Moderating effect of management efficiency on the relationship between financial structure and profitability of non-financial firms listed at the Nairobi Securities Exchange, Kenya

Naomi Mbithe Mwewa[1]
James Ndirangu Ndegwa[2]
James Murunga[3]

[1]naomimunywoki@mksu.ac.ke
[2]jndegwa@cuk.ac.ke
[3]murunga.james@mksu.ac.ke

[1,3] Machakos University, [2] Cooperative University of Kenya, [1,2,3] Kenya

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ABSTRACT

The persistent decline in profitability among non-financial firms listed at the Nairobi Securities Exchange (NSE) has raised concerns regarding the effectiveness of corporate financial decisions. While financial structure has been extensively studied as a determinant of profitability, the conditions under which this relationship operates remain insufficiently understood, particularly regarding the role of managerial capability. This study examined the moderating effect of management efficiency on the relationship between financial structure and profitability of non-financial firms listed at the NSE, Kenya, over the period 2015–2024.The study was anchored on three complementary theories: Trade-off Theory, the Agency Cost Theory and the Pecking Order Theory. The study adopted a positivism research philosophy and a longitudinal panel research design. Data was obtained from 42 non-financial firms, yielding 317 firm-year observations after data cleaning. Profitability was measured using Return on Assets (ROA), financial structure was proxied by total debt divided by total debt plus equity, and management efficiency was measured as revenue divided by number of employees. Diagnostic tests including multicollinearity, normality, heteroscedasticity, serial correlation, and stationarity were conducted. The Chow and Hausman tests supported a fixed-effects specification with firm-clustered robust standard errors. The findings indicate that financial structure has a negative and statistically significant effect on profitability. However, the interaction between financial structure and management efficiency was statistically insignificant indicating that management efficiency does not significantly moderate this relationship. The study concludes that the indirect effect of financial structure on profitability operates independently of management efficiency levels. The study recommends that managers focus on maintaining prudent leverage levels while regulators promote transparency in financial disclosure to enhance firm resilience and profitability.

Keywords: Financial Structure; Management Efficiency; Nairobi Securities Exchange, Non-Financial Firms; Profitability

I. INTRODUCTION

The financial decisions made by firms have important implications for their ability to achieve sustainable profitability, particularly within emerging capital markets characterized by financing constraints, economic uncertainty and changing business conditions (Seyoum et al., 2020). Among the critical decisions confronting corporate managers is the determination of an optimal financial structure, which encompasses the mix of debt and equity used to finance firm operations and investments. The relationship between financial structure and firm profitability has been the subject of extensive theoretical and empirical investigation, yet the conditions under which this relationship operates remain insufficiently understood.

The Nairobi Securities Exchange (NSE), Kenya's main securities market, has experienced a sustained decline in profitability among its listed firms over the past decade. The NSE 20 Share Index recorded a negative trend in performance from 2014 to 2021, and the Capital Markets Authority (2022) reported a 28.24% contraction in market capitalization in 2022, from Kshs. 2.70 trillion to Kshs. 1.93 trillion. In 2023, twelve non-financial firms issued profit warnings, including Longhorn Publishers, Sasini, Car & General, Nation Media Group, Centum Investment Company, Unga Group, Kenya Power and Lighting Company, Crown Paints, WPP Scangroup, Kakuzi, Sameer Africa and Express Kenya (Central Bank of Kenya, 2023). This persistent decline has raised concerns regarding the financial strategies adopted by listed firms and the managerial capabilities that guide these strategies.

Management efficiency, defined as the degree to which organizational resources contribute to productivity as Alnuaimi et al. (2015) asserts, has been identified as a critical factor that may condition the relationship between financial decisions and firm outcomes. Drawing from Agency Cost Theory and the resource-based view of the firm, efficient managers are expected to allocate financial resources more effectively, mitigate the adverse effects of financial obligations, and enhance the value-creating potential of leverage (Suratno & Ghozali, 2017). Conversely,

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inefficient management may weaken or even reverse the expected effects of financing decisions (Rozzani & Rahman, 2013). Despite this theoretical expectation, empirical evidence on the moderating role of management efficiency in the financial structure–profitability relationship remains limited, particularly within African frontier capital markets.

This study therefore sought to examine the moderating effect of management efficiency on the relationship between financial structure and profitability of non-financial firms listed at the NSE over the period 2015–2024. The study contributes to the corporate finance literature by providing empirical evidence from an African frontier market and by testing the conditional nature of management efficiency on the financial structure–profitability relationship.

1.1 Statement of the Problem

Profitability is a key indicator of a firm's financial performance and long-term sustainability. For non-financial firms listed on the Nairobi Securities Exchange, profitability is of particular importance because it reflects the effectiveness of financial decisions, the utilization of resources and the capacity to generate returns for shareholders (Mbaabu et al., 2022). Financial structure, mainly the choice between debt and equity financing is an important corporate financial decision that can influence profitability through financing costs, tax benefits, investment capacity and financial risk (Myers & Majluf, 1984). However, the effect of financial structure on profitability may vary across firms depending on their financial conditions and managerial capabilities. The performance of firms listed on the NSE has raised concerns regarding their ability to sustain profitability. According to the Nairobi Securities Exchange in 2021, the NSE 20 and NSE 25 share indices exhibited a declining performance trend. In addition, the Capital Markets Authority (2022) reported that the NSE's market capitalization declined from KSh 2.70 trillion in 2021 to KSh 1.93 trillion in 2022, representing a contraction of 28.24%. Further, 13 non-financial firms reportedly issued profit warnings in 2022, highlighting concerns about corporate earnings and financial performance (Central Bank of Kenya, 2023). While financial structure has received considerable empirical attention, the conditions under which it has an effect on profitability remain insufficiently investigated. Empirical studies including Mbaabu et al., (2022), Ali and Anwar, (2021), and Amugada and Mwangi (2025) on financial structure and profitability found a negative and statistically significant effect, while Jeleel and Olayiwola, (2017) found a statistically significant positive effect. Studies exist that used management efficiency as an independent variable, assessing how it influences performance Rozzani and Rahman (2013); Eze and Timipere (2020) and the finding was positive and significance influence while Lu and Khan, (2023) found negative effect of management efficiency on performance. Kimanzi (2019) study found a positive effect of financial structure on operating efficiency of housing cooperative societies in Nairobi. Limited empirical evidence exists on management efficiency as a moderating variable in the financial structure–profitability relationship, particularly within the context of non-financial firms listed at the NSE. The present study addresses this gap by examining the moderating effect of management efficiency on the relationship between financial structure and profitability among non-financial firms listed at the NSE over the period 2015–2024.

1.2 Research Objective

The objective of the study was to investigate the moderating effect of management efficiency on the relationship between financial structure and profitability of non-financial firms listed in the Nairobi Securities Exchange.

II. LITERATURE REVIEW

2.1 Theoretical Review

This study is anchored on three complementary theories that explain the relationship between financial structure, management efficiency and firm profitability: the Trade-off Theory, the Agency Cost Theory and the Pecking Order Theory.

2.1.1 Trade-off Theory

The Trade-off Theory, initially proposed by Modiglian and Miller (1963) and later developed by Kraus and Litzenberger (1973), suggests that firms determine their optimal capital structure by balancing the tax benefits of debt against the costs of financial distress. According to this theory, an optimal financial structure exists at the point where the marginal present value of the tax shield on additional debt equals the increase in the present value of financial distress costs (Mule & Mukras, 2015). Financial structure decisions therefore directly affect profitability through their impact on the cost of capital and the extent of tax shield benefits.

2.1.2 Agency Cost Theory

The Agency Cost Theory, pioneered by Jensen and Meckling (1976), posits that the separation of ownership and management creates conflicts of interest between principals (shareholders) and agents (managers). Debt can serve as a disciplining mechanism by imposing fixed obligations on managers and subjecting them to monitoring by

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external financiers (Jeleel & Olayiwola, 2017). However, excessive debt may also create agency costs of debt, including asset substitution and underinvestment problems, which can adversely affect firm value. Management efficiency is conceptualized within this framework as a strategic capability that moderates how effectively debt discipline translates into improved performance.

2.1.3 Pecking Order Theory

The Pecking Order Theory, proposed by Myers and Majluf (1984), suggests that firms prefer internal financing to external financing due to information asymmetry and the costs associated with external financing. When external funds are necessary, firms prefer debt to equity because of lower information costs. The theory implies that the observed financial structure reflects the cumulative outcome of past financing decisions rather than an optimal target. Management efficiency may moderate the extent to which firms can utilize internal resources effectively and manage the costs associated with external financing.

2.2 Empirical Review

Empirical evidence on the relationship between financial structure and firm profitability in African markets is extensive but inconclusive. Seyoum et al. (2020) found that financial structure had a significant negative effect on profitability measured by ROA among textile and garment factories in Ethiopia. Their study used panel data from eleven garment factories for the period 2009–2019 and employed fixed effects regression. Motanya (2019) reported that financial structure had a significant negative effect on the profitability of petroleum firms in Kenya, using data from 35 firms over the period 2007–2016. Eze and Timipere (2020) established negative relationships between several debt measures and profitability among Nigerian non-financial firms, using data from 16 firms over the period 2001–2015. Nwaolisa and Chijindu (2016) similarly found that financial structure negatively influenced profitability among listed oil and gas firms in Nigeria.

However, the regional evidence is not uniformly negative. Mule and Mukras (2015) found an insignificant relationship between long-term debt-to-equity ratio and profitability among Tanzanian processing enterprises listed on the Dar-es-Salaam Stock Exchange. Muchiri et al. (2016), using firms listed on East African securities exchanges, found that the combined financial structure had a significant negative effect on ROA but a significant positive effect on ROE. These findings demonstrate that the direction of the financial structure–performance relationship can change depending on the profitability indicator employed.

Within the Kenyan context, evidence on the financial structure–profitability relationship also remains inconsistent. Mule and Mukras (2015) found a significant negative effect of debt-to-total-assets ratio on the performance of listed firms in Kenya. Kodongo et al. (2015) found that leverage significantly and negatively affected the profitability of firms listed at the NSE. Amugada and Mwangi (2025) reported that both short-term and long-term debt had statistically significant negative effects on ROA among listed manufacturing firms. In contrast, Shikumo et al. (2020) found that long-term debt positively and significantly influenced financial growth measured in terms of earnings per share and market capitalisation. Muchiri et al. (2016) reported a positive association between capital structure and financial performance measured using Tobin's Q.

The literature on management efficiency as a moderating variable in the financial structure–profitability relationship is relatively limited. Kimanzi (2019) demonstrated that financial structure, asset structure and board demographics jointly contributed to changes in operating efficiency among housing co-operative societies in Nairobi, but did not examine management efficiency as a moderator. Mbaabu et al. (2022) found that firm size significantly moderated several relationships involving debt intensity, debt capitalization and financial flexibility, but did not examine management efficiency. Muchiri et al. (2016) demonstrated that GDP growth significantly moderated the relationship between financial structure and financial performance, while Muhammad et al. (2021) found that firm size moderated the relationship between capital structure and financial performance. These studies demonstrate that the financial structure–profitability relationship can be conditional on other firm characteristics, but the specific role of management efficiency remains insufficiently investigated.

III. METHODOLOGY

3.1 Research Design

The study adopted the positivism research philosophy, which relies on the hypothetical deductive method to verify a priori hypotheses stated quantitatively (Park et al., 2020). A longitudinal research design was employed using panel data to examine the moderating effect of management efficiency on the relationship between financial structure and profitability among non-financial firms listed on the Nairobi securities exchange. This design was appropriate because it enabled analysis of firm-level observations over time considering variations across firms and changes within firms during the study period (Zikmund et al., 2000). The study used secondary quantitative data obtained from published firm financial reports for the period 2014-2024. The longitudinal panel approach facilitated the examination

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of relationships between financial structure and profitability while assessing whether management efficiency moderates this relationship. The study also incorporated firm age and COVID-19 as firm level controls and econometric procedures to improve reliability.

3.2 Study Area

The study was conducted in Kenya, focusing on the non-financial firms listed on the Nairobi Securities Exchange. The NSE, the Kenyan's main securities exchange, provides a formal market through which listed companies access capital and investors trade securities. The NSE formed an appropriate setting for the study, because listed companies are subject to financial reporting and disclosure requirements and thus their published financial statements was readily available for longitudinal financial analysis. The study examined financing decisions outside the financial services sector, excluding financial institutions because their financial structures, regulatory requirements and operating characteristics differ substantially from those of non-financial firms. The unit of analysis comprised individual listed non-financial firms observed over the study period 2015-2024.

3.3 Target Population

The target population comprised non-financial firms listed at the NSE for the period 2015-2024. These firms constituted the relevant population because their financing decisions resource utilization and profitability were directly related to the studies objectives. Banking and insurance firms were excluded because their financing structures are governed by different regulations and they have different financial characteristics (Muhammad et al., 2021). A census approach was initially adopted and the eligible population was determined using the NSE's listing classification for the 46 non-financial firms and availability of relevant published financial information for the variables under investigation.

3.4. Sampling and sample size

The study used a firm selection criteria based on the eligibility of non-financial firms listed on NSE and the availability of relevant financial data for the study variables. Purposive sampling was applied and out of the 46 listed non-financial firms, four that did not have complete set of published financial statements over the study period were excluded. The final sample used for analysis was 42 firms after excluding four firms due to incomplete data. Deacons East Africa PLC, ARM Cement PLC, Mumias Sugar Company and Laptrust Imara I-REIT were excluded because full sets of audited financial statements could not be obtained for the study period.

3.5 Data Collection

The study relied exclusively on secondary quantitative panel data collected from published audited financial statements and annual reports of non-financial firms listed on the NSE. Relevant information was extracted for the period 2015-2024 the principal sources being the individual firm's websites, firms' annual reports and audited financial statements, and where necessary, official NSE publications and other verified corporate disclosures. A structured data collection sheet was used to record the financial information required to construct the study variables. The schedule captured the information necessary to measure profitability, financial structure management efficiency and the relevant control variables. The extracted information was checked for consistency across firms and years and discrepancies were reviewed against the original reports before the final dataset was prepared. Profitability was dependent variable and was measured using Return on Assets (ROA), calculated as net income divided by total assets. ROA was selected because it measures how well managers have used and managed the firm's assets to generate profits for stockholders (Ali & Anwar, 2021). Financial structure was the independent variable proxied by total debt divided by total debt plus equity (TD/TD+TE). This ratio captures the proportion of firm assets financed through debt, thereby reflecting overall leverage exposure (Jeleel & Olayiwola, 2017). Management efficiency was the moderating variable measured as revenue per employee, following Prasad and Ravinder (2012). This measure captures the productivity of employees in generating revenue for the firm. The control variables were firm age was measured as the number of years since incorporation and COVID-19 dummy variable, taking the value of 1 for the COVID-19 period and 0 for the pre-pandemic period, consistent with Yuen et al. (2022) and Lu and Khan (2023). Any transformations applied to variables were documented and consistently used in the relevant regression specifications.

3.6 Data Analysis

The study employed quantitative data analysis and panel-data regression techniques to investigate the relationship between financial structure and profitability and to determine whether management efficiency moderated this relationship. Data preparation and statistical analysis were conducted using Stata. The study employed the following empirical model to examine the moderating effect:

$$ROAi,t = \beta_0 + \beta_1 FinStri,t + \beta_2 MgEffi,t + \beta_3 FinStr * MgEffi,t + \beta_4 FmAgi,t + \beta_5 Di,t + \varepsilon i,t$$

Where:

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$ROAi,t$ = Return on Assets of firm i in time t

$\beta_1 FinStri,t$ = Financial Structure of firm i in time t

$\beta_2 MgEffi,t$ = Management Efficiency of firm i in time t

$\beta_3 FinStr * MgEffi,t$ = Interaction term between Financial Structure and Management Efficiency

$\beta_4 FmAgi,t$ = Age of firm i in time t

$\beta_5 Di,t$ = COVID-19 dummy variable

β_0 = Constant

β_1, β_2, β_3, β_4, and β_5 = Coefficients

$\varepsilon i,t$ = Error term

The predictor and management efficiency were mean-centred before constructing the interaction terms to reduce potential multi-collinearity between the constituent variables and their interaction terms. Descriptive statistics were computed to summarize the distribution and variation of the study variables. Measures such as the mean, standard deviation minimum and maximum values were used to examine the characteristics of the data. Diagnostic and model specification tests were conducted to inform the selection and reliability of panel regression estimates. The diagnostic tests conducted included variance inflation factor test, Jarque-Bera test for normality, Breusch-Pagan test for heteroscedasticity, Breusch-Godfrey LM test for serial correlation and Fisher-type Augmented Dickey-Fuller test for stationarity. Where the diagnostic results indicated potential violations of conventional regression assumptions, the study applied corrective procedures including appropriate variable transformations and firm-clustered standard errors to improve the robustness of statistical inference. The model selection tests conducted included Cho test and Hausman selection tests both of which pointed to the choice of fixed effects model as being appropriate. One period lag for profitability was incorporated alongside the transformed explanatory variable together with firm-clustered robust standard errors.

3.7 Ethical Considerations

The study used secondary data obtained from publicly available corporate annual reports audited financial statements and other relevant official publications. No primary data was collected from human participants, no interviews, questionnaires or experiments. The study observed the applicable institutional research requirements and obtained a clearance letter from Machakos University on 27th April, 2026, an approval letter from Muranga University of Technology office of Institutional Scientific Ethics Review Committee (MUT-ISERC) on 14th May 2025, and a research License from NACOSTI on 25th May 2026 (License No: NACOSTI/P/26/4189875)

IV. FINDINGS & DISCUSSION

4.1 Descriptive Statistics

Table 1 presents the descriptive statistics for the study variables.

Table 1

Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Median	Max
ROA	372	0.0011	0.167	-1.015	0.0163	0.466
Financial Structure	410	0.6746	1.092	0.025	0.4761	14.187
Management Efficiency	414	67.9348	315.14	5.406	12.7688	2966.69
Firm Age	420	60.64	36.35	3	58	155
COVID-19 Dummy	420	0.30	0.458	0	0	1

The findings indicate that profitability, measured using ROA, had a mean of 0.0011, indicating that on average, the non-financial firms listed at the NSE recorded slightly positive profitability during the study period. The standard deviation of 0.167 was considerably larger than the mean, indicating substantial variation in profitability across firms and years. The minimum ROA of -1.015 indicates that some firms experienced substantial losses, while the maximum of 0.466 indicates that other firms generated strong returns. Financial structure had a mean of 0.6746 and a standard deviation of 1.092, indicating that on average, non-financial firms listed at the NSE rely on debt financing for approximately 67.46% of their capital structure. The median was 0.4761, which was lower than the mean, suggesting that some firms with relatively high financial structure values increased the mean. The substantial difference between the maximum value (14.187) and the upper quartile suggests the presence of extreme observations and a positively skewed distribution. Management efficiency had a mean of 67.9348 and a median of 12.7688, indicating substantial positive skewness and the presence of extreme observations. Firm age recorded a mean of

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approximately 60.64 years, with the youngest observation corresponding to a three-year-old firm and the oldest to a 155-year-old firm.

4.2 Diagnostic Test Results

Multicollinearity: The VIF results showed a mean VIF of 1.051, with individual VIF values ranging from 1.019 to 1.130, substantially below the threshold of 10. Tolerance values ranged from 0.885 to 0.981, above the minimum threshold of 0.10. Multicollinearity was therefore not a concern. Normality: The Jarque-Bera test produced a statistic of 2,898.785 with a p-value < 0.001, indicating that the residuals were not normally distributed. Logarithmic and signed-log transformations were applied to address this violation. Heteroscedasticity: The Breusch-Pagan test produced an LM statistic of 21.084 with a p-value of 0.002, indicating the presence of heteroscedasticity. Firm-clustered robust standard errors were employed to address this issue.

Serial Correlation: The Breusch-Godfrey LM test produced a statistic of 36.775 with a p-value < 0.001, indicating the presence of first-order serial correlation. A one-period lag of profitability was incorporated to address this issue. Stationarity: The Fisher-type ADF test indicated that ROA and financial flexibility were stationary at level (I(0)), while financial structure and NDTS were non-stationary at level but became stationary after first differencing (I(1)). Model Selection: The Chow test produced an F-statistic of 6.377 with a p-value < 0.001, rejecting pooled OLS in favour of fixed effects. The Hausman test produced a chi-square statistic of 83.9186 with a p-value < 0.001, rejecting random effects in favour of fixed effects.

4.3 Regression Results

Table 2 below presents the moderated fixed-effects regression results.

Table 2

Fixed Effects Moderation Results

Variable	Coefficient	Std. Error	t-statistic	p-value
Constant	0.018424	0.260222	0.071	0.9436
Financial Structure (centred)	-0.020379	0.037695	-0.541	0.5888
Management Efficiency (centred)	0.000003665	0.000116	0.032	0.9748
FS*Management Efficiency	0.000413	0.000532	0.777	0.4373

N = 357; R^2 = 0.5769; Estimator: Firm fixed effects; Inference: Standard errors clustered by firm.

The findings indicate that the direct effect of financial structure on profitability was negative but statistically insignificant in the moderated model (β = -0.020379, p = 0.5888). The coefficient for management efficiency itself was also statistically insignificant (β = 0.000003665, p = 0.9748). The interaction term between financial structure and management efficiency (FS × Management Efficiency) had a positive coefficient (β = 0.000413, p = 0.4373). Since the p-value exceeds 0.05, the interaction is statistically insignificant, indicating that management efficiency does not significantly moderate the relationship between financial structure and profitability.

4.4 Comparison with Non-Moderated Model

Table 3 presents a comparison between the non-moderated corrected model and the moderated model.

Table 3

Comparison of Non-Moderated and Moderated Model Results

Variable	Non-Moderated Coefficient	Non-Moderated p-value	Moderated Coefficient	Moderated p-value
Financial Structure	-0.102154	0.0010	-0.020379	0.5888
Management Efficiency	—	—	0.000003665	0.9748
FS*Mgt Efficiency	—	—	0.000413	0.4373

In the non-moderated corrected model, financial structure had a negative and statistically significant effect on profitability (β = -0.102154, p = 0.0010). However, when the interaction term with management efficiency was introduced, the direct effect of financial structure became statistically insignificant (β = -0.020379, p = 0.5888). This change suggests that the inclusion of the interaction term and the centring of variables altered the estimated relationship, though the interaction itself was not statistically significant. The moderation hypothesis (H_0) was therefore not rejected.

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4.5 Discussion

The fixed-effects regression results indicate that financial structure has a negative and statistically significant effect on the profitability of non-financial firms listed on the NSE. This finding suggests that an increase in financial structure, as measured in the study, is associated with a reduction in profitability, holding other factors constant. The result implies that higher reliance on debt financing may expose firms to increased interest expenses and financial risk, potentially reducing the returns generated from their assets.

This finding is consistent with the negative relationship between financial structure and profitability reported in several previous studies conducted in African markets (Motanya, 2019; Muchiri et al. 2016; Seyoum et al., 2020; Eze and Timipere, 2020; Mule and Mukras, 2015; Kodongo et al., 2015). However, it differs from studies such as Jeleel and Olayiwola (2017) which reported positive effects of debt financing on firm performance. These differences may reflect variations in firms' operating environments, debt costs, financing policies and capacity to use borrowed funds productively. The findings indicate that financial structure has a significant negative effect on the profitability of non-financial firms listed on the Nairobi Securities Exchange (NSE), suggesting that the costs and financial risks associated with debt financing may outweigh the potential benefits of borrowing among the firms under investigation.

The finding is consistent with the arguments of Agency Cost Theory, which recognizes that although debt financing can enhance managerial discipline through contractual obligations and creditor monitoring, excessive reliance on debt may increase financial obligations, agency costs and financial distress, ultimately constraining firm profitability (Jensen & Meckling, 1976). Empirically, the finding is consistent with Muchiri et al. (2016), who established that financial structure negatively influenced return on assets among listed firms in East Africa Securities Exchanges (EASE) but in relation to ROE, financial structure had a significant positive relationship. Similarly, Motanya (2019), in a study of petroleum firms in Kenya, found that financial structure had a negative effect on profitability. The findings also agree with Seyoum et al. (2020) who found a negative effect on ROA among textile and garment factories in Ethiopia. They are also consistent with Eze and Timipere (2020) study who established a negative relationship between debt and profitability among Nigerian non-financial firms. Nwaolisa and Chijindu (2016), also reported a negative relationship between financial structure and profitability among Nigerian oil and gas firms. However, the findings differ from studies that have reported positive or mixed relationships between financial structure and firm performance. For instance, Shikumo et al. (2020) established that financial structure significantly influenced firm profitability, although the direction of the relationship was not consistently established. Similarly, Jeleel and Olayiwola, (2017) study among listed Nigerian chemicals and paints firms found that equity financing positively affected return on assets, while debt financing had a negative but statistically insignificant effect.

The findings further established that management efficiency does not significantly moderate the relationship between financial structure and profitability among non-financial firms listed on the NSE. This finding provides a different perspective from the proposition of Agency Cost Theory, particularly the argument that effective managerial monitoring and control can enhance the performance implications of financing decisions (Jensen & Meckling, 1976). The theory suggests that debt may serve as a disciplinary mechanism by reducing managerial discretion over free cash flows and strengthening accountability to creditors. However, the current findings suggest that management efficiency does not significantly influence how financial structure translates into profitability. The study by Rozzani and Rahman, (2013) found that management efficiency was the component of CAMELS rating that achieved an overall best rating in performance evaluation of banks in Malaysia. Similarly Prasad and Ravinder (2012) study showed that management efficiency was a key contributor to bank performance among the nationalized banks in India. However, both studies were focusing on the direct relationship of management efficiency and performance, unlike in the current study which assessed the moderation role of management efficiency. Additionally, the finding of the current study differ from those of Kimanzi (2019), who established that financial structure, asset structure and board demographics jointly contributed significantly to operating efficiency. Although this study demonstrates the importance of financial and governance-related factors in organizational efficiency, it does not directly establish that management efficiency moderates the relationship between financial structure and profitability. Therefore, the current study extends this discussion by examining the interaction between financial structure and management efficiency in explaining profitability rather than considering their individual or joint contributions to organizational efficiency.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The study examined the moderating effect of management efficiency on the relationship between financial structure and profitability of non-financial firms listed at the NSE over the period 2015–2024. The findings indicate that financial structure has a negative and statistically significant effect on profitability in the non-moderated model. However, management efficiency does not significantly moderate this relationship, as the interaction term between financial structure and management efficiency was statistically insignificant.

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The study concludes that the adverse effect of financial structure on profitability operates independently of management efficiency levels. This suggests that the financial burden imposed by excessive debt is a structural constraint that cannot be readily overcome through managerial skill alone. The findings therefore support the view that financial structure and management efficiency influence profitability through different channels, and that the relationship between financial structure and profitability is relatively robust across different levels of management efficiency.

5.2 Recommendations

The outcome of the research analysis undertaken in this study justifies the following manifold recommendations; To Management of Listed Non-Financial Firms: Management should maintain prudent financial structures by aligning borrowing and other financial commitments with sustainable operating cash flows. Before increasing leverage, firms should evaluate the expected return on the financed investment, the cost of borrowing, refinancing exposure and the effect of additional commitments on financial flexibility. Debt should be directed toward investments capable of generating returns sufficient to compensate for the associated financing cost and risk. To Boards of Directors**:** Boards should strengthen oversight of financing policy by requiring management to justify major borrowing decisions in terms of expected cash flows, debt-servicing capacity and the effect on future financial flexibility. Further, board finance and audit committees should receive regular information on leverage trends, liquidity headroom, maturity concentrations and covenant exposure.

To the Capital Markets Authority and Nairobi Securities Exchange: The CMA and NSE should continue promoting transparent and comparable disclosure of debt commitments, liquidity positions and major capital investment requirements. Improved disclosure would assist investors in assessing whether listed firms maintain sustainable financial structures and whether increases in asset investment are accompanied by improvements in profitability. Future Research: Future research may examine other potential moderating variables such as corporate governance structures, firm size, or industry characteristics. Researchers may also consider alternative measures of profitability such as return on investment or Rate of Return on Capital Employed (ROCE), and extend the analysis to unlisted non-financial firms or to securities markets in other African contextual setups.

Declaration of Interest

The authors declare that they do not have any known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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