + \beta_3 ROA_{it} + \beta_4 ROCE_{it} + \beta_5 Z_{it} + \beta_6 EPS_{it} * Z_{it} + \beta_7 MBV_{it} * Z_{it} + \beta_8 ROA_{it} * Z_{it} + \beta_9 ROCE_{it} * Z_{it} + \mu_{it} \dots \dots \dots 3.6$$

Where:

CR	=	Capital Structure
EPS _{it}	=	Earnings per share
MBV _{it}	=	Market to book value of equity
ROA _{it}	=	Return on assets
ROCE _{it}	=	Return on capital employed
Z _{it}	=	Firm Size.
B _i	=	Parameter estimates
i	=	1 2 3n firms
t	=	time 2015 - 2025
μ _{it}	=	Error term

Diagnostic Tests and Results

The diagnostic tests verified that the study's regression models met the essential criteria for valid inference. All variables were stationary at the level before estimate, and the following were mostly confirmed: independence of residuals, homoskedasticity, and normality. Collinearity was within acceptable ranges. We may be confident in the analysis's conclusions now that these results back up the economic findings (Wooldridge, 2020).

Stationarity Test

Finally, this study uses the Levin, Lin, & Chu. (2002) unit root test to check if the variables are stationary, which is an important diagnostic step in time series econometrics. If they are, then the variables can be used for regression and cointegration analyses, and the results can be used to choose the right models and avoid spurious regression, which strengthens the validity of the econometric findings (Erturk & Kaya, 2021).

Table 2: Levin, Lin & Chu unit root Test

Variable	Chi-square Statistic-at level	Prob>z
Capital structure	-3.70418	0.0001
Earnings per share	-6.23900	0.0000
Market to book value of equity	-1.71524	0.0432
Return on assets	-1.91655	0.0276
Return on capital employed	-7.41119	0.0000
Firm size	-14.4999	0.0000

The results of the stationarity test are shown in Table 4.2. To take serial correlation and heteroskedasticity into consideration, the study used the Levin, Lin & Chu unit root test, which makes use of non-parametric modifications (Gujarati & Porter, 2020). There was no evidence of unit root problems or stationarity as all of the p-values were lower than the crucial value of 0.05. The results showed a capital structure chi-square statistic with a p-value of 0.0001 and a significance level of -3.70418. Profit for the quarter ending June 30, 2019, with a p-value of 0.0000. There was a chi-square statistic with a p-value of 0.0432 and a level of -1.71524 for the market to book value of equity ratio. The chi-square test for ROA yielded a p-value of 0.0276 at a significance level of -1.91655. At a level of -7.41119 and a p-value of 0.0000, the chi-square statistic for return on capital employed is -14.4999, and at a magnitude of -14.4999, it is 0.0000.

Shapiro-Wilk Test for Normality

In order to ensure the validity of the data, the Shapiro-Wilk test was used to check whether the residuals fulfilled the assumption of normal distribution. Normalcy is a prerequisite for regression analysis since it ensures accurate significance test findings and p-value interpretation. When testing for normalcy, the Shapiro-Wilk test is often used, particularly with small to medium data sets. This test looks at the observed distribution and compares it to a theoretical normal distribution to see whether the null hypothesis is true (Manyenze, 2019). Since the null hypothesis cannot be rejected when the p-value is more than 0.05, we may say that the data follows a normal distribution. Data cannot be considered regularly distributed when the p-value is less than 0.05.

Table 3: Shapiro-Wilk Test Normality Test

Variable	Shapiro-Wilk statistic	Prob>z
Capital structure	0.19396	0.392
Earnings per share	0.77477	0.437
Market to book value of equity	0.78798	0.297
Return on assets	0.75338	0.647
Return on capital employed	0.41117	0.664
Firm size	0.90540	0.427

The study's results from the Shapiro-Wilk test show that several variables are statistically significant at levels higher than the conventional 0.05 level: capital structure ($p=0.19396$) and earnings per share ($p=0.77477$) and market to book value of equity ($p=0.297$), return on assets ($p=0.75338$) and return on capital employed ($p=0.664$), firm size ($p=0.90540$) and $p=0.427$. The normality of the residuals in the regression may be inferred from this. More assurance in the study's analysis is provided by the results, which show that the regression model is valid.

Autocorrelation Test

To check whether the regression model's residuals were serially correlated, which might affect the reliability of the findings, the Breusch-Godfrey test was used.

Table 4: Breusch-Godfrey Test

Method	Test statistic value	p-value
F-statistic Test	2.675499	0.0711
Chi*R-squared Test	5.437261	0.0660

This study used the Breusch-Godfrey test statistic. The findings show that the Chi-squared test had a value of 5.437261 and a p-value of 0.0660, while the F-statistic test had a value of 2.675499 and a p-value of 0.0711. Autocorrelation is a crucial statistic to consider when working with panel data since it shows how closely connected observations are from different time periods. According to Greene (2018), variables are considered to be regularly distributed when autocorrelation is not present. Therefore, the results are supported by the Breusch-Godfrey test statistic, which indicates that the regression model used in this research is appropriate and that the residuals are not related, therefore confirming the accuracy of the findings.

Heteroskedasticity Test

To make sure the regression models in this research are meeting the requirements for accurate estimation, we ran them through heteroskedasticity testing. According to Gandhi and Porter (2020), the Glejser Heteroskedasticity test determines whether there is a systematic relationship between the independent variables and the squared residuals of a regression).

Table 5: Glejser Heteroskedasticity Test

Method	Test statistic value	p-value
F-statistic Test	2.349141	0.1268
Chi*R-squared Test	2.345549	0.1256

To conclude, while doing regression analysis, the heteroskedasticity test is a must-have diagnostic tool. It protects the conventional linear regression model's assumptions by finding out whether residual variances are constant (Chen & Wu, 2023). The findings demonstrate a p-value of 0.1268 for the F-statistic test and a 0.1256 for the Chi-squared test. It follows that heteroskedasticity was not an issue.

Collinearity Test

To find out if there is collinearity in a multiple regression model, the study uses the variance inflation factor (VIF). When there is a high level of collinearity, estimates of the regression coefficients may be unstable. When the VIF value is 1, that would imply that the variable has no relationship with any of the other independent variables. However, when VIF exceeds 5, this can be a sign of collinearity issue.

Table 6: Collinearity Test

Variables	Tolerance	Variance Inflation Factor (VIF)
Earnings per share	.936	1.069
Market to book value of equity	.950	2.858
Return on assets	.809	1.237
Return on capital employed	.832	1.202
Firm size	.714	3.185

In the course of this research, the VIF test was carried out in order to determine whether or not there were any issues about the collinearity that existed between profits per share, market to book value of equity, return on assets, and return on capital employed. Based on the findings of the research, it was determined that mobile banking and digital payments exhibit a high degree of collinearity due to the fact that their VIF values are quite high (Manyenze, 2019). Earnings per share tolerance of 0.936, variance inflation factor (VIF) of 1.069, market to book value of equity tolerance of 0.950, variance inflation factor (VIF) of 2.858, return on assets tolerance of 0.809, variance inflation factor (VIF) of 1.237, return on capital employed of 0.832, variance inflation factor (VIF) of 1.202, and firm size of 0.714 are all factors that contribute to the variance inflation factor (VIF) of 3.185. It is possible that this indicates that there is a significant association between these numbers, which may result in the reliability of the regression results seeing a decrease. A logarithm transformation was performed on the data in order to control collinearity. This included combining multiple variables, combining some variables, or excluding one of the predictors that were comparable.

Granger Causality Test

One of the most important assumptions that the Granger causality test makes is that the variables are stable, which means that their mean and variance do not vary during the course of measurement.

Table 7: Granger Causality Test

Null Hypothesis:	F-Statistic	P-value
Earnings per share does not granger cause capital structure	0.13167	0.8767
Capital structure does not granger cause earnings per share	1.29726	0.2759
Market to book value of equity does not granger cause capital structure	0.71476	0.4907
Capital structure does not granger cause market to book value of equity	1.38247	0.2537
Return on assets does not granger cause capital structure	0.00068	0.9993
Capital structure does not granger cause return on assets	0.00687	0.9932
Return on capital employed does not granger cause capital structure	0.05428	0.9472
Capital structure does not granger cause return on capital employed	0.07068	0.9318
Firm size does not granger cause capital structure	0.30905	0.7345
Capital structure does not granger cause firm size	0.12513	0.8825

Granger Causality Tests are shown in Table 7, which contains the findings. The f-statistic for capital structure is 0.13167, and the p-value is 0.8767. Earnings per share does not granger cause capital structure. The f-statistic for earnings per share is 1.29726, and the p-value is 0.2759. Capital structure does not directly impact profits per share. According to the F-statistic of 0.71476 and the p-value of 0.4907, the market to book value of equity does not granger cause capital structure F-statistic. The market to book value of equity is not granger caused by capital structure, according to the f-statistic of 1.38247 and the p-value of 0.2537 statistics. A f-statistic of 0.00068 and a p-value of 0.9993 indicate that return on assets does not granger generate capital structure fluctuations. Return on assets is not granger caused by capital structure, according to the f-statistic, which is 0.00687, and the p-value is 0.9932. With an f-statistic of 0.05428, a p-value of 0.9472, it can be concluded that return on capital employed does not granger cause capital structure. There is no correlation between capital structure and return on capital employed, as shown by the f-statistic of 0.07068 and the p-value of 0.9318. Capital structure is not granger caused by firm size, according to the f-statistic of 0.30905 and the p-value of 0.7345. According to the f-statistic of 0.12513 and the p-value of 0.8825, the capital structure does not granger affect company size. It may be deduced from the fact that all of the p-values were higher than 0.05 that there was no Granger causality issue among the variables under investigation.

Cointegration Test

For the purpose of determining the long-term equilibrium connections that exist between time series variables, the cointegration testing was an essential econometric instrument that was used in this investigation. The Kao Residual Cointegration Test was used in this investigation to guarantee that the findings regarding the connections between variables were statistically sound and not based on a supposition. The findings provide the groundwork for the development of robust econometric models that are capable of capturing both dynamic adjustments and equilibrium connections (Erturk & Kaya, 2021).

Table 8: Kao Residual Cointegration Test

Variables : Capital structure, Earnings, per share, Market to book value of equity Return on assets, Return on capital employed, Firm size; Null Hypothesis: No cointegration		
Kao Residual Cointegration Test	<u>Statistic</u>	<u>P-value</u>
Panel Augmented Dickey-Fuller Test	3.887381	0.0001

In Table 8, the Kao residual cointegration test gives the findings on the panel augmented dickey-fuller test statistic, which has a value of 3.887381 and a p-value of 0.0001 connected with it. The fact that the variables were cointegrated and had a linear connection over the long term is inferred from this.

Hausman Test

For the purpose of this investigation, the Hausman test was used as a means of directing the selection of the model that would be most suitable for the analysis of the panel data. It was essential to conduct the test in order to ascertain whether the Fixed Effects Model or the Random Effects Model was more appropriate for the investigation than the other. When there is no link between the individual effects and the factors that explain them, the Random Effects Model is believed to be more effective than other mathematical models. Nevertheless, in the event that such a connection is present, the estimates derived from the Random Effects Model become biased and inconsistent, which is why the Fixed Effects Model is the more suitable option. In order to complete the operation, it was necessary to first estimate the Fixed Effects model and then the Random Effects model, and then compare the estimates of their coefficients. In order to determine the degree of disparity that exists between the two sets of estimates, the Hausman test statistics were used. In the event that the test result was found to be statistically significant, the null hypothesis was challenged, hence showing that the Fixed Effects Model was the more appropriate choice. In the event that the result did not meet the criteria for statistical significance, the Random Effects Model was chosen as the preferable option since it offered more accurate estimates.

Table 9: Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Random effect test	1.545870	5	0.9077

On the other hand, a test that is statistically insignificant and a result that is not significant both provide support to the use of the random effects model (Baltagi, 2021). The data that were shown in table 9 did not indicate that the null hypothesis was rejected; hence, the random effect model was chosen for this investigation rather than the fixed effect model.

Correlation Analysis

The link between Earnings per Share (EPS), Market-to-Book Value of Equity, Return on Assets (ROA), Return on Capital Employed (ROCE), and capital structure is shown in the correlation matrix that can be seen above. Each correlation coefficient provides information on the direction of the linear link between two variables as well as the intensity of that relationship. A positive

coefficient indicates that the variables move in the same direction, which means that a rise in one variable is related with an increase in the other variable. This happens when the coefficient is positive. An inverse connection, on the other hand, is shown by a negative coefficient. This kind of interaction is characterized by an increase in one variable being related with a reduction in the other variable. There is a strong correlation between the size of the coefficient and the intensity of the association. If the numbers are closer to +1 or -1, it indicates that the association between the variables is stronger, whilst values that are closer to zero imply that the relationship is weaker. Before carrying out regression analysis, the correlation matrix was thus helpful in gaining an idea of the relationships that existed between the variables under investigation and locating any potential instances of multicollinearity.

Table 10: Correlation Matrix

Correlation Probability	Capital structure	Earnings per share	Market to book value of equity	Return on assets	Return on capital employed	Firm Size
Capital structure	1.000					

Earnings per share	0.581462	1.000				
p-value	0.0000	-----				
Market to book value of equity	-0.847062	0.558837	1.000			
p-value	0.0000	0.0000	-----			
Return on assets	0.147642	0.180956	0.288923	1.000		
p-value	0.0248	0.0058	0.0000	-----		
Return on capital employed	-0.173614	0.247841	0.269658	0.511474	1.000	
p-value	0.0082	0.0001	0.0000	0.0000	-----	
Firm size	-0.779844	-0.483383	-0.831565	-0.232581	-0.255249	1.000
p-value	0.0000	0.0000	0.0000	0.0004	0.0001	-----

The investigation also revealed that there are substantial connections between the profits per share and the capital structure, which indicates that the two factors are dependent on one another. The market to book value of equity has a very significant negative connection with the capital structure. This suggests that the dependency on debt financing is reduced in proportion to the market to book value of equity, which implies that the market to book value of equity is greater. This robust link suggests that the market value of equity is higher than the book value, which is beneficial to the overall capital structure.

Further investigation revealed that the Return on Assets (ROA) had a substantial impact on the capital structure of the company. According to the findings, the return on assets (ROA) exhibited a positive correlation with the debt-to-equity ratio. This suggests that businesses that operate at a

greater level of profitability are more likely to expand their utilization of loan financing. The implication of this might be that successful businesses have a better capability to get finance from outside sources as a result of their improved financial performance and increased capacity for payback. In contrast to the results of Văidean (2014), who indicated a weakly negative link between capital structure and Return on Assets, the data presented here point to a different conclusion. It is possible that the disparity in results is attributable to differences in the industries, economic situations, or regulatory environments of the companies that were investigated. In addition, the findings demonstrated that there is a significant inverse connection between Return on Capital Employed (ROCE) and capital structure in the context of listed financial companies. It may be deduced from this that businesses who had a greater ROCE depended less on loan funding. In light of this fact, it seems that businesses who are able to earn substantial returns from their capital investments could choose the utilization of funds created internally rather than expanding their debt commitments. These data, taken as a whole, indicate that financial performance is a crucial factor in shaping the choices that listed financial organizations make regarding their capital structure.

Hypothesis Testing and Results

H01: Earnings per share has no significant effect on capital structure of listed financial institutions in Kenya

Table 11: Earnings per share model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Earnings per share	0.022996	0.010525	2.184979	0.0301
C	0.045708	0.081119	0.563465	0.5738
R-squared 0.571267, Adjusted R-squared 0.504480, F-statistic 8.553501 Probability (F-statistic) 0.000000				

An investigation of the impact of earnings per share (EPS) on capital structure was the subject of the first hypothesis. In accordance with the findings, the earnings per share (EPS) had a coefficient of 0.022996 and a p-value of 0.0301. The results of the study suggested that earnings per share (EPS) had a statistically significant influence on capital structure among listed financial businesses in Kenya. This was shown by the fact that the p-value was less than 0.05. The presence of a positive coefficient indicates that there was a correlation between an increase in the utilization of debt financing and a rise in earnings per share over time. This suggests that companies with superior earnings performance were more likely to change their capital structure by raising leverage. This might be owing to increased trust from lenders and an enhanced capacity to service debt commitments brought about by enterprises with stronger earnings performance. Because of this, the findings of the regression offered strong evidence that earnings per share had a direct and substantial influence on capital structure, which was examined in this research. Their findings are in line with the findings of Fatoki and Olweny (2017), who investigated the impact of earnings per share on the capital structure of listed non-financial companies in Nigeria. These findings are compatible with their findings. The researchers also discovered that there is a positive correlation

between earnings per share and debt structure, which lends credence to the idea that businesses that have higher levels of profitability may have easier access to debt funding. An investigation of the impact of earnings per share (EPS) on capital structure was the subject of the first hypothesis. In accordance with the findings, the earnings per share (EPS) had a coefficient of 0.022996 and a p-value of 0.0301. The results of the study suggested that earnings per share (EPS) had a statistically significant influence on capital structure among listed financial businesses in Kenya. This was shown by the fact that the p-value was less than 0.05. The presence of a positive coefficient indicates that there was a correlation between an increase in the utilization of debt financing and a rise in earnings per share over time. This suggests that companies with superior earnings performance were more likely to change their capital structure by raising leverage. This might be owing to increased trust from lenders and an enhanced capacity to service debt commitments brought about by enterprises with stronger earnings performance. Because of this, the findings of the regression offered strong evidence that earnings per share had a direct and substantial influence on capital structure, which was examined in this research. Their findings are in line with the findings of Fatoki and Olweny (2017), who investigated the impact of earnings per share on the capital structure of listed non-financial companies in Nigeria. These findings are compatible with their findings. The researchers also discovered that there is a positive correlation between earnings per share and debt structure, which lends credence to the idea that businesses that have higher levels of profitability may have easier access to debt funding.

H02: Market to Book value of equity has no significant effect on capital structure of listed financial institutions in Kenya.

Table 12: Market to Book value of equity model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Market to Book value of equity	-0.261416	0.091468	-2.857998	0.0047
C	0.044836	0.082132	0.545893	0.5857
R-squared 0.34440, Adjusted R-squared 0.30224, F-statistic 8.168151 Probability(F-statistic) 0.004656				

As part of the second hypothesis, we investigated how the market-to-book value of equity influenced the capital structure of the company. A negative coefficient of -0.261416 and a p-value of 0.0047 were found to be associated with the variable, as shown by the findings. The results suggested that the Market-to-Book Value of Equity had a statistically significant influence on the capital structure of listed financial enterprises in Kenya. This was evidenced by the fact that the p-value was less than 0.05.

Firms that had greater market-to-book values were less likely to depend on debt financing, according to the negative coefficient, which implies that this was the case. It is possible that this suggests that companies who have good market values would rather increase their debt levels than increase their equity financing or funds that are produced internally. As a result, the regression model offered compelling evidence that there is a clear and substantial connection between the Market-to-Book Value of Equity and the capital structure of the company. The conclusions of this study are in agreement with the research conducted by Mahajan and Tartaroglu (2008), who explored the stock market timing hypothesis in major industrialized nations that are members of

the G-7. The results of their investigation demonstrated that the Book-to-Market ratio had a detrimental impact on the levels of debt, particularly in market-oriented countries like the United States or the United Kingdom. In a similar vein, Fatoki and Nasieku (2017) investigated the impact that the Market-to-Book Value of Equity has on the capital structure decisions made by companies in Nigeria. In addition, the findings of their research demonstrated that there is a negative correlation between Market-to-Book Value and capital structure. This suggests that businesses that have a greater market value have a tendency to lower their dependence on debt financing.

H03: Return on Assets has no significant effect on capital structure of listed financial institutions in Kenya.

Table 13: Return on Assets model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Return on Assets	0.519900	0.034600	15.02601	0.0000
C	0.021486	0.000895	24.00670	0.0000
R-squared	0.301358, Adjusted R-squared	0.398727 F-statistic	266.5538, Prob(F-statistic)	0.000000

Return on assets (ROA) was the subject of the third hypothesis, which investigated how it influenced capital structure. A positive coefficient of 0.519900 and a p-value of 0.0000 were found to be associated with ROA, as shown by the findings. Based on the data, it was determined that Return on Assets had a statistically significant impact on the capital structure of listed companies in Kenya. This was evidenced by the fact that the p-value was less than 0.05. Firms that had better profitability, as assessed by ROA, were more likely to expand their usage of debt financing, according to the positive coefficient, which shows that this finding is supported by the data. It is possible that this is an indication that productive businesses have more financial strength and a higher capacity to satisfy their debt commitments, which therefore makes it simpler for them to get funding from outside sources. As a result, the regression model offered compelling evidence that there is a direct and substantial connection between Return on Assets and capital structure, which was evaluated using the debt-to-equity ratio. According to the results of Purba et al. (2020), who discovered that Return on Assets did not have a substantial influence on capital structure, these findings are somewhat different from those of the previous research. The findings, on the other hand, are in agreement with those of Fatoki (2018), who investigated the impact of Return on Assets on the capital structure of non-financial companies that were listed on the Nigerian Stock Exchange. He found that there was a positive and statistically significant relationship between financial performance and capital structure. However, Ramadhani, Syafina, and Dharma (2024) discovered that ROA had a large negative influence on capital structure. They observed that this effect was considerable. It is possible that the disparities in results might be ascribed to variances in the features of the industries, the economic situations, and the research methodology that prevail across the various nations and sectors.

H04: Return on capital employed as no significant effect on capital structure of listed financial institutions in Kenya.

Table 14: Return on capital employed model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Return on capital employed	-0.045099	0.001938	-23.26610	0.0000
C	0.000635	9.80E-05	6.474628	0.0000
R-squared 0.398551, Adjusted R-squared 0.395895, F-statistic 266.7915, Probability (F-statistic) 0.000000				

The impact of Return on Capital Employed (ROCE) on capital structure was the subject of the fourth hypothesis, which was investigated. A negative coefficient of -0.045099 and a p-value of 0.0000 were found to be associated with ROCE, as shown by the findings. When the p-value was less than 0.05, the data suggested that Return on Capital Employed had a statistically significant influence on the capital structure of listed enterprises in Kenya. This was the conclusion that was drawn from the findings. Considering that the coefficient is negative, it may be inferred that businesses that have a greater ROCE are less likely to depend on loan funding. Based on this, it is possible to infer that businesses who were able to make substantial returns from their capital investments favoured the utilisation of money created internally rather than raising their levels of debt. As a result, the regression model offered compelling evidence that there is a direct and substantial connection between Return on Capital Employed and capital structure, which was evaluated using the debt-to-equity ratio. These results are in line with the research conducted by Fatoki (2018), who investigated the impact of Return on Capital Employed on the capital structure of non-financial companies that are listed on the Nigerian Stock Exchange. According to the findings of the research, there is a negative and statistically significant association between financial performance metrics and capital structure. This finding lends credence to the idea that businesses that have higher levels of profitability may exhibit a reduced reliance on debt financing.

H05: Firm size has no significant moderating effect on the relationship between financial performance and capital structure of listed financial institutions in Kenya

Table 15: Model without moderation

Variable	Coefficient	Std. Error	t-statistic	P-value
Earnings per share	0.021610	0.000525	41.16931	0.0000
Market to book value	-0.321729	0.025965	-12.39086	0.0000
Return on assets	0.038353	0.000841	45.59105	0.0000
Return on capital employed	-0.014151	0.004421	-3.200890	0.0016
Firm size	-0.174598	0.018339	-9.520714	0.0000
C	1.230194	2.400103	0.512559	0.6089
R-squared	0.579465	Mean dependent var		0.192130
Adjusted R-squared	0.483659	S.D. dependent var		0.986986
S.E. of regression	0.719515	Akaike info criterion		2.365354
Sum squared resid	94.22185	Schwarz criterion		3.095564
Log likelihood	-224.1984	Hannan-Quinn criter.		2.659873
F-statistic	5.224626	Durbin-Watson stat		1.706548
Probability (F-statistic)	0.000000			

Table 15 displays the outcomes of the model that does not include moderation, often known as the control model. The results demonstrate the overall impact that the determinants of financial performance have on the capital structure of listed financial institutions in Kenya. P-values of 0.0000, which were below the 0.05 significance threshold, demonstrated that Earnings per Share (EPS), Market-to-Book Value, Return on Assets (ROA), Return on Capital Employed (ROCE), and company size all had statistically significant impacts on capital structure. This was shown by the fact that all of these factors were found to have a significant impact on capital structure. It can be deduced from this that the factors pertaining to financial performance had a substantial impact on the choices regarding capital structure made by the listed financial companies that were included in the research. Because of this, the regression model offered compelling evidence that the capital structure of a company was directly influenced by the financial success of the company, as measured by the debt-to-equity ratio. Based on the data, it seems that differences in profitability, market value, and business characteristics have a significant impact in deciding the choices that financial institutions make about funding. These results are in line with the findings of the research conducted by Fatoki (2018), who discovered that the size of the company had a substantial direct influence on the association between financial performance metrics and capital structure among listed financial organizations.

Table 16: Model with moderation

Variable	Coefficient	Std. Error	t-statistic	P-value
Earnings per share	0.054043	0.001000	54.05561	0.0000
Market to book value of equity	-0.918054	0.036414	-25.21139	0.0000
Return on assets	0.057990	0.004784	12.12156	0.0000
Return on capital employed	-0.934590	0.020424	-45.75941	0.0000
Firm size	-0.367551	0.006087	-60.38748	0.0000
Earnings per share *Firm size	0.006045	0.000130	46.50673	0.0000
Market to book value *Firm size	0.128471	0.007017	18.30743	0.0000
Return on assets *firm size	-0.006124	0.000635	-9.638208	0.0000
Return on capital employed*Firm size	-0.108415	0.002621	-41.36890	0.0000
C	-2.938838	2.809938	-1.045873	0.2970
R-squared	0.609862	Mean dependent var		0.192130
Adjusted R-squared	0.495889	S.D. dependent var		0.986986
S.E. of regression	0.700767	Akaike info criterion		2.324958
Sum squared resid	87.41127	Schwarz criterion		3.114777
Log likelihood	-215.5327	Hannan-Quinn criter.		2.643519
F-statistic	5.350944	Durbin-Watson stat		2.074965
Probability (F-statistic)	0.000000			

The findings for the model with moderation are shown in Table 16. This model includes both the control model and interaction terms. There was a statistically significant impact on the capital structure earnings per share model has grown significantly in Kenya, the regression model provides strong evidence of its direct impact of earnings per share on capital structure as measured

in this study. The first hypothesis was the earnings per share model variable, which had a positive coefficient of 0.054043 and a high p-value of 0.0000, indicating that it has there was a significant impact on the capital structure. The profits per share likewise revealed a statistical significance with a negative coefficient of 0.054043, despite the fact that the p-value for this variable was 0.0000. The findings presented here lend credence to the findings of Fatoki and Olweny (2017), who investigated the impact of earnings per share on the capital structure of publicly traded non-financial companies in Nigeria under consideration. Based on their findings, they discovered that there is a positive correlation between profits per share and debt structure.

The second hypothesis was the market to book value of equity model variable, which had a negative coefficient of -0.918054 and a low p-value of 0.0000, indicating that it had a statistically significant impact on the capital structure of listed financial firms significantly in Kenya. The regression model provides strong evidence of its direct impact on structure as measured in this study. The variables were analyzed in this study. Earnings per share also revealed a statistical significance with a negative coefficient of -0.918054, which was accompanied by a p-value of 0.0000. These findings lend credence to the findings of Mahajan and Tartaroglu (2008), who studied the equity market timing theory of capital structure in the seven most industrialised nations. They made the observation that the BTM ratio has a detrimental impact on the amount of debt in market-oriented regimes, particularly in the United States of America. In their 2017 study, Fatoki and Nasieki (2017) investigated the impact of market to book value of equity on the capital structure decisions made by companies in Nigeria. Their primary objective was to determine whether or not there is any kind of reverse causality between the market to book value of equity model and the capital structure choice that results in a negative effect.

The third hypothesis was the return on assets variable, which had a positive coefficient of 0.057990 and a low p-value of 0.0000, indicating that it has there was a statistically significant impact of return on assets on the capital structure in Kenya for listed firms, the regression model provides strong evidence of its direct impact of Return on assets on capital structure as measured in this study using debt to equity ratio. The debt to equity ratio was used to measure the impact of return on assets on capital structure. Additionally, a statistically significant positive coefficient of 0.057990 was established for earnings per share, which had a p-value that was less than 0.05 respectively. The findings presented here lend credence to the findings of Purba et al. (2020), who demonstrated that the return on assets did not have a substantial impact on the capital structure. The purpose of this study is to investigate the impact that Return on Assets has on the capital structure of non-financial companies that are listed on the Nigerian Stock Exchange (NSE). The results of the investigation indicate that there is a correlation that is both positive and statistically significant between the market value of equity and the book value of equity, as well as the capital structure. The research conducted by Ramadhani, Syafina, and Dharma (2024) discovered that ROA had a large and detrimental impact on the capital structure.

The fourth hypothesis was the return on capital employed model variable, which had a negative coefficient of -0.934590 and a low p-value of 0.0000, indicating that it has there was a statistically significant impact of return on capital employed on the capital structure in Kenya for listed firms, the regression model provides strong evidence of its direct impact of return on capital employed on capital structure as measured in this study using debt to equity ratio. The results of this study were statistically significant. Additionally, a statistically significant negative coefficient of -0.934590 was found for earnings per share, which was proved by a p-value that was less than 0.05. According to Fatoki (2018), who investigated the impact of return on capital employed on the capital structure of non-financial companies listed on the Nigerian Stock Exchange (NSE), these findings provide validity to the findings she obtained. According to the results of the investigation, there is a correlation that is both statistically significant and negative between the market value of equity and the book value of equity, according to the capital structure.

The results shows the overall effect of financial performance dimensions on capital structure had improved after introduction of moderation, the findings show that the coefficients were all higher and p-values were also significant p-0.0000, indicating that it has there was a statistically significant impact of earnings per share, market to book value, return on assets, return on capital employed and firm size on the capital structure among the listed financial firms in Kenya after the introduction of the interaction terms for moderation. Through the use of the debt to equity ratio, the regression model offers substantial evidence of the impact of financial performance on capital structure, as evaluated in this research. These findings lend credence to the findings of Fatoki (2018), who discovered that the size of the company had a substantial moderating influence on the association between financial performance metrics and the capital structure of listed financial organizations.

Table 17 Moderation effect

Variables	With moderation	Without moderation	Difference
R-Squared	0.609862	0.579465	+0.030397
Adjusted R-Squared	0.495889	0.483659	+0.01223

There is a summary of the moderating effect shown in Table 17. Following the incorporation of the interaction terms, the findings indicate that there was a statistically significant enhancement in the capacity of the model to provide an explanation. As a result, the conclusion was that there was a considerable moderating influence of the business size on the financial performance, and therefore, the effect on the capital structure was 3.00397% and 1.223% for R-Squared and Adjusted R-Squared, respectively.

Interpretation of the Findings

In order to investigate the impact that financial performance has on the capital structure of listed financial enterprises in Kenya, this research used both correlation analysis and regression analysis. Earnings per Share (EPS), Market-to-Book Value of Equity, Return on Assets (ROA), and Return on Capital Employed (ROCE) were the four primary independent variables that were the focus of

the research. In addition, the size of the company was used as a moderating coefficient. The results gave significant insights into the ways in which various aspects of financial performance impact the choices that listed financial businesses, especially publicly traded financial institutions, make about their capital structure. According to the findings, financial performance indicators play a key part in deciding the quantity of debt financing and total leverage that companies choose to use in their accounting practices. Because of this, the research makes a contribution to a better understanding of how factors such as profitability, market value, and firm-specific features influence financing choices within the highly regulated financial industry in Kenya.

There was a positive and substantial correlation between earnings per share and capital structure ratio, as shown by the fact that the regression coefficient of earnings per share was not only positive but also significant. A probability-value of 0.0000 implies that this link was statistically significant at the 5% significance level. This suggests that the relationship was significant. This report notes that profits per share have increased dramatically in Kenya for listed financial organisations, and that this growth has had an effect on the structure of loans by pushing management to borrow more money in order to expand their investment activities rather than depending only on internal financing.

There was a negative correlation between market to book value of equity and capital structure ratio, as shown by the fact that the regression coefficient of market to book value of equity was negative and statistically significant. A probability-value of 0.0000 implies that this link was statistically significant at the 5% significance level. This suggests that the relationship was significant. According to the findings of this research investigation, the market to book value of equity has increased significantly in Kenya for the listed financial firms. This has had an influence on the structure of debts, as it has encouraged management to borrow less money in order to expand their investment activities and instead rely heavily on internal financing alone.

Based on the fact that the regression coefficient of the return on assets was positive and statistically significant, it can be concluded that there was a positive correlation between the return on assets and the capital structure ratio. A probability-value of 0.0000 implies that this link was statistically significant at the 5% significance level. This suggests that the relationship was significant. Furthermore, Ramadhani, Syafina, and Dharma (2024) discovered that ROA had a considerable negative impact on the capital structure. This was the opposite of what was expected. According to the findings of this study enquiry, the return on assets has increased considerably in Kenya for the listed financial organisations. This result has had an impact on the structure of loans, as it has encouraged management to borrow more money in order to extend their investment activities. Instead, the management has relied heavily on internal financing alone.

The fact that the regression coefficient of the return on capital employed was negative and statistically significant indicates that there was a negative correlation between the capital structure

ratio and the return on capital employed. A probability-value of 0.0000 implies that this link was statistically significant at the 5% significance level. This suggests that the relationship was significant. The findings of this study enquiry indicate that the return on capital employed has increased considerably in Kenya for the listed financial organisations. This growth has had an impact on the structure of debts, as it has encouraged management to borrow less money in order to expand their investment activities and instead depend heavily on resources that are available inside the company.

With a specific emphasis on Earnings per Share (EPS), Market-to-Book Value of Equity, Return on Assets (ROA), and Return on Capital Employed (ROCE), this chapter examined the ways in which the capital structure of listed financial institutions in Kenya is influenced by the financial performance of such institutions. Important information on the degree to which these financial performance indicators impact the capital structure of companies that are listed on the Nairobi Securities Exchange was supplied by the findings of the regression analysis and diagnostic tests. According to the findings of the regression study, each of the four financial performance indicators had positively and negatively significant correlations with capital structure. These associations were statistically significant. There was a positive and substantial association between capital structure and earnings per share and return on assets. This relationship suggested that companies with higher levels of profitability were more likely to depend on debt financing. It's possible that this is attributable to the fact that financially stable companies are in a better position to access external finance owing to their increased capacity for repayment and the trust of investors. On the other hand, the Return on Capital Employed and the Market-to-Book Value of Equity both shown negative connections with the capital structure of the organisations. In light of this, it can be deduced that rises in these factors led to a reduction in the utilisation of debt financing by the listed financial companies. Based on the data, it seems that businesses that have high market valuations and excellent returns on capital employed could choose equity financing or internal financing rather than raising their debt.

In addition, a number of diagnostic tests were carried out in order to validate and verify the dependability of the regression model. The Shapiro–Wilk normality test, the Breusch–Godfrey test for autocorrelation, the Variance Inflation Factor (VIF) test for collinearity, the Levin–Lin–Chu unit root test, the Glejser heteroskedasticity test, the Granger causality test, the cointegration test, and the Hausman test were among the tests that were used. The results of the Shapiro–Wilk test demonstrated that the residuals followed a normal distribution, and the results of the Breusch–Godfrey test demonstrated that the residuals did not exhibit any autocorrelation within their distribution. Furthermore, the findings of the VIF demonstrated that there was no substantial multicollinearity among the variables that were considered independent components. In general, the findings of the diagnostic test demonstrated that the regression model was acceptable, dependable, and suitable for the purpose of explaining the connection between financial performance and capital structure among the listed financial institutions in Kenya.

Both the correlation and regression analyses were conducted in this chapter to investigate the link between financial performance and capital structure across listed financial institutions in Kenya. The conclusions of these studies were provided in this chapter. The research concentrated on the most important aspects of financial performance, which were Earnings per Share (EPS), Market-to-Book Value of Equity, Return on Assets (ROA), and Return on Capital Employed (ROCE), with company size serving as the moderating variable. The findings provide significant insights into the manner in which the capital structure choices of listed financial institutions in Kenya are influenced by the financial performance shown by such institutions. Based on the findings of the research, it was determined that both Return on Assets and Earnings per Share formed strong positive correlations with capital structure that were statistically significant. The conclusion that can be drawn from this is that businesses that have a higher profitability and profits performance are more likely to depend on debt funding. On the other side, the research discovered that the Return on Capital Employed and the Market-to-Book Value of Equity both exhibited substantial negative associations with capital structure. It may be deduced from this that businesses who had greater returns on capital employed and stronger market valuations had a tendency to minimise their dependence on debt financing strategies. Tests of diagnostic significance were also carried out in order to evaluate the validity and reliability of the model. Based on the findings, it was determined that the regression model was robust and suitable for study. There was no indication of multicollinearity among the variables, and the tests revealed that the residuals followed a normal distribution. Additionally, there was no substantial autocorrelation between the variables. Additionally, the Granger causality and cointegration tests provided evidence that important linkages exist between financial performance and capital structure over the course of time.

Conclusions

Several conclusions may be reached about the influence of financial performance on the capital structure of listed financial institutions in Kenya, and these conclusions are in accordance with the findings that were reported in Chapter Four. Earnings per Share (EPS), Market-to-Book Value of Equity, Return on Assets (ROA), Return on Capital Employed (ROCE), and firm size were all found to play statistically significant roles in determining the level of debt financing that was adopted by financial institutions that were listed on the Nairobi Securities Exchange, according to the findings of the study. The data also demonstrated that the influence of financial performance on capital structure was complex, with some factors having positive benefits while others had negative effects. Certain variables had positive effects, while others had negative consequences. To be more specific, profits per share and return on assets demonstrated positive and substantial connections with capital structure. This suggests that businesses that exhibit higher levels of profitability and earnings performance are more likely to expand their utilisation of debt funding. However, the Market-to-Book Value of Equity and Return on Capital Employed both exhibited strong negative associations with capital structure. These connections were very significant. Based on this, it seems that companies that have a greater market value and a better return on capital

employed are less likely to depend extensively on debt financing. Instead, they are more likely to favour equity financing or internal financing solutions.

Suggestions for further Research

Although this study focused on the effect of financial performance on capital structure among listed financial firms in Kenya, there are several areas that were not fully addressed and therefore require further investigation. The following recommendations for future research highlight existing gaps in the literature and provide directions for deeper understanding of the factors influencing capital structure decisions among listed financial institutions. The study provided an important basis for analyzing and assessing the relationship between financial performance and capital structure among listed financial firms in Kenya. However, several limitations should be considered when interpreting and generalizing the findings. First, the study relied entirely on secondary data obtained from sources such as reports from the Central Bank of Kenya, commercial bank databases, insurance companies, investment firms, and annual financial statements. As a result, the study did not incorporate primary data or qualitative insights from managers, regulators, investors, or other stakeholders. Future studies may therefore consider adopting qualitative or mixed method approaches in order to gain a deeper understanding of the motivations and strategic considerations behind capital structure decisions.

Secondly, while the regression analysis provided useful insights into the quantitative relationship between financial performance and capital structure, the model explained only 60.9862% of the variation in capital structure. This suggests that there are other important factors influencing capital structure decisions that were not captured in the study. Future research may therefore incorporate additional variables such as corporate governance, liquidity, macroeconomic conditions, interest rates, inflation, management efficiency, and regulatory changes to improve the explanatory power of the model.

In addition, future studies may extend the analysis to non-listed financial institutions such as SACCOs and microfinance institutions, which operate under different financial and regulatory environments compared to firms listed on the Nairobi Securities Exchange. This would provide a broader understanding of capital structure decisions within the wider financial sector in Kenya.

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