

RESEARCH ARTICLE

Financial Flexibility and Profitability of Non-Financial Firms Listed at the Nairobi Securities Exchange, Kenya**Naomi Mbithe Mwewa¹ ✉, Prof. James Ndirangu Ndegwa (PhD)² and Dr. James Murunga (PhD)³**¹ *Department of Business and Finance, School of Business and Economics, Machakos University*E-mail: naomimunywoki@mksu.ac.ke ORCID iD: 0009-0004-5565-0809² *Department of Accounting and Finance, Cooperative University of Kenya*E-mail: jndegwa@cuk.ac.ke ORCID iD: 0000-0003-4989-6293³ *Department of Economics, School of Business and Economics, Machakos University*E-mail: murunga.james@mksu.ac.ke ORCID iD: 0000-0003-2929-5909**Corresponding Author:** Naomi Mbithe Munywoki, **E-mail:** naomimunywoki@mksu.ac.ke

ABSTRACT

Non-financial firms depicts positive and pivotal social economic contributions to the economy in terms of creation of employment, poverty reduction and growth and development of the country's gross domestic product. However, the financial flexibility causal effect relationship with their profitability is still having controversial debate amongst scholars resulting to its direct effect on profitability being limited, particularly within African frontier capital markets. This study examined the effect of financial flexibility on the profitability of non-financial firms listed at the Nairobi Securities Exchange (NSE), Kenya, for a time horizon between 2015–2024. The study adopted a longitudinal panel research design and utilized firm-level secondary data from 42 non-financial firms in Kenya. Profitability was gauged using Return on Assets (ROA), while financial flexibility was operationalized as firm cash ratio minus industry cash ratio plus the maximum of industry debt ratio minus firm debt ratio or zero. Panel econometric techniques were employed, with diagnostic tests for normality, multicollinearity, heteroscedasticity, serial correlation and stationarity conducted prior to estimation. The Chow and Hausman tests supported a fixed-effects specification with firm-clustered robust standard errors. The findings indicate that financial flexibility had a direct effect on profitability which was statistically significant. The study concluded that firms maintaining greater financial flexibility are better positioned to respond to financing requirements and investment opportunities, thereby enhancing profitability. The study recommends that managers of non-financial firms listed at the NSE preserve adequate financial flexibility through disciplined liquidity planning, diversified financing sources and maintenance of unused debt capacity. Policymakers and capital-market regulators should promote diversified financing alternatives and improved disclosure of financial risks to strengthen firm resilience and profitability.

KEYWORDS

Financial flexibility; profitability; non-financial firms; Nairobi Securities Exchange; panel data; Kenya

ARTICLE INFORMATION

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1. Introduction

Every firm requires finance for its operations and growth, and the financing decisions made by management have profound implications for firm performance and sustainability (Seyoum et al., 2020). Among the critical dimensions of corporate financial decision-making is financial flexibility, which refers to the ability of a firm to obtain necessary funds quickly and at low cost to finance positive Net Present Value projects and to bear adverse shocks to cash flows (Mahmood et al., 2018). Financial flexibility has increasingly been recognized as a central consideration in corporate financial policy, particularly in emerging and frontier markets characterized by financing constraints, economic uncertainty and changing business conditions.

The Nairobi Securities Exchange (NSE), Kenya's principal 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 Scan group, Kakuzi, Sameer Africa and Express Kenya (Central Bank of Kenya, 2023). This persistent decline in profitability has raised concerns among investors, regulators and policymakers regarding the financial strategies adopted by listed firms.

Financial flexibility theory posits that firms maintain excess liquidity and unused debt capacity to respond to investment opportunities and financial shocks (Gamba & Triantis, 2007; Byoun, 2021). Theoretically, financially flexible firms can avoid financial distress when faced with negative shocks and can fund investment when profitable opportunities arise (Billett et al., 2021). However, empirical evidence on the direct effect of financial flexibility on profitability remains limited and fragmented, with most studies focusing on firm value, financing decisions or crisis resilience rather than accounting-based profitability measures. Furthermore, studies that have examined financial flexibility within the Kenyan context have reported inconsistent findings. Ogutu and Njuguna (2022) found a significant positive relationship between financial flexibility and firm value among non-financial firms listed at the NSE, while Ouma (2022) established that financial flexibility had a negative and significant moderating effect on the relationship between working capital financing and Return on Assets.

This study therefore sought to examine the effect of financial flexibility on the profitability of non-financial firms listed at the NSE over the period 2015-2024. The specific objective was to investigate the effect of financial flexibility on the profitability of non-financial firms listed at the NSE. The study contributes to the corporate finance literature by providing contemporary evidence from an African frontier market and by focusing specifically on profitability measured using Return on Assets.

2. Literature review

2.1 Theoretical review

This study is anchored on three complementary theories that explain the relationship between financial flexibility and firm profitability: the Trade-off Theory, the Pecking Order Theory and the Signaling Theory.

The Pecking Order Theory, proposed by Myers and Majluf (1984), posits 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 firms with greater financial flexibility, particularly those with higher cash holdings and unused debt capacity, are better positioned to finance investments internally and avoid the adverse selection costs associated with external financing. This enhances profitability by reducing financing costs and preserving value.

The Trade-off Theory, initially proposed by Modigliani 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. Financial flexibility is central to this framework because firms with greater flexibility can maintain lower leverage ratios and preserve debt capacity, thereby reducing the probability of financial distress while retaining the option to issue debt when favorable conditions arise (DeAngelo & DeAngelo, 2007). This balancing act directly influences profitability by minimizing financing costs and preserving financial resources for productive investment.

The Signaling Theory, developed by Spence (1973) and extended by Ross (1977), explains how financing decisions communicate information about a firm's quality and future prospects to external stakeholders. Financial flexibility can serve as a signal of financial strength and resilience, enabling firms to communicate positive expectations to investors and creditors. Firms that maintain adequate liquidity and borrowing capacity are perceived as financially stronger, which may reduce the cost of capital and enhance profitability (Berger, 2019).

2.2 Empirical literature review

Byoun (2021) investigated financial flexibility demand and corporate financial decisions using 16,462 US non-financial firms over the period 1972-2016. The study developed and tested the Financial Flexibility Demand Stage Hypothesis (FFDSH) and found that financial flexibility-building firms have lower leverage ratios and larger cash holdings, while financial flexibility-utilizing firms have the highest leverage ratios and lowest cash holdings. The findings established that financial flexibility significantly affects corporate financial decisions, though the study focused on financing decisions rather than profitability.

Bilyay-Erdogan (2020) examined whether financial flexibility enhances firm value using firms from developed and emerging European countries. The study analyzed 4,334 firms from 15 developed countries and 1,436 firms from six emerging countries over the period 2000-2016. Financially flexible firms were identified according to their ability to maintain leverage below predicted levels over successive years. The findings showed that financial flexibility positively affected firm value, demonstrating that maintaining unused debt capacity provides firms with valuable financing opportunities.

Fahlenbrach et al., (2021) investigated the value of financial flexibility during the COVID-19 crisis using U.S. firms. The findings showed that firms with high financial flexibility experienced a stock-price decline that was 26% lower than firms with low financial

flexibility, after accounting for industry effects. The evidence demonstrated that financial flexibility provides a significant buffer against unexpected economic and financial shocks.

Chang and Wu, (2022) investigated the relationship between financial flexibility and firm performance among semiconductor companies listed on the Taiwan Stock Exchange during the COVID-19 period. Using quantile regression, the study found an inverted U-shaped relationship between financial flexibility and firm performance, implying that financial flexibility enhances performance up to an optimal level, beyond which additional flexibility may provide diminishing benefits.

Cai and Wu, (2020) examined the influence of financial flexibility on future profitability using non-ferrous metal companies listed on the Shanghai and Shenzhen stock exchanges over the period 2013-2017. Using principal component factor analysis, the study found that financial flexibility has a positive and significant effect on profitability.

Jaworski and Czerwonka, (2026) investigated the effect of financial flexibility on profitability and working capital management in small and medium enterprises in Central and Eastern Europe. Using data from nine countries over the period 2014-2022 and employing OLS, fixed effects and random effects regression analysis, the study found that financial flexibility has a positive and significant effect on profitability.

Within the African context, Chukwu et al., (2019) examined whether financial flexibility enhances the profitability of money deposit banks in Nigeria. The study found that financial flexibility positively influences bank profitability, providing evidence from the Nigerian banking sector.

In Kenya, Ogutu and Njuguna (2022) examined the influence of financial flexibility on the firm value of non-financial firms listed at the NSE over the period 2011-2019. Using a descriptive longitudinal research design and panel multiple regression analysis on 37 non-financial firms, the study found that financial flexibility had a significant positive relationship with firm value. The study used cash holdings, debt capacity and financing cost restrictions as measures of financial flexibility.

Mbaabu et al., (2022) examined financial leverage and firm performance among listed non-financial firms at the NSE using data covering 2013-2018. The study found that financial flexibility had a positive relationship with ROA and ROE, although its relationship with ROA was statistically insignificant. Firm size significantly moderated several of the relationships involving financial flexibility.

Ouma (2022) examined working capital financing, financial flexibility and financial performance of non-financial firms listed at the NSE. Using 31 non-financial firms and 155 firm-year observations, the study found a significant negative relationship between working capital financing and ROA and established that financial flexibility had a significant negative moderating effect on this relationship.

2.3 Research gap

The reviewed literature reveals that while financial flexibility has been extensively studied in developed markets, empirical evidence from African frontier markets remains limited and fragmented. Most existing studies have focused on financial flexibility in relation to firm value, financing decisions or crisis resilience rather than accounting profitability. Furthermore, the Kenyan evidence on financial flexibility is comparatively recent but remains limited, with studies reporting inconsistent findings. The present study addresses this gap by examining the direct effect of financial flexibility on accounting profitability measured using Return on Assets among non-financial firms listed at the NSE over the period 2015-2024, a period that encompasses significant economic disruptions including the COVID-19 pandemic.

2.4 Objective of the study

Objective: The objective of the study was to investigate the effect of Financial Flexibility on the profitability of non-financial firms listed in the Nairobi Securities Exchange.

The objective of this study was to investigate the effects of Financial Flexibility on the profitability of non-financial firms listed on the Nairobi Securities Exchange.

H₀: Financial Flexibility does not affect profitability

H₁: Financial Flexibility has an effect on profitability

2.4.1 Conceptual framework

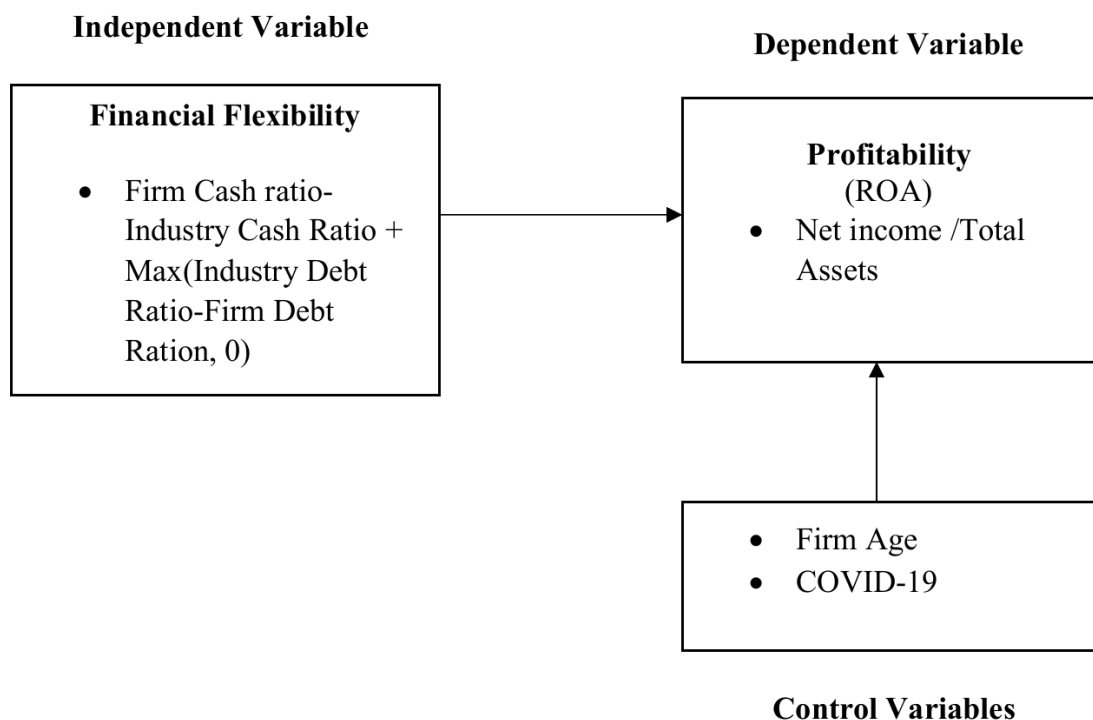


Figure 1: Conceptual Framework

3. Methodology

3.1 Research philosophy and design

The study adopted 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 because the study variables change over time, and this design allowed the collection of data on the same study variables repeatedly over a long period to establish trends and relationships (Zikmund et al., 2013).

3.2 Study population and sample

The target population comprised non-financial firms listed at the NSE. The study excluded banking and insurance firms because their financial structures are governed by different regulations and they have different financial characteristics (Muhammad et al., 2021). A census approach was initially adopted for the 46 non-financial firms, but the final sample used for analysis was 42 firms after excluding four firms due to incomplete data. Deacons East Africa PLC was excluded because it did not release publicly available audited 2019 financial statements following its placement under administration. ARM Cement PLC was excluded because it did not have a publicly stand-alone annual report following its voluntary bankruptcy and administration. Mumias Sugar Company was excluded because it did not publish official standard financial statements for 2020 following its placement under receivership. Laptrust Imara I-REIT was excluded due to incomplete data for the study period.

3.3 Data collection procedure

The study used solely secondary panel data obtained from audited financial statements of the sampled firms over the period 2015-2024. Data was collected from the NSE, individual firm websites and annual reports. Clearance and ethical approval were obtained from Machakos University, and a research license was granted by NACOSTI.

3.4 Variable measurement

Dependent Variable: Profitability 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 (Rafiuddin, 2015; Ali & Anwar, 2021).

Independent Variable: Financial flexibility was measured as Firm Cash Ratio minus Industry Cash Ratio plus Max(Industry Debt Ratio minus Firm Debt Ratio, 0). This measure captures both cash flexibility and liability flexibility, consistent with Wel, Ding and Xu (2017) and Bilyay-Erdogan (2020).

Control Variables: Firm age was measured as the number of years since incorporation. A COVID-19 dummy variable was incorporated, taking the value of 1 for the COVID-19 period and 0 for the pre-pandemic period, consistent with Yuen, Ngo, Le and Ho (2022) and Lu and Khan (2023).

3.5 Model specification

The study employed the following empirical model:

$$ROA_{i,t} = \beta_0 + \beta_1 FinFlexi_{i,t} + \beta_2 FmAg_{i,t} + \beta_3 Di_{i,t} + \varepsilon_{i,t}$$

Where:

$ROA_{i,t}$ = Return on Assets of firm i in time t

$\beta_1 FinFlexi_{i,t}$ = Financial Flexibility of firm i in time t

$\beta_2 FmAg_{i,t}$ = Age of firm i in time t

$\beta_3 Di_{i,t}$ = COVID-19 dummy variable

β_0 = Constant

$\beta_1, \beta_2, \beta_3$ = Coefficients

$\varepsilon_{i,t}$ = Error term

3.6 Diagnostic tests

Diagnostic tests were conducted to establish whether the data satisfied the assumptions underlying panel regression models. The Variance Inflation Factor (VIF) was used to test for multicollinearity. The Jarque-Bera test was used to test for normality. The Breusch-Pagan test was used to test for heteroscedasticity. The Breusch-Godfrey LM test was used to test for serial correlation. The Fisher-type Augmented Dickey-Fuller test was used to test for stationarity. The Chow test was used to select between pooled OLS and fixed effects, while the Hausman test was used to select between fixed effects and random effects.

4. Results and 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	Q1	Median	Q3	Maxim
ROA	372	0.001	0.167	-1.015	-0.04	0.016	0.064	0.466
Financial Flexibility	407	0.079	0.196	-0.37	0	0	0.1	2.58
Firm Age	420	60.643	36.347	3	25.75	58	83	155
COVID - Dummy	420	0.3	0.458804	0	0	0	1	1

Source: Research Data (2026)

The results indicated 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 flexibility had a mean of 0.0792 and a standard deviation of 0.196. The median and first quartile were both zero, while the maximum was 2.580, indicating substantial heterogeneity in the financial flexibility positions of the firms. The positive mean indicates that, on average, the NSE-listed non-financial firms maintain some degree of financial flexibility, though the magnitude is relatively modest.

Firm age recorded a mean of approximately 60.64 years, with the youngest observation corresponding to a three-year-old firm and the oldest to a 155-year-old firm, indicating that the NSE-listed non-financial firms represent a wide range of organisational maturity.

4.2 Correlation analysis

Table 2 presents the Pearson correlation coefficients among the study variables.

Table 2: Correlation Matrix

Variable	ROA	FF	AGE	COVID
ROA	1			
Financial Flexibility	0.025	1		
Firm Age	0.163	0.147	1	
COVID Dummy	-0.017	0.084	0.063	1

Source: Research Data (2026)

The results indicate that ROA has a weak positive correlation with financial flexibility ($r = 0.025$), suggesting a minimal bivariate association. Firm age is positively associated with ROA ($r = 0.163$), while the COVID-19 dummy has a very weak negative correlation with ROA ($r = -0.017$). The correlations among the explanatory variables are generally weak, providing preliminary evidence against serious multicollinearity.

4.3 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 ($I(0)$).

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. The fixed-effects estimator was consequently selected.

4.4 Regression results and findings

Table 3 presents the final transformed and lagged fixed-effects regression results.

Table 3: Final Transformed and Lagged Fixed-Effects Regression Results.

Variable	Coefficient	Std. Error	t-statistic	p-value
Constant	-0.401637	0.295673	-1.358	0.1743
Lagged transformed ROA	0.031270	0.081696	0.383	0.7019
Signed-log Financial Flexibility	0.169435	0.071412	2.373	0.0177
Firm Age	0.002861	0.003965	0.722	0.4705
COVID-19 Dummy	-0.015033	0.016688	-0.901	0.3677
Source: Research Data (2026)		Estimator: Firm fixed effects.		
N = 317; R² = 0.6811		Inference: Standard errors clustered by firm.		

Source: Research Data (2026)

The results indicate that financial flexibility has a positive and statistically significant effect on profitability ($\beta = 0.169435$, $p = 0.0177$). The coefficient is significant at the 5% level, providing sufficient evidence to reject the null hypothesis that financial flexibility has no significant effect on profitability. The positive coefficient indicates that an increase in financial flexibility is associated with an increase in profitability, holding other factors constant.

The lagged profitability coefficient was positive but statistically insignificant ($\beta = 0.031270$, $p = 0.7019$). Firm age had a positive but statistically insignificant relationship with profitability ($\beta = 0.002861$, $p = 0.4705$). The COVID-19 dummy had a negative but insignificant relationship with profitability ($\beta = -0.015033$, $p = 0.3677$).

The corrected model had an R-squared of 0.6811, indicating that the explanatory variables jointly accounted for approximately 68.11% of the variation in profitability among non-financial firms listed at the NSE.

5. Discussion of findings

The finding that financial flexibility has a positive and statistically significant effect on profitability is consistent with several previous studies. Ogutu and Njuguna, (2022) found a significant positive relationship between financial flexibility and firm value among non-financial firms listed at the NSE. Byoun, (2021) demonstrated that firms adequately managing financial flexibility vary in their leverage and cash-holding positions, with financially flexible firms having lower leverage and larger cash holdings. Bilyay-Erdogan, (2020) found that financial flexibility positively and significantly affects firm value in a comparative study between developed and emerging countries. Cai and Wu (2020) found that financial flexibility has a positive and significant effect on profitability among Chinese non-ferrous metal companies. Jaworski and Czerwonka (2026) found that financial flexibility has a positive and significant effect on profitability in Central and Eastern European SMEs.

The positive effect of financial flexibility on profitability can be explained by the ability of financially flexible firms to respond quickly to investment opportunities, unexpected cash-flow requirements and changing financing conditions. Financial flexibility enables firms to avoid financial distress when faced with negative shocks and to fund investment when profitable opportunities arise (Gamba & Triantis, 2007). The finding suggests that the mere availability of financing capacity may be more beneficial than excessive actual reliance on debt financing. In other words, maintaining borrowing capacity and liquidity can provide strategic firm benefits without necessarily exposing it to the full costs associated with high leverage.

The finding is consistent with the Pecking Order Theory, which suggests that firms prefer internal financing to external financing due to information asymmetry and the costs associated with external financing (Myers & Majluf, 1984). Financially flexible firms with higher cash holdings can finance investments internally and avoid the adverse selection costs associated with external financing, thereby enhancing profitability. The finding also supports the Trade-off Theory, which suggests that firms with greater flexibility can maintain lower leverage ratios and preserve debt capacity, thereby reducing the probability of financial distress while retaining the option to issue debt when favourable conditions arise (DeAngelo & DeAngelo, 2007).

The finding also supports the Signaling Theory, which suggests that financing decisions communicate information about a firm's quality and future prospects to external stakeholders (Spence, 1973; Ross, 1977). Financial flexibility can serve as a signal of financial strength and resilience, enabling firms to communicate positive expectations to investors and creditors. Firms that maintain adequate liquidity and borrowing capacity are perceived as financially stronger, which may reduce the cost of capital and enhance profitability.

6. Implication to research and practice

The study offered valuable implications for regulators and policymakers, including The Capital Markets Authority and the Nairobi Securities Exchange. Understanding how financing decisions affect profitability enhances regulatory capacity to promote financial stability, optimal leverage practices, and sustainable corporate performance. The findings may inform capital market reforms, disclosure requirements, and policies aimed at strengthening firm resilience. The study contributed to Kenya's broader economic agenda by providing evidence that supports improved corporate financing efficiency, which is critical for economic growth and investment attraction.

From a theoretical point of view, the finding provides empirical support for the predictions of both the Trade-off Theory and the Pecking Order Theory, which suggest that firms must carefully balance the benefits and costs of external financing. The results indicate that for NSE-listed non-financial firms, the costs associated with debt financing, including interest obligations, financial distress risks, and agency costs, tend to outweigh the potential benefits, such as tax shields and discipline imposed by creditors. This finding aligns with a growing body of evidence from other African markets, including Ethiopia, Nigeria, and East Africa, suggesting that the adverse effect of excessive debt financing on profitability is a relatively robust feature of emerging capital markets where financing costs are high and capital markets remain less developed.

The practical implication is that financial managers of non-financial firms should exercise considerable caution in their financing decisions, recognizing that the availability of funds is not the sole consideration. Rather, the cost of capital, the risk profile of the firm, and the productive utilization of borrowed funds must be carefully evaluated. The persistence of this negative relationship across multiple model specifications strengthens the conclusion that an inappropriate financial structure can become a binding constraint on profitability.

7. Conclusions and recommendations

7.1 Conclusions

The study concludes that financial flexibility has a positive and statistically significant effect on the profitability of non-financial firms listed at the NSE. The findings indicate that firms possessing greater financial flexibility are better positioned to achieve enhanced profitability. Financial flexibility enables firms to respond to changing business conditions, accommodate unexpected financial requirements and take advantage of profitable investment opportunities without necessarily relying excessively on costly external financing.

The positive and statistically significant finding suggests that the ability to maintain financial capacity and preserve access to financing is an important strategic resource for non-financial firms listed at the NSE. The findings therefore suggest that profitability is influenced not only by the amount and structure of financing employed by a firm but also by its ability to preserve financial capacity for future contingencies and investment opportunities.

7.2 Recommendations

To Management of Listed Non-Financial Firms: Management should deliberately preserve financial flexibility through adequate liquidity planning, diversified financing sources, unused committed facilities where economically justified and disciplined management of existing debt capacity. Financial flexibility should be incorporated into strategic financial planning as a reserve that enables the firm to respond to shocks and investment opportunities rather than being viewed as inefficiently unused capacity. Firms should establish internal leverage limits and debt-service monitoring mechanisms that reflect their industry risk and cash-flow volatility.

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. 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, major capital investments and workforce information. 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 productivity.

To Investors and Financial Analysts: Investors and financial analysts should interpret leverage together with financial flexibility. A firm with rising debt may appear to be expanding, but the profitability implications depend on financing costs and the returns generated by the financed assets. Analysts should incorporate indicators such as debt burden, liquidity headroom and asset productivity when evaluating listed non-financial firms.

For Future Research: Future research may extend the analysis to unlisted non-financial firms or to securities markets in other African countries. Comparative evidence would establish whether the positive financial-flexibility effect is specific to the Kenyan listed-firm environment or is more widely observed across different institutional settings. Researchers may also consider other measures of firm performance, including return on equity, operating margin or market-based performance.

7.3 Limitations of the study

The study relied primarily on secondary financial information for listed firms. Complete annual employee counts were not available for every firm-year. The study is limited to non-financial firms listed at the NSE and therefore does not directly represent financial institutions, private firms or firms operating in other securities markets. The study focused on accounting profitability measured using ROA, which does not capture all aspects of shareholder value, market expectations or long-term strategic performance. The study covered the period 2015–2024, which includes the COVID-19 pandemic period, and the relationships observed during this period may differ from those in normal times. The study used a relatively short panel with ten years of data for each firm, which may limit the ability to identify long-run relationships.

8. Declarations

8.1 Ethics approval

Clearance was received from Machakos University, and Ethical approval and research authorization was obtained from the National Commission for Science, Technology and Innovation (NACOSTI).

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Conflicts of Interest: The authors declare no conflict of interest.

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References

- Ali, J. B., & Anwar, G. (2021). Capital structure and firm profitability in developing countries. *GOYA*, 68(374), 163–174.
- Berger, J. (2019). Signaling can increase consumers' willingness to pay for green products. *Journal of Consumer Behaviour*, 18(3), 233–246.
- Billett, M. T., Hribar, P., & Liu, Y. (2021). Financial flexibility and the cost of debt. *Journal of Financial and Quantitative Analysis*, 56(7), 2413–2445.
- Bilyay-Erdogan, S. (2020). Does financial flexibility enhance firm value? A comparative study between developed and emerging countries. *Business: Theory and Practice*, 21(2), 1–14.

- Byoun, S. (2021). Financial flexibility demand and corporate financial decisions. *The Financial Review*, 56(3), 481–509.
- Cai, Y., & Wu, Y. (2020). The influence of financial flexibility on enterprise's profitability in the future. *Advances in Social Science, Education and Humanities Research*, 476, 1–6.
- Capital Markets Authority. (2022). *Annual report and financial statements 2021–2022*. Nairobi: CMA.
- Central Bank of Kenya. (2023). *Kenya financial sector stability report 2023 (Annual No. 14)*. Nairobi: CBK.
- Chang, C. C., & Wu, W. (2022). Financial flexibility and firm performance: Evidence from semiconductor companies in Taiwan during COVID-19. *Journal of Risk and Financial Management*, 15(3), 1–18.
- Chukwu, I. B., Agbaeze, K. E., Offor, O. F., & Udoh, B. E. (2019). Does financial flexibility enhance the profitability of money deposit banks? Evidence from Nigeria. *International Journal of Mechanical Engineering and Technology*, 10(7), 96–103.
- DeAngelo, H., & DeAngelo, L. (2007). *Capital structure, payout policy and financial flexibility*. Working Paper, University of Southern California.
- Fahlenbrach, R., Rageth, K., & Stulz, R. M. (2021). How valuable is financial flexibility when revenue stops? Evidence from the COVID-19 crisis. *The Review of Financial Studies*, 34(11), 5474–5521.
- Gamba, A., & Triantis, A. (2007). The value of financial flexibility. *Journal of Finance*, 63(5), 2263–2296.
- Jaworski, J., & Czerwonka, L. (2026). Does financial flexibility affect profitability and working capital management in small and medium enterprises: Evidence from Central and Eastern Europe. *Central European Management Journal*, 34(1), 1–20.
- Kraus, A., & Litzenberger, R. H. (1973). A state preference model of optimal financial leverage. *The Journal of Finance*, 28(4), 911–922.
- Lu, J., & Khan, S. (2023). Are sustainable firms more profitable during COVID-19? Recent global evidence of firms in developed and emerging economies. *Asian Review of Accounting*, 23(1), 1–25.
- Mahmood, Y., Rashid, A., Rizwan, F., & Ahmad, M. (2018). The role of macroeconomic and institutional factors in creating corporate financial flexibility. *Management Decision*, 59(4), 732–746.
- Mbaabu, K., Kinyua, G., & Mwangi, M. (2022). Financial leverage and firm performance among listed non-financial firms at the Nairobi Securities Exchange. *International Journal of Finance and Accounting*, 7(2), 45–62.
- Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *The American Economic Review*, 53(3), 433–443.
- Muhammad, M., Yet, C. E., Tahir, M., & Nasir, A. M. (2021). Capital structure of family firms: The effect of debt and equity market timing. *Journal of Family Business Management*, 11(1), 1–18.
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13(2), 187–221.
- Ogut, V. O., & Njuguna, P. (2022). The influence of financial flexibility on firm value of non-financial firms listed on the Nairobi Securities Exchange. *KCA Journal of Business Management*, 13(1), 1–18.
- Ouma, V. (2022). *Working capital, financial flexibility and financial performance of non-financial firms listed in Nairobi Securities Exchange (Master's thesis)*. University of Nairobi.
- Park, Y., Konge, L., & Artino, A. (2020). The positivism paradigm of research. *Academic Medicine*, 95(5), 690–693.
- Rafiuddin, A. (2015). Determinants of profitability: Evidence from listed companies in Sri Lanka. *Journal of Finance and Accounting*, 3(4), 89–95.
- Ross, S. (1977). The determination of financial structure: The incentive-signalling approach. *The Bell Journal of Economics*, 8(1), 23–40.
- Seyoum, A., Teklu, T., & Tassew, W. (2020). The effects of financial structure decisions on firms' profitability: Evidence from selected textile and garment factories in Ethiopia. *Journal of International Trade, Logistics and Law*, 6(1), 90–99.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- Wel, Y., Ding, Y., & Xu, H. (2017). Financial flexibility, operational cash flow and R&D investment. *Advances in Social Science, Education and Humanities Research*, 72, 585–588.
- Yuen, M. K., Ngo, T., Le, T. D. Q., & Ho, T. H. (2022). The environment, social and governance (ESG) activities and profitability under COVID-19: Evidence from the global banking sector. *Journal of Economics and Development*, 24(4), 57–85.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods (9th ed.)*. Mason, OH: South-Western Cengage Learning.