CAPITAL STRUCTURE AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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ABSTRACT

Commercial banks in Kenya have had massive delisting, others experienced an adverse effect of debt-to-equity ratio and return on assets, experienced significant capital deficiencies and liquidity, while other banks listed had not been adhering to the required daily cash reserve ratio of 5.25%. The performance of these banks therefore, has been mixed and dramatically linked to capital structure. The study purposed to establish ways in which financial performance of commercial banks listed in NSE is influenced by capital structure. Specifically, the research aimed to establish the influence of ordinary share capital, to determine the effect of retained earnings, and long-term debt on commercial banks listed in NSE financial performance. Bank size as a moderating variable was also be determined. The research was grounded on three theories: profit maximization, pecking order and trade-off theories. The research was based on descriptive research design. The research target population comprised of Nairobi securities exchange 11 listed commercial banks in Kenya as of 2022. A census in these selected financial institutions was done for information gathering on the banks Return on Assets to determine financial performance. The type of data used was secondary data derived from central bank of Kenya, the listed banks financial statements that are audited, as well as Kenya National Bureau of Statistics. The study period was 5years from 2018. A panel regression model was employed to analyse data through the medium of statistical package for social sciences version 29.0. The study findings ascertained that increasing unit levels of ordinary share capital, retained earnings and long-term debt have positive effect on the financial performance of commercial banks listed at the Nairobi Securities Exchange, Nairobi. It was also revealed that bank size significantly influenced the relationship between financial performance and capital structure. This study, therefore, recommends that commercial banks listed at the Nairobi Securities Exchange need to reassess their capital structuring so that they can realize better financial performance. This study provides a basis for enhancing a strong capital structure. The findings of this study may guide building strong capital structure, specifically on ordinary share capital, retained earnings and long-term debt. In lieu of these determinants of capital structure, this study offers a basis to improving financial performance.

Key words: Ordinary Share Capital, Capital Structure, Long-Term Debt, Retained Earnings.

INTRODUCTION

Background to the Study

Capital structure in financial institutions enhances shareholder values and risk management and offers tax advantage through reducible interest payments. As noted by Omrawoo et al. (2017), capital structure provides financial flexibility by allowing the company to access different funding sources rooted in market conditions and specific needs as a symphony of financial instruments, strategic foresight, and risk management. Besides, it is pivotal for business to make decisions based on several factors when choosing either to use debt structures or equity for the business operations financing since capital structure varies significantly by industry (Mujwahuzi & Mbogo, 2020). For instance, using debt in mining, which is a cyclonic industry, often not suitable since the firm cannot predict profiles of cash flow and the capability of debt repayment needs to be ascertained.

However, industries like insurance and banking, their models require capital structure leverage due to the capability of using vast leverages (Kum et al., 2021). In the same vein, debt versus equity financing in private companies have challenges since, for instance, small businesses are regulated by financing institutions with the requirement of possession of personal guarantees from their owners as Nwude and Anyalechi (2018) note. Masavi *et al*. (2017) suggests that ordinary shares, an equity instrument, are a primary method of financing organizations. It is the amount of money companies raise from the issue of ordinary shares from public and private sources and owns the businesses' equity in the perspective of holding proportion. As noted by Nwude and Anyalechi (2018), ordinary share capital is a significant way to raise capital to fund expansion in businesses. For instance, there is flexibility of the shares where decision is made by a company on the initial charge volume to be issued as well as time to issue in future as per the obligations (Dudycz, 2022).

The other strategic capital structure quintessential for the banking industry is retained earnings, which is business profits reinvested after shareholders' distribution payments to help fund future activities. Nduati and Wepukhulu (2020) argue that retained earnings in finance represents a significant financing source as the firm's accumulated wealth are reserved back into business for reinvestments. The specific amount of money set aside for businesses specific purposes are known as reserves and these funds are not primarily intended to be distributed to shareholders and separately reported in balance sheet (Rubunda *et al.,* 2019).

The ROA in commercial banks increased from 2.9 % in 2015 to 3.2 % in 2016, which implies that commercial banks generated more earnings from their assets. The return on assets then slightly decreased to 2.6 %, with a slight increase to 2.76 % from 2017 and 2018, respectively. 2019 ROA dropped to 2.6 % and drastically decreased to 1.7 % in 2020 (CBK, 2021).

The banking industry in Kenya comprises 43 commercial banks, where in NSE listing, there are 11 banks, locally owned (24) and those which are foreign owned are four in number (NSE, 2023). Three peer groups classify these banks with composite index that is weighed. The index distinguishes the three tiers in terms of net assets, loan number and deposit accounts, customer

deposits, capital and reserves (CBK, 2020). In the past decades, however, the banking sector has undergone many regulatory reforms, which have brought many changes in operations to strengthen the sector and successfully show robust growth. Regardless of the measures the CBK takes, NSE listed financial performance of commercial banks in Kenya has recently had challenges meeting set performance objectives.

In 2015, the bank supervision annual report confirms that there was decline of 5.03% of the sectors profit from pre-tax, which is equivalent to 141.1 billion to ksh.134.0 billion in 2014 (December) to 2015 in the same frame (CBK,2016). The decrease in profits in 2015 was linked to faster expenses growth than income growth. Owing to the high competition presented by other banks, commercial banks have encountered challenges; Kenya's commercial banks have seen a 1.7 per cent decline in return on assets (ROA) in 2020. As a result, Kenyan banks earned less money from their assets in 2019 than in 2018, when the ROA was 2.6 per cent.

In the same vein, the prudential guidelines of CBK (2013) make it mandatory for banks to have a minimum core capital of one billion shillings. Consequently, the regulations aimed to lower the levels of risks that the creditors of the banks are exposed to and make sure that the issued guidelines are complied with, negatively has impacted these financial institutions especially the tier three as they are submitted to situation of looking for other forms of financing in order to adhere to the regulated minimum requirement (Meshack et al., 2022) impacting on the capital structure of the financial institutions. The use of debts tends to raise the gearing levels, and its excess use may lead to financial distress, ultimately affecting the banks' profitability. Therefore, to gain a competitive banking advantage, commercial banks should leverage a sound capital structure to ensure that available funds are effectively used to prevent undercapitalization to help the sector increase profit in the form of higher returns to stakeholders.

Statement of the Problem

As much as capital structure continues to dominate corporate finance, its effect on financial performance has yielded mixed results. This is because corporate managers are mandated for financing decisions that include enterprise capital structure formation, where poor capital structure can result in firms' financial failure. Srivastava and Sharma (2014) proved that using debt negatively affects performance. There has been a massive delisting of listed firms in Kenya at NSE due to capital structure. Between 2004 and 2008, Kaumbuthu (2011) argued that the firms listed at NSE experienced an adverse effect of debt-to-equity ratio and ROE. Kenya has seen the collapse of several banks arising from its capital structure and liquidity challenges. Gathaiya (2017) observed that Dubai Bank in 2015, was placed under receivership by the Central Bank of Kenya (CBK); had experienced significant capital deficiencies and liquidity, and as reported by CBK (2016). The bank had not been adhering to the required daily cash reserve ratio of 5.25%. Other collapsed banks in Kenya include Imperial Bank and Chase Bank. Furthermore, in 2019, the central bank approved the merger of the NIC Bank and the CBA Bank, aiming to improve its capitalization while harnessing its customer base and market shares (CBK, 2019). Thus, in the last decade, NSE listed commercial banks performance has been mixed and dramatically linked to capital structure (Muchiri *et al.,* 2016).

Similarly, since 2010, banks have been delisted from the Nairobi Securities Exchange. In June 2019, the National Bank of Kenya was suspended from the Nairobi Securities Exchange, and a takeover by the Kenya Commercial Bank was proposed after years of losses (NSE, 2019). In 2016, the losses of the National Bank hit 1.2 billion. It also reported a 302.3 million loss as of December 2019 due to increased costs, including finance costs (CBK, 2019). As of December 2018, the National Bank of Kenya had recorded a decrease in its profit by 42 per cent. The NIC bank also merged with the CBA bank on September 30th 2019 (CBK, 2019) to ensure stable capital levels and liquidity.

The capital structure of commercial banks is one area that still needs to be studied. This is because the banks' capital structure is determined by the statement of financial position asset side (CBK, 2020). Many regulations have also been introduced that affect the capital structure of the banks, such as the Basel III international requirements alongside the rules from the CBK. This creates the need the necessity of studying the interconnection between financial performances of commercial banks rooted in the banks' capital structures.

Various scholars from global, regional and local perspectives have conducted empirical studies to focus more on the capital structure and variables that explain capital structures and financial performance of organizations. In examining ways in which capital structure impacts the performance of firms in Vietnam, Nguyen and Nguyen (2020) the study revealed a significant negative influence to the firms' performance. In the same vein, Suardi and Noor's (2015) investigations found that the Debt Equity Ratio had a positive with short-term debt projecting a negative interconnection with economic performance.

Regionally, Mujwahuzi and Mbogo's (2020) study in Tanzania aimed to identify the link between long-term debt-to-equity ratio on financial performance and findings inferred an insignificance and weak impact on the profitability of the firms. Other scholars, for instance, Nwude and Anyalechi (2018) in Nigeria, reveal that financing business with debt dues with a maturity date that exceeds and payable beyond twelve months negatively and significantly influences ROA. In Ghana, Kum et al. (2021) investigations on ways in which banks listed in GSE concluded that asset structure, profitability, growth, corporal tax and bank size influences banks financial decisions.

Nduati and Wepukhulu's (2020) local study in Kenya on retained earnings capital to SACCO's financial performance in Nairobi County reveals a pivotal and positive effect on the firm's performance. Mousavi et al. (2017) research on NSE listed agricultural firms found that a shoot in debt ration led to a rise in ROA. Harrison's (2021) study on shared on banks performance reveal a statistically significance to financial performance and Maingi and Waweru (2022) assessed how ordinary share capital influenced the share on returns in firms listed in Nairobi exchange securities and reveal that issuing the right issue represented an opportunity to increase exposure to the firm's stock and raise capital for growth opportunities.

Most of the reviewed studies present methodological, conceptual and contextual gaps. Besides, a key concern that faces financial institution that requires financing as a necessity for expansion and growth is rooted in the decision of whether to raise capital through equity or secure debt as a financing decision. Most of the available literature also portrays mixed results and has yet to concentrate exclusively by establishing ways in which NSE listed commercial banks financial performance is influenced by capital structures; hence, a need the to conduct this study which filled in and bridged the insufficient empirical investigation.

Objectives of the Study

General Objective of the Study

The study's general objective was to evaluate the effect of capital structure on the financial performance of listed commercial banks in the NSE, Kenya.

Specific Objectives

i. To determine the effect of ordinary share capital on the financial performance of listed commercial banks in the NSE, Kenya.
ii. To establish the effect of retained earnings on the financial performance of listed commercial banks in the NSE, Kenya.
iii. To determine the impact of long-term debt on the financial performance of listed commercial banks in the NSE, Kenya.
iv. To determine the moderating effect of bank size on the relationship between capital structure and financial performance of listed commercial banks in the NSE, Kenya.

Research Hypotheses

H_{O1}: Ordinary share capital has no significant effect on the financial performance of listed commercial banks in the NSE, Kenya.

H_{O2}: Retained earnings have no significant effect on the financial performance of listed commercial banks in the NSE, Kenya.

H_{O3}: Long-term debt has no significant effect on the financial performance of listed commercial banks in the NSE, Kenya.

H_{O4}: Bank size have no significant moderating effect on the relationship between the capital structure and the financial performance of listed commercial banks in the NSE, Kenya.

Theoretical Review

Profit Maximization Theory

Profit maximization theory, also known as neoclassical economic theory, is rooted in the earlier work of Adam Smith, 1776, in the Wealth of Nations (Jafar et al., 2010). The theory approaches profit maximization as the most vital objective of a business which should determine the decision-making processes (Tripathi, 2019). In the contemporary global competition and intense businesses, profit maximization theory has taken on an economic viewpoint, where businesses ensure that profits are maximized through equal marginal costs and revenues. Profit refers to excess cells and cost metrics to gauge the business's growth and ascertain the business model's viability (Yitayaw, 2021). Thus, for a business to maximize profits, either the sales value should increase or the cost value should decrease; technically, marginal revenue equals marginal cost.

The Profit Maximization concept assumes that firms are rational and should evaluate the cost and benefits of different decisions and choose alternatives that lead to the highest profits (Ovonomo & Onuoha, 2023). The theory presupposes that firms have a single objective, which is to maximize profits in the perspective that the point at which the marginal cost and marginal revenue become equal allows for the maximum gap between the Marginal Revenue (MR) and Marginal Cost (MC); the profit at this point is always maximum (Tripathi,2019). MR and MC are economic measures that are applied to determine the amount of output and the price per unit of a product that will maximize profits.

Despite the criticism, profit maximization theory was relevant to the study since a profitable business is able to pay its obligations and liabilities which build its creditworthiness. This approach's operating logic and backbone are efficiency, minimizing inputs, and maximizing outputs. This theory underpinned the dependent variable, and financial performance. In light of profit maximization theory, commercial banks should utilize stable capital sources, including equity and long-term debt, for long-term asset investment to increase profitability.

Pecking Order Theory

Donaldson (1961) and modified by Myers and Donaldson (1961) identified the pecking order theory while Myers and Majluf (1984) modified it. It provides basic principles about a firm's behaviour in investment decisions and financing structures. It presumes the existence of a certain order or hierarchy when it comes to the sources of financing (Nwude & Anyalechi, 2018). As noted by Harrison (2021), the theory is rooted in the concept of asymmetric information on the premise that managers, unlike outside investors, have a deeper comprehension of the company's prospects, value and risks and thus, the financing cost tends to increase as asymmetric information increases. Pecking order theory further recognizes that a company's financing sources are three, namely, debt, internal funds and new equity (Gathara et al., 2021).

Harrison (2021) notes that the theory presumes that companies prefer internal funding sources more and will only prefer to utilize debt or equity, where internal funding is much more limited. This idea was further reinforced by Myers and Majluf (1984) through the suggestion that there is less preference for equity because when managers issue new equity, there is a belief among investors that managers are inclined to think that the company is overvalued. Thus, they take advantage of this overvaluation, prompting the investors to place a low value on the new issuance.

Pecking order theory can be explained from the perspective of financing costs, loss of control, and dilution (Nwude & Anyalechi, 2018). For instance, internal funds allow firms to maintain ownership and control structures. This theory is relevant to the current study that seeks to appraise the role played by retained earnings and ordinary shares to finance banks for overall operations and financial performance, and if the firm’s retained earnings do not suffice, management will choose the financing source without control restrictions. The theory suggests that older and mature firms should prefer to finance with internal funds, which is applicable in

the case and focus of commercial banks. This theory was thus was a great value to the study, and used to guide on how retained earnings and share capital influences financial performance of banks listed at the Nairobi Securities Exchange.

Trade-off Theory

The proponents of the trade-off theory were Kraus and Litzenberger (1973) and placed more emphasis on the advantage of financing with debt. As a result, the trade-off theory a competitor of the pecking order theory of capital structure. It suggests that a corporation's optimal capital structure arises from the agency and personal taxes' effects alongside the bankruptcy costs (Ghazouani, 2013). Thus, the trade-off theory presumes that the companies ought to choose a debt level that maximizes the tax shield advantages.

This theory is premised on the concept that the choice of how much debt and equity finance is contingent on the balance between costs and benefits (Abel, 2018). The theory tends to be inclined towards debt financing based on its suggestion that debt has the benefit of a tax shield, which would otherwise not be obtained in the event of equity financing. Harrison (2021) highlights that financing based on debt rather than equity increases the total after-tax return and increases corporate value which attract investors. However, the major implication of the theory is that the target deviations are gradually eliminated from the leverage it exhibits through target adjustments. Furthermore, it limits the motives of tax payments for a firm to utilize debts financing based on Abel (2018) views.

The theory is relevant to the study as it is inclined towards debt financing based on the benefit of a tax shield on debt, which would not be obtained in equity financing. This theory will provide useful insights into these affiliations helping understand why certain firms prefer debt financing over equity financing.

Empirical Literature Review

Maingi and Waweru (2022) assessed how ordinary share capital influenced the share on returns in firms listed in Nairobi exchange securities. The study aimed to determine the influence of bonus issues, right issues and stock split announcements on the performance of Kenyan firms. To answer the study questions, an event study research design targeted all firms listed in the Nairobi exchange securities between 2014 and 2020. The study findings inferred that all firms had abnormal returns. This suggested that announcements influenced shared returns. It was revealed that the bonus issue increased the firms shared capital, which reflected that the firms were in a financially sound position for growth. It was also revealed that issuing the right issue represented an opportunity to increase exposure to the firm's stock and raise capital for growth opportunities. However, besides the methodological biases that characterized the study, the measure of performance was shared returns, which is the total income investors get from the investment, while the study performance was through metrics that measure business profitability about its total assets.

Adeniji (2023) in Nigeria examined how retained earnings influences market-to-book value in firms. For this purpose, the design adopted was a descriptive survey design and secondary data was collected. The study population comprises 78 manufacturing firms listed as trading firms

for ten years (2008/2018). Data on economic variables included all the firms' reserves, which were part of the company's profit. The findings showed that Nigerian manufacturing firms invested their retained earnings into the business to fund projects. It was revealed that reserves helped safeguard the financial position of the firms and were used for various purposes such as improving the financial situation, stable dividend repayments, expansion, legal requirements, meeting contingencies and improvement. The study gap emanates from performance since the study employed price the price-to-book ratio was employed to compare a company's current market price to its book value. The current study will use specific metrics to gauge the accumulated net earnings of a business's profit levels and firm's performance, such as return on assets.

Sadiq et al. (2023) assessed the influence of debt financing and firm's value in Jordan's industrial shareholding companies. A set of 56 company panel data in the Amman stock exchange was employed and covered a timeframe of 4 years (2012-2016). Findings revealed that there a positive and significance connection between GDP per capita and debt financing. The study revealed that long-term debt is pivotal to sustainable development since it allows financing of investments over their active lifetime, matching project investments' liquidity needs. However, besides the methodological gaps that characterized this study, the research was done in Jordan, a nation that greatly varies in the business environment and legal framework, culture, and economic activities from that of Kenya.

AlFadhli and AlAli (2021) investigated how the size of a bank's assets influences the proxies of the bank's financial performance in Kuwaiti. The study was based on Kuwaiti financial data from 10 banks over ten years, from 2008 to 2018. Results inferred a statistically significant relationship between financial performance and bank asset size. It was revealed that the size of banks was proven to have an impact on profitability and other factors, such as liquidity. The survey was carried out in Kuwait, while the ongoing survey will be done in Kenya, which has a different market capitalization.

RESEARCH METHODOLOGY

The research employed a descriptive survey research design. It aimed to systematically obtain information to describe a population, situation, or phenomenon (Sekaran & Bougie, 2016). Bryman (2016) affirms that descriptive design primarily focuses on describing population characteristics or phenomenon over time and revisit them to view any change in trend.
The choice of descriptive design in the study was that it could be used to collect both quantitative and qualitative data. Further, secondary data was collected from 2013 through 2020 to assess commercial banks financial performance trend.

To establish the interrelation between the impacts of capital structure on commercial banks financial performance at NSE, the study target population was all the 11 listed commercial banks at the NSE as of 2023.

NSE 11 listed commercial banks are chosen because they provide financial services to the general public and help ensure economic stability and economic growth by providing loan facilities to businesses. Also, the 11 listed commercial banks financial statements are reliable, accessible, and reputable since international firms performs the audit. In this regard, the study unit of observation and analysis was constituted by the commercial banks (11) in NSE, and their financial statements published respectively.

The study used a census method to be the most appropriate since the target population is 11 listed commercial banks in the NSE. The period to be considered was from 2018 to 2022.
Both descriptive and inferential statistics was considered in the study. The descriptive statistics provided the data basic features (central tendencies and dispersion). Inferential statistics used Panel data regression analysis at a 5% significant level. Before data analysis, regression analysis assumptions were affirmed through a diagnostic test.

Two models were used to show how capital structure relates with NSE listed commercial banks financial performance in Kenya. Model one was a panel regression or general model, which was the standard multiple regression analysis using Siddik et al. (2017) approach in the model development and the baseline specified in the equation will be as indicated:

$$ROA_{it} = \beta_0 + \beta_1 OSC_{it} + \beta_2 REA_{it} + \beta_3 LTD_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots \quad (3.1)$$

Where;
ROA = Return on assets
B_o = Constant
OSC_{it} = Ordinary share capital
REA_{it} = Retained earnings
LTD_{it} = Long term debt
$\beta_{1....}\beta_3$ = the study V. coefficients
it = listed commercial Number for each period
ε_{it} = error-term

Descriptive Statistics Results

The study's descriptive analysis relied on statistical measures such as the mean, standard deviation, maximum, and minimum values derived from data analysis. The mean represented the central value of the study variable, while the standard deviation showed the variability or dispersion of the study data from the mean.

Table 1: Descriptive Statistics

	N	Mean	Std. Dev	Minimum	Maximum
ROA	55	.237577	.00205199	0.358134	2.155334
ordinary share capital	55	0.100219	0.156585	0.001601	1.139994
retained earnings	55	0.276984	0.327572	-1.60575	1.05154
long-term debt	55	0.200195	0.186595	0.000000	1.126967

Source: Survey Data (2025)

Examining the descriptive features of the variables, particularly their central tendency and dispersion, the study found that ROA had a mean score value of 0.0237 and a standard deviation of 0.00203. This signifies that commercial banks listed at the Nairobi securities exhibited average financial stability of 0.237 % with individual banks showing varying degrees of stability within the range of 0.358% and 2.1553%. The mean ratio for ordinary share capital was 0.100219, and thus the firms were not at risk of leverage on ordinary share capital, since it is a significant way to raise capital to fund expansion in businesses.

The findings also highlight the high variability of retained earnings, which had a mean of 0.100219 and a standard deviation of 0.1565 during the study period. This lends credence to the notion that businesses and service providers fund their own operations and assets.

Long-term debts had an average value of 0.200195. This revealed that the average amount of equity capital was roughly three times the amount of debt that commercial and service firms accumulated to finance their assets. The variable's standard deviation was discovered to be 0.186595. This value was clearly above the mean, indicating that the variable was highly volatile throughout the study, an indication that the firms were performing well, as they were deemed to be stable and had accumulated much money over the years. The firms were considered to be well-leveraged and thus no fear of collapse or liquidation as a result of the accumulation of debts.

Normality Test

Table 2 represents the results of the Normality test to test whether the data came from a normally distributed population.

Table 2: Shapiro-Wilk test for Normal Data

Variable	Obs	W	V	Z	Prob> Z
ROA	55	0.72987	12.542	5.338	0
ordinary share capital	55	0.15421	39.83	8.345	0
retained earnings	55	0.55321	19.341	6.421	0
long-term debt	55	0.3452	31.432	7.451	0

Source: Researcher (2025)

When the p-value is less than 0.05, the null hypothesis is discarded, and sufficient proof exists to conclude that the results analyzed did not come from a normally distributed population. ROA, ordinary share capital, retained earnings, and long-term debt all had a p-value of 0. This stipulates that the null hypothesis would be discarded, implying that the tested data did not come from a normally distributed population. No further action is taken since Normality is not a must in running panel data, as there are fluctuations regarding data obtained over the years.

Test for Multicollinearity

Table 3 represents the results of the test for Multicollinearity to test whether Multicollinearity existed in the data.

Table 3: Test for Multicollinearity

Variable	VIF	I/VIF
ordinary share capital	7.08	0.154397
retained earnings	3.67	0.236710
long-term debt	5.48	0.325401
Mean VIF		

Source: Research Data (2025)

The results, as presented in Table 3, indicate that the VIF values of all the variables studied were less than 10, indicating positive and significant Multicollinearity (Osborne & Waters, 2019). Therefore, it was concluded that none of the independent variables could suffer from multicollinearity since every individual variable had a VIF value below 10.

Autocorrelation Test

To ascertain whether the data in this study is correlated over time or has an autocorrelation problem, the Durbin-Watson test was utilized. The results are shown in Table 4

Table 4: Autocorrelation Test

Variable	**Durbin Watson**
ordinary share capital	1.124
retained earnings	3.542
long-term debt	1.116

Source: research Data (2025)

Table 4 presents the results, which show that the Durbin-Watson values varied between 1.116 and 3.542, reflecting data characteristics that inform the similarity degree between identical variables over time intervals that are successive. According to Flatt and Jacobs (2019), data that is closer to two indicates independent observations, and values closer to zero or four correspondingly in Durbin-Watson's statistics will suggest a more substantial positive or negative autocorrelation. Therefore, Flatt and Jacobs (2019) recommendations led to the conclusion that the model's residuals are not autocorrelated, allowing inferential statistics to be applied to the study's data.

Table 5 Coefficients and Significance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.247	.303		7.408	.000
Share Capital.	.142	.013	.105	2.929	.004
Retained Earnings.	.344	.379	.463	5.378	.000
Long Term Debts	.170	.035	.441	4.291	.000

a. Dependent Variable: Financial Performance

Source: Research Data (2025)

Using the SPSS tool, the researcher generated results that described a detailed insight into the relationship between capital structure and financial performance. From Table 4.10, the results show that if ordinary share capital, retained earnings, and long-term debts are kept constant, the financial performance of listed commercial banks in the NSE in Kenya would be positive at 2.247 units with a p-value of 0.000, less than 0.05.

The unstandardized coefficient for ordinary share capital is 0.142, which suggests that a one unit increase in ordinary share capital is associated with a 0.142 unit increase in the dependent variable. The standard error of this coefficient is 0.013, which represents the degree of uncertainty associated with the estimate. The result also inferred that a unit increase in retained earnings, a 0.344 increase in performance, was predicted, holding the other variables constant. Further, for every increase of one point in long-term debts, performance is predicted to be higher by 0.170 points, holding all other variables constant.

$$\mathbf{ROA_{it} = \beta_0 + \beta_1 OSC_{it} + \beta_2 REA_{it} + \beta_3 LTD_{it} + \varepsilon_{it} \ldots\ldots\ldots\ldots\ldots\ldots\ (3.1)}$$

Where;
Y = Return on assets (dependent variable)
B_o = Constant
OSC_{it} = Ordinary share capital
REA_{it} = Retained earnings
LTD_{it} = Long term debt
$\beta_{1\ldots}\beta_3$ = the study V. coefficients
it = listed commercial Number for each period
ε_{it} = error-term
This leads to the formation of a regression equation as follows:
Y=2.247 +0.142 (Ordinary share capital) +0.344 (Retained earnings) +0.170 (Long term debt).

Test of Hypotheses

H_{o1}: Ordinary share capital has no significant effect on the financial performance of listed commercial banks in the NSE, Kenya.

The study operationalized ordinary share capital to be proxied by Initial public offer, rights issue, and bonus issue. Multiple regression analysis was therefore used to assess whether ordinary share capital significantly predicted return on assets of listed commercial banks in Kenya. Table 4.10 provides more proof that ordinary share capital had a significant beneficial influence ($\beta = 0.105$, $p = 0.004$) on the financial performance of listed commercial banks in the NSE, Kenya. Therefore, the hypothesis was rejected.

H_{o2}: Retained earnings have no significant effect on the financial performance of listed commercial banks in the NSE, Kenya.

The study found that retained earnings had a significant effect on the financial performance of listed commercial banks in the NSE, Kenya ($\beta=0.63$, $p=0.000$), hence rejected the hypothesis.

H_{o3}: Long-term debt has no significant effect on the financial performance of listed commercial banks in the NSE, Kenya.

The study operationalized long-term debts to be proxied by long-term Loans, bonds, and mortgages. Multiple regression analysis was therefore used to assess whether long-term debts significantly predicted return on assets of listed commercial banks in Kenya. Table 4.10 provides more proof that long-term debts had a significant beneficial influence ($\beta = 0.441$, $p = 0.00$) on the financial performance of listed commercial banks in the NSE, Kenya. Therefore, the hypothesis was rejected.

The study's fourth goal was to see if firm size had any moderating effects on the relationship between capital structure and the financial performance of listed commercial banks in Kenya. The study operationalized bank size to be proxied by the Logarithm of asset base (Total net assets). The null hypothesis was stated as;

H_{o4}: Bank size has no significant moderating effect on the relationship between the capital structure and the financial performance of listed commercial banks in the NSE, Kenya.

A regression analysis was performed after including the interaction term (X4) to determine the nature and significance of the moderating effect of bank size. Two regression models were fitted and displayed in Tables below. Bank size was used as a predictor variable in the first model that was fitted, and it was adopted as a moderating variable in the second model, where it interacted with capital structure to create an interaction variable.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.578[a]	.485	.471	.3650

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	25.181	2	12.591	14.747	<.001[b]
Residue	3.415	8	0.854		
Total	28.596	10			

Coefficients and Significance

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	.489	.109		4.486	.003
Bank Size	.664	.315	4.608	3.399	.001
Capital Structure	.718	.217	3.543	3.309	.002

Source: Survey Data (2025)

The results in Table 4.11 indicate that Bank size had a $\beta = 4.608$, $t = 3.399$, and p-value of 0.003. This demonstrates that bank size met the criteria for predictor variable status because it significantly predicted financial performance.

Step Two in Testing for the Moderating effect of Bank size

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.609[a]	.712	.600	.814

ANOVA

Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Regression	101.123	2	101.123	201.119	<.001[b]
Residue	2.514	8	0.503		
Total	**121.637**	**10**			

Coefficients and Significance

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	.701	.236		2.970	.001
Bank Size	.823	.204	3.145	4.034	.000

Source: Survey Data (2025)

The results presented above indicate that there was a coefficient of β = 3.145, p-value = 0.000, when the bank size and capital structure interacted and were treated as moderating variables. It implied that the bank size significantly influenced the relationship between financial performance and capital structure. The bank size has an effect on how capital structure affects the financial performance of listed commercial banks in the NSE, Kenya, in this regard.
Therefore, the hypothesis was rejected, and the study concluded that there was a significant moderating effect of bank size on the relationship between capital structure and the financial performance of listed commercial banks in the NSE, Kenya.

Conclusions, and Recommendations

Conclusion of the Study

In the first objective, the study concluded and affirmed that ordinary share capital has a significant positive effect on financial performance. The results indicated that an increase in the shareholder core capital funds within the firm will lead to improvements in financial performance. An increased focus on retained earnings within commercial Banks in Kenya will result in lower interest charges from other forms of investments, thus improving the firm's financial performance position. In the second objective, the study concluded that the cost of retained earnings had a positive and significant effect on financial performance. Increasing the usage of retained earnings would have a positive and significant impact on final returns, yielding more dividend payouts to shareholders and thereby affecting financial performance.
The research found a significant positive influence on the financial performance of listed banks in Kenya through the use of long-term debt. As a result, the researcher concludes that good use of interest-bearing debt has a positive impact on the financial performance of listed firms in Kenya. This also indicates that debt markets and debt financing management have been effective in the country, particularly among listed firms. This research also concludes that interest rate capping was well-informed and that any adverse review for the same may compromise the financial performance of corporations.
The fourth objective was to establish the relationship between the moderating effect of bank size on the relationship between capital structure and the financial performance of listed commercial banks on the NSE in Kenya. The study concluded that there was a significant moderating effect of bank size on the relationship between capital structure and the financial performance of listed commercial banks on the NSE in Kenya. This is because large banks derive numerous benefits from economies of scale and synergy compared to small banks, resulting in a higher return on investment, which in turn increases their financial performance.

Recommendations

Since ordinary share capital has a positive and significant effect on financial performance, recommendations are for bank executives to actively seek additional equity capital associated with lower funding costs, thereby widening the net interest margin and subsequently improving performance. This will also help commercial banks in the NSE, Kenya, to take more risks and lend more.

The study recommends that management and policymakers enhance total earnings to promote retained earnings, which have a significant and positive relationship with the financial performance of listed commercial banks on the NSE in Kenya. On long term debts, the study

established that long term debts had a positive and significant effect of financial performance commercial banks in the NSE, Kenya. Therefore, the study recommend that management of listed firms should prioritize on long terms debts since it is less expensive form of financing and should be considered as a resort or for high potential investment opportunities. It is recommended that firm should increase their assets base and also consider opening more branches to increase their firm size so as to enjoy benefits resulting from economies of scale and synergy which in turn increases their financial performance.

REFERENCES

Abel, A. B. (2018). Optimal debt and profitability in the trade-off theory. *The Journal of Finance*, *73*(1), 95-143.

Adeniji, A. Y. (2023). Retained earnings, corporate governance and market-to-book value of listed firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, *11*(5), 28-38.

AlFadhli, M. S., & AlAli, M. S. (2021). The effect of bank size on financial performance: a case study on Kuwaiti Banks. *Journal of Insurance and Financial Management*, *4*(3), 11-15.

Bryman, A. (2016). *Social research methods*. Oxford university press.

Dudycz, T. (2022). Does share capital mater for company performance? *Economic research-Ekonomska istraživanja*, *35*(1), 3035-3059.

Gathara, Z. M., Kilika, J. M., & Maingi, J. N. (2019). Effect of leverage on financial performance of selected companies listed in the Nairobi Securities Exchange, Kenya. *International Journal of Innovative Finance and Economics Research*, *7*(1), 10- 33.

Ghazouani, T. (2013). The capital structure through the trade-off theory: Evidence from Tunisian firm. *International Journal of Economics and Financial Issues*, *3*(3), 625-636.

Harrison, P. (2021). *The Effect of Financial Structure on Financial Performance of Listed Commercial Banks in Kenya* (Doctoral dissertation, St. Paul's University).

Jafar, H., Muda, I., Zainal, A., & Yasin, W. (2010). Profit maximization theory, survival-based theory and contingency theory: a review on several underlying research theories of corporate turnaround. *Jurnal Ekonom*, *13*(4), 136-143.

Maingi, N., & Waweru, F. (2022). Effect of Rights Issue, Bonus Issue and Stock Split Announcements on Share Returns of Firms Listed in Nairobi Securities Exchange. *International Journal of Finance and Accounting*, *7*(3), 1-32.

Masavi, J. M., Kiweu, M., & Kinyili, J. (2017). Capital structure and financial performance of agricultural companies listed in Nairobi securities exchange, Kenya. *International Journal of Economics, Commerce and Management*, *5*(11), 653-665.

Meshack, K. M., Winnie, N., Okiro, K., & Ochieng, D. E. (2022). The effect of capital structure on financial performance with firm size as a moderating variable of non financial firms listed at the Nairobi Securities Exchange.

Muchiri, M. J., Muturi, W. M., & Ngumi, P. M. (2016). Relationship between Financial Structure and Financial Performance of Firms Listed at East Africa Securities Exchanges. *Journal of Emerging Issues in Economics, Finance & Banking*, *5*(1).

Mujwahuzi, G. V., & Mbogo, C. J. (2020). Effects of capital structure on business profitability of processing enterprises listed on the Dar es Salaam Stock Exchange, Tanzania. *Journal of Finance and Accounting*, *8*(4), 165-171.

Nduati, N. W., & Wepukhulu, J. M. (2020). Effect of retained earnings on financial performance of saving and credit co-operative societies in Nairobi County, Kenya. *International Academic Journal of Economics and Finance*, *3*(6), 197-209.

Nwude, E. C., & Anyalechi, K. C. (2018). Impact of capital structure on performance of commercial banks in Nigeria. *International Journal of Economics and Financial Issues*, *8*(2), 298.

Ovonomo, O. T., & Onuoha, B. C. (2023). Finance and Business Survival of Fish in Warri Delta State.

Omrawoo, T. V., Jaunky, V. C., & Ramesh, V. (2017). Determinants of Capital Structure of Non-Financial Firms in Mauritius: A Panel Data Approach. *Recent Advances in Business and Economics*, 194-220.

Osborne, J. W., & Waters, E. (2019). Four assumptions of multiple regression that researchers should always test. *Practical assessment, research, and evaluation*, *8*(1), 2.

Rubunda, E., Namusonge, G. S., & Oluoch, O. (2019). The influence of retained earnings and equity finance structure on the growth of small and medium manufacturing enterprises in Rwanda. *European Journal of Social Sciences*, *58*(2), 112-123.

Sadiq, M., Yousaf, S. U., Anser, M. K., Sriyanto, S., Zaman, K., Van Tu, D., & Anis, S. N. M. (2023). The role of debt financing in the relationship between capital structure, firm's value, and macroeconomic factors: To throw caution to the wind. *The Quarterly Review of Economics and Finance*, *87*, 212-223.

Siddik, M. N. A., Kabiraj, S., & Joghee, S. (2017). Impacts of capital structure on performance of banks in a developing economy: Evidence from Bangladesh. *International journal of financial studies*, *5*(2), 13.

Smith, A. (1937). The wealth of nations. modern library. *New York*, *423*.

Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. john wiley & sons.

Suardi, I., & Noor, K. D. (2015). The impact of capital structure on financial performance of the listed agriculture companies in Indonesia. *Global Journal of Business and Social Science Review*, *3*(1), 9-17.

Tripathi, A. (2019). Profit Maximization Theory and Value Maximization Theory. *International Journal of Scientific Development and Research*, *4*(6), 284-289.

Yitayaw, M. K. (2021). Determinants of profitability and financial sustainability of saving and credit cooperatives in Eastern Ethiopia. *International Journal of Rural Management*, *17*(2), 239-261.