

Long-Term Debt Financing and Financial Performance of Manufacturing and Allied Firms Listed on the Nairobi Securities Exchange, Kenya

Emmanuel Mugendi Kithure^{1*}, James Nyamu¹, Collins Sitenei¹

¹Tharaka University, P. O. Box 193-60215, Marimanti, Kenya

*Corresponding author email: Emmanuel.kithure@tharaka.ac.ke

Accepted: 12 September 2026 || Published: 24 September 2026

Abstract

The manufacturing sector is a key pillar of Kenya's Vision 2030 and the Bottom-Up Economic Transformation Agenda, yet manufacturing and allied firms listed on the Nairobi Securities Exchange (NSE) continue to face declining profitability, stagnant growth, and rising debt levels. This study established the effect of long-term debt financing (LTDF) on the financial performance of manufacturing and allied firms listed on the NSE. The study was anchored in trade-off, pecking order, and agency theories and employed an explanatory, longitudinal research design using a quantitative panel data approach. A census of manufacturing and allied firms yielded a strongly balanced panel of nine firms with 99 firm-year observations, using secondary data from audited financial statements for 2015 to 2025. We measured long-term debt financing using the long-term debt ratio and financial performance using return on assets (ROA). Data were analysed in STATA (version 19) using descriptive statistics, Pearson correlation, and fixed-effects panel regression with firm-clustered robust standard errors. The study found that long-term debt financing had a negative and statistically significant effect on financial performance ($\beta = -2.389$, $p < .001$), with the model explaining 89.8% of the within-firm variation in ROA. The study concluded that overreliance on long-term borrowing undermines the profitability of listed manufacturing firms, as the interest and financial-distress costs of high leverage outweigh its benefits. It recommends that finance managers exercise restraint in using long-term debt, reserving borrowing for productive investments that generate returns above its cost, and that regulators monitor rising leverage as an early warning of financial distress.

Keywords: Long-Term Debt Financing, Leverage, Financial Performance, Return on Assets, Manufacturing Firms, Nairobi Securities Exchange

How to Cite: Kithure, E. M., Nyamu, J., & Sitenei, C. (2026). Long-Term Debt Financing and Financial Performance of Manufacturing and Allied Firms Listed on the Nairobi Securities Exchange, Kenya. *Journal of Finance and Accounting*, 6(9), 39-49.

1. Introduction

The manufacturing sector is a key component of Kenya's Vision 2030, the Big Four Agenda, and the Bottom-Up Economic Transformation Agenda, and is expected to drive industrialization, job creation, and economic growth. Across advanced and emerging economies, manufacturing drives industrialization, employment creation, technological innovation, and value addition. In Kenya, however, manufacturing and allied firms listed on

the Nairobi Securities Exchange (NSE) continue to record moderate yet fragile financial performance, and Amugada and Mwangi (2025) observed that these firms still face growing debt levels, slow growth, and diminishing profitability. Understanding how their financing decisions, and in particular their use of long-term debt, shape performance is therefore of considerable practical importance.

Long-term debt financing is a funding arrangement in which firms obtain borrowed capital that is repayable over a period exceeding one year through instruments such as corporate bonds, term loans, and mortgage-backed facilities (Weygandt et al., 2022). It is assessed using leverage ratios obtained from the firm's balance sheet, which show the degree to which a firm's assets are funded by debt obligations with maturities exceeding one year (Ratten, 2025), and among Kenyan manufacturing and allied firms, it is commonly calculated as the ratio of long-term debt to total assets. The effect of long-term debt on performance, however, remains contested. In Bangladesh, Rahman et al. (2020) reported that long-term debt exerted a significant negative influence on return on assets (ROA). Okafor et al. (2024), by contrast, found that listed non-financial firms in Nigeria recorded a positive impact on return on equity but an insignificant effect on ROA. In Ghana, Mensah and Agyei (2023) found that long-term debt financing improves performance when firms maintain moderate leverage, but that high long-term debt increases bankruptcy risk.

Evidence from Kenya is similarly mixed. Mwititi and Gitagia (2023) reported that long-term debt demonstrated a significant positive effect on financial performance, indicating that a higher proportion of long-term liabilities relative to total assets can boost ROA, particularly when firms implement stringent liquidity management practices, and other studies suggest that well-managed long-term borrowing contributes to value creation when directed toward productive strategic investments (Kimani & Aduda, 2023; Wanjiru & Mwangi, 2024). By contrast, Otieno et al. (2022) indicated positive effects while Amugada and Mwangi (2025) reported negative relationships, and limited attention has been given to the influence of firm size. This study therefore established the effect of long-term debt financing on the financial performance of manufacturing and allied firms listed on the NSE.

1.1 Problem Statement

The manufacturing sector is expected to drive industrialization, job creation, and economic growth under Kenya's Vision 2030 and the Bottom-Up Economic Transformation Agenda. Yet Amugada and Mwangi (2025) observed that manufacturing and allied firms listed on the NSE still face growing debt levels, slow growth, and diminishing profitability. Aishwarya et al. (2022) noted that although substantial research exists on the connection between capital structure and financial performance, most earlier studies examined the direct effects of debt or equity financing and often produced inconsistent findings, and most were conducted in developed nations. Importantly, recent evidence on the specific effect of long-term debt financing on the financial performance of manufacturing and allied firms listed on the NSE remains limited (Ndung'u & Kimanzi, 2025). This study addressed this gap by establishing the effect of long-term debt financing on the financial performance of these firms.

1.2 Objective of the Study

The objective of the study was to establish the effect of long-term debt financing on the financial performance of manufacturing and allied firms listed at the Nairobi Securities Exchange.

1.3 Research Hypothesis

H₀₁: There is no statistically significant effect of long-term debt financing on the financial performance of manufacturing and allied firms listed on the Nairobi Securities Exchange.

2. Literature Review

2.1 Theoretical Review

2.1.1 Trade-Off Theory

Kraus and Litzenberger (1973), building on Modigliani and Miller (1958), formulated the trade-off theory of capital structure, which posits that firms determine their optimal mix of debt and equity by balancing the benefits and costs of debt financing. The theory recognizes that real market imperfections such as taxes, bankruptcy costs, and agency conflicts influence financing decisions (Bauer et al., 2018), and holds that firms strive for a capital structure that minimizes the weighted average cost of capital and maximizes firm value by weighing the tax-shield advantages of debt against the potential costs of financial distress (Arhinful et al., 2025). For capital-intensive manufacturing and allied firms listed on the NSE, the theory is highly relevant, as it explains why excessive long-term borrowing, by raising distress costs, can erode financial performance.

2.1.2 Pecking Order Theory

The pecking order theory, developed by Myers and Majluf (1984), suggests that firms finance their operations through a hierarchy, prioritizing internal financing through retained earnings over external financing, and favouring debt over equity when internal funds are inadequate. This hierarchy results from information asymmetry between managers and investors (Eldomiaty et al., 2017; Hoskisson et al., 2018). The theory implies that firms which borrow heavily are often those that have exhausted internal funds, which helps explain why high long-term debt may be associated with weaker performance among listed manufacturing firms.

2.1.3 Agency Theory

Agency theory addresses the conflict of interest between shareholders and managers and suggests that debt financing acts as a disciplinary mechanism by reducing the free cash flows available to managers, thereby limiting opportunistic behaviour and improving performance (Derouiche et al., 2018; Mukoma, 2023). In the context of NSE-listed manufacturing and allied firms, higher debt levels may compel managers to be more efficient; however, beyond a point, the costs of servicing that debt may outweigh its disciplinary benefits.

2.2 Empirical Review

Nazir et al. (2021) examined how debt financing affects the performance of firms listed on the Pakistan Stock Exchange using secondary data and found mixed results: moderate debt levels enhanced performance by providing funds for expansion and growth, while excessive borrowing constrained performance due to high interest expenses and financial risks. Organizations that depended heavily on debt did not perform better than those with optimal debt-to-equity ratios (Nazir et al., 2021).

Moshi and Kiwia (2024) investigated the impact of debt financing on the financial performance of manufacturing firms listed on the Dar es Salaam Stock Exchange in Tanzania, using panel data of eight manufacturing firms over 2015–2023 and panel regression analysis. Long-term

debt had a positive and significant effect on ROA, whereas short-term debt had a negative and significant effect; the study concluded that prudent use of long-term debt improves performance, while excess short-term borrowing harms profitability. However, the study did not examine the moderating role of firm size.

Mwiti and Gitagia (2023) examined long-term debt and its effect on the financial performance of manufacturing firms listed on the NSE. Their results indicated that high long-term liabilities relative to total assets, together with a low current ratio, resulted in improved return on assets, leading to the conclusion that long-term debt usage contributed to financial performance. Rahman et al. (2020), by contrast, reported a significant negative influence on ROA among non-financial firms in Bangladesh, while Okafor et al. (2024) found an insignificant effect on ROA in Nigeria. These inconsistent findings, drawn largely from outside Kenya and rarely focused on NSE-listed manufacturing and allied firms, reveal both contextual and methodological gaps that this study addressed.

3. Methodology

3.1 Research Design

This study used an explanatory, longitudinal research design with a quantitative panel data approach. The explanatory design identifies and explains the causal relationship between variables by determining how and why one variable influences another (Saunders et al., 2019), while the longitudinal design measures the same subjects over an extended period (Menard, 2002). The design was appropriate as the study described and investigated the cause-and-effect relationship between long-term debt financing and the financial performance of manufacturing and allied firms listed on the NSE from 2015 to 2025.

3.2 Population of the Study

The target population included all manufacturing and allied firms listed on the Nairobi Securities Exchange. These organizations are important parts of Kenya's manufacturing industry, including drinks, tobacco, chemicals, consumer goods, and agro-processing. They were selected because they are publicly traded, prepare standardized audited financial statements, and provide reliable information for making decisions about capital structure and financial performance.

3.3 Sample Size and Sampling Procedure

The study employed a census, which is effective when the target group is small and easy to reach. Mugenda and Mugenda (2019) note that a census is appropriate when the population is small (fewer than 30 units) and all elements can be reached. After excluding firms with incomplete records over the study window, the census included only 9 firms, yielding a strongly balanced panel of nine manufacturing and allied firms observed over eleven years (2015–2025) and 99 firm-year observations.

3.4 Data Collection Methods

The study used secondary data extracted from audited annual financial statements. A structured data-extraction sheet captured long-term debt and total assets (to compute the long-term debt ratio) and net income and total assets (to compute return on assets). Data were obtained from the official NSE website, individual firm investor portals, and the Capital Markets Authority

(CMA) database, and were validated by cross-checking across sources to ensure accuracy and consistency.

3.5 Model Specification

To test the hypothesis, the study estimated the following fixed-effects panel regression model of the effect of long-term debt financing on financial performance:

$$ROA_{it} = \beta_0 + \beta_1 LTDF_{it} + \varepsilon_{it} \quad (i)$$

where ROA_{it} is the return on assets of firm i at time t ; $LTDF_{it}$ is long-term debt financing measured by the ratio of long-term debt to total assets; β_0 is the constant; β_1 is the regression coefficient; and ε_{it} is the error term. The coefficient β_1 indicates the extent to which changes in long-term debt financing influence return on assets among the listed firms.

3.6 Diagnostic Tests

Before estimation, the panel regression assumptions were validated through diagnostic tests, namely the Levin–Lin–Chu and Im–Pesaran–Shin unit-root tests for stationarity, the Shapiro–Wilk test for normality, the variance inflation factor for multicollinearity, the Breusch–Pagan and White tests for heteroscedasticity, a residual-lag regression for autocorrelation, the Ramsey RESET test for linearity, and the Hausman specification test to choose between fixed and random effects. Where heteroscedasticity was detected, robust standard errors clustered at the firm level were applied.

3.7 Data Analysis Methods

Data were analysed in STATA version 19 using both descriptive and inferential statistics. Descriptive statistics summarised the behaviour of the variables, Pearson correlation established the direction and strength of the association between long-term debt financing and return on assets, and fixed-effects panel regression estimated the effect of long-term debt financing on financial performance. The hypothesis was tested using the t-test, the model's overall significance was tested using the F-test, and results were presented in tables and figures.

3.8 Ethical Considerations

Although the study relied entirely on secondary data, the researcher observed strict ethical standards. The researcher secured the necessary approvals, including a permit from the National Commission for Science, Technology and Innovation (NACOSTI), and ensured that all data extracted from annual reports and NSE publications were reported accurately and without manipulation to favour any hypothesis.

4. Results and Discussion

4.1 Descriptive Statistics

Table 1 presents the descriptive statistics for long-term debt financing and return on assets. Return on assets averaged -0.313 , indicating that the typical firm-year yielded a loss on its asset base, with a standard deviation of 1.414 and a range from -10.917 to 0.367 that reflects extreme dispersion driven by a few loss-making firms. Long-term debt financing recorded a mean of 0.242 , implying that long-term debt funded roughly a quarter of total assets in the average firm-year, with a maximum of 4.474 reflecting the heavily indebted position of the most distressed firms.

Table 1: Descriptive Statistics for Long-Term Debt Financing and Financial Performance

Variable	N	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
ROA	99	-0.313	1.414	-10.917	0.367	-5.402	36.602
LTDF	99	0.242	0.566	0.000	4.474	5.228	35.879

4.2 Trend Analysis

The yearly means show a clear divergence between the two variables. Mean return on assets declined steadily from 0.100 in 2015 to -1.422 in 2025, while mean long-term debt financing rose from 0.110 to 0.592 over the same period, as illustrated in Figure 1. This mirror-image movement, in which rising long-term debt accompanied falling profitability, anticipates the negative relationship confirmed in the regression analysis and reflects the tendency of firms to borrow more heavily as their fortunes declined.

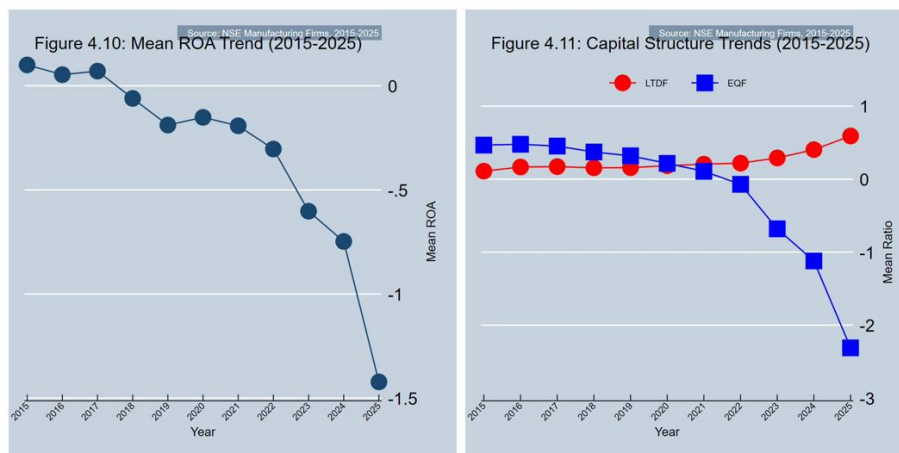


Figure 1: Trend of Mean Return on Assets and Capital Structure Ratios (2015–2025)

The left panel shows mean return on assets; the right panel shows the mean long-term debt (LTDF) and equity (EQF) ratios.

4.3 Correlation Analysis

A Pearson correlation analysis established the direction and strength of the association between long-term debt financing and return on assets, as presented in Table 2. Long-term debt financing was strongly, negatively, and significantly correlated with return on assets ($r = -0.893$, $p < .01$). This indicated that firms carrying more long-term debt relative to their assets tended to earn markedly lower returns. This direction is consistent with Rahman et al. (2020) and provided an early indication of the negative effect confirmed in the regression model.

Table 2: Pearson Correlation; Long-Term Debt Financing and Financial Performance

Variable	ROA	LTDF
ROA	1.000	—
LTDF	-0.893**	1.000

$N = 99$. ROA = return on assets; LTDF = long-term debt ratio. ** $p < .01$.

4.4 Diagnostic Test Results

A wide range of diagnostic tests was conducted to confirm that the panel regression assumptions held and to guide the choice of estimator, and the results are consolidated in Table 3. The variance inflation factor (mean = 1.00) indicated no serious multicollinearity; the Breusch–Pagan and White tests both rejected the null of constant variance, confirming heteroscedasticity, which was corrected using firm-clustered robust standard errors; the residual-lag regression returned an insignificant coefficient ($p = .138$), indicating no first-order autocorrelation; the Ramsey RESET test detected mild non-linearity attributable to the extreme observations; the Levin–Lin–Chu and Im–Pesaran–Shin tests indicated non-stationarity at levels, which is common in short panels and is absorbed by the fixed-effects transformation; and the Hausman test supported the fixed-effects specification.

The Shapiro–Wilk test, also reported in Table 3, rejected the null of normality for both variables and for the regression residuals, since all p -values were below 0.05. This non-normality is an expected feature of firm-level financial data, which naturally contain skewness, outliers, and bounded ratios, and does not necessarily indicate an error in the data. With 99 observations, the central limit theorem provides reasonable assurance that the estimators remain approximately valid, and robust standard errors were applied to contain the influence of the extreme observations.

Table 3: Summary of Diagnostic Test Results

Test	Purpose	Statistic	p	Decision
Variance inflation factor	Multicollinearity	Mean VIF = 1.00	—	No multicollinearity
Breusch–Pagan	Heteroscedasticity	$\chi^2 = 8.81$	0.003	Heteroscedastic
White	Heteroscedasticity	$\chi^2 = 38.96$	< .001	Heteroscedastic
Residual-lag regression	Autocorrelation	$t = 1.50$	0.138	No autocorrelation
Ramsey RESET	Linearity	$F = 12.04$	< .001	Mild non-linearity
Levin–Lin–Chu	Stationarity	$t^* = 0.785$	0.784	Non-stationary
Im–Pesaran–Shin	Stationarity	$W\text{-}t\text{-bar} = 0.512$	0.696	Non-stationary
Hausman	FE vs RE	$\chi^2 = -30.06$	—	Fixed effects
Shapiro–Wilk (ROA)	Normality	$W = 0.368$	< .001	Not normal
Shapiro–Wilk (LTDF)	Normality	$W = 0.465$	< .001	Not normal
Shapiro–Wilk (residuals)	Normality	$W = 0.896$	< .001	Not normal

VIF = variance inflation factor; FE = fixed effects; RE = random effects. A negative Hausman chi-square indicates the standard test assumptions are not met, in which case the fixed-effects estimator is the consistent choice.

4.5 Effect of Long-Term Debt Financing on Financial Performance

The fixed-effects regression results for the effect of long-term debt financing on financial performance are presented in Table 4.

Table 4: Fixed-Effects Regression Results for Long-Term Debt Financing

Variable	Coefficient	Robust SE*	t	p
LTDF	-2.389	0.091	-26.17	< .001
Constant	0.264	0.022	11.97	< .001
R ² (within)	0.898	—	—	—
F(1, 8)	685.11	—	—	< .001
Observations	99	—	—	—

**Robust standard errors clustered at the firm level.*

The model was statistically significant, $F(1, 8) = 685.11$, $p < .001$, and explained 89.8% of the within-firm variation in return on assets. The estimated equation was:

$$ROA = 0.264 - 2.389 \text{ LTDF} \quad (\text{ii})$$

The coefficient on long-term debt financing was -2.389 and highly significant, meaning that a one-unit rise in the long-term debt ratio was associated with a fall of about 2.389 units in return on assets. The null hypothesis (H_0 1, that long-term debt financing has no significant effect on financial performance) was therefore rejected.

4.6 Discussion

The study found that long-term debt financing had a negative and statistically significant effect on the financial performance of manufacturing and allied firms listed on the NSE. This shows that greater reliance on long-term borrowing reduced the profitability of listed manufacturers over the study period, a pattern reinforced by descriptive evidence showing that the years in which long-term debt rose most sharply were precisely those in which profitability fell most steeply. The finding agrees with Rahman et al. (2020), who reported a significant negative influence of long-term debt on return on assets among non-financial firms in Bangladesh, and with Amugada and Mwangi (2025), who reported negative debt–performance relationships among listed manufacturing firms in Kenya.

This result contrasts with Mwiti and Gitagia (2023) and Moshi and Kiwia (2024), who found long-term debt beneficial to return on assets at moderate leverage in Kenya and Tanzania, respectively, and with Okafor et al. (2024), who found an insignificant effect on ROA in Nigeria. This divergence is explained by the very high debt burdens of some distressed firms in this sample, whose leverage far exceeded the moderate range associated with beneficial borrowing. This finding aligns with trade-off theory's warning that, beyond an optimal point, the costs of financial distress associated with debt outweigh its tax advantages, and with the pecking order theory's view that firms that borrow heavily are typically those that have exhausted internal funds and are already in difficulty. It further reflects the limits of the disciplinary role of debt emphasised by agency theory, since the servicing burden of excessive long-term debt eroded rather than enhanced performance.

5. Conclusion

The study concludes that long-term debt financing significantly undermines the financial performance of manufacturing and allied firms listed on the NSE. The consistently negative and significant coefficient shows that, over the study period, the heavy long-term borrowing observed among the firms carried interest obligations and financial-distress costs that outweighed any tax advantage of debt, supporting the trade-off theory. The evidence does not support reliance on long-term debt as an engine of profitability in this sector under the conditions that prevailed between 2015 and 2025.

6. Recommendations

The study recommends that finance managers and boards exercise restraint in the use of long-term borrowing and avoid the high leverage that characterised the distressed firms in the sample. Long-term debt should be reserved for productive investments that generate returns above the cost of debt, rather than covering operating shortfalls, and firms already carrying heavy debt burdens should pursue deleveraging and restructuring to reduce interest and distress costs that have depressed returns. The Capital Markets Authority should monitor the long-term debt levels of listed manufacturers and treat rapidly rising leverage as an early warning of financial distress, thereby protecting minority shareholders and sector stability.

Acknowledgements

The author is grateful to the supervisors for their invaluable guidance and scholarly insights, and to Tharaka University for the support extended during the preparation of this work.

References

- Aishwarya, P., Sudharani, R., & Suresh, N. (2022). A study on impact of capital structure on profitability of companies listed in the Indian stock exchange with respect to the automobile industry. *International Journal of Case Studies in Business, IT and Education*, 6(2), 45-58.
- Amugada, B. S., & Mwangi, L. W. (2025). Debt financing and profitability of listed manufacturing firms at the Nairobi Securities Exchange, Kenya: An empirical analysis. *Asian Journal of Economics, Finance and Management*, 7(1), 169–182.
- Arhinful, R., Amin, H. I. M., Mensah, L., Gyamfi, B. A., & Obeng, H. A. (2025). Determining an optimal capital structure and its impact on financial performance: Insight from the firms listed on the New York Stock Exchange. *Cogent Economics & Finance*, 13(1), Article 2571401.
- Bauer, T., Kourouxous, T., & Krenn, P. (2018). Taxation and agency conflicts between firm owners and managers: A review. *Business Research*, 11(1), 33–76.
- Derouiche, I., Hassan, M., & Amdouni, S. (2018). Ownership structure and investment–cash flow sensitivity. *Journal of Management and Governance*, 22(1), 31–54.
- Eldomiaty, T. I., Azzam, I., El Din, M. B., Mostafa, W., & Mohamed, Z. (2017). An empirical assessment of the reality of pecking order theory. *Research in Finance*, 33, 43–73.
- Hoskisson, R. E., Gambeta, E., Green, C. D., & Li, T. X. (2018). Is my firm-specific investment protected? Overcoming the stakeholder investment dilemma in the resource-based view. *Academy of Management Review*, 43(2), 284–306.

- Kimani, D., & Aduda, J. (2023). Long-term debt financing and firm value of manufacturing companies in Kenya. *Journal of Finance and Investment Analysis*, 12(4), 21–38.
- Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *The Journal of Finance*, 28(4), 911–922.
- Menard, S. (2002). *Longitudinal research* (2nd ed.). Sage Publications.
- Mensah, L., & Agyei, S. K. (2023). Long-term debt financing and financial performance of listed firms in Ghana: The moderating role of firm size. *African Journal of Economic and Management Studies*, 14(2), 189–208.
- Modigliani, F., & Miller, M. H. (1958). The cost of capital, corporation finance and the theory of investment. *The American Economic Review*, 48(3), 261–297.
- Moshi, J. M., & Kiwia, R. O. (2024). Debt financing and the financial performance of manufacturing firms listed at the Dar es Salaam Stock Exchange. *African Journal of Finance and Management*, 12(1), 45–62.
- Mugenda, O. M., & Mugenda, A. G. (2019). *Research methods: Quantitative and qualitative approaches* (Rev. ed.). African Centre for Technology Studies.
- Mukoma, P. K. (2023). Effects of capital structure on agency costs of listed non-financial firms in Kenya. *European Journal of Economics and Financial Research*, 7(2), 1–15.
- Mwiti, M. E., & Gitagia, F. (2023). Long-term debts and financial performance of manufacturing firms listed at the Nairobi Securities Exchange, Kenya. *International Academic Journal of Economics and Finance*, 3(10), 267–278.
- 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.
- Nazir, A., Azam, M., & Khalid, M. U. (2021). Debt financing and firm performance: Empirical evidence from the Pakistan Stock Exchange. *Asian Journal of Accounting Research*, 6(3), 324–334.
- Ndung'u, N., & Kimanzi, K. (2025). Capital structure and financial performance of manufacturing companies listed at the Nairobi Securities Exchange in Kenya. *International Journal of Finance and Accounting*, 10(1), 1-15.
- Okafor, V. I., Okolie, U. C., & Ezejiofor, R. A. (2024). Effect of long-term debt on financial performance of listed consumer goods firms in Nigeria. *International Journal of Trend in Scientific Research and Development*, 8(3), 456–467.
- Otieno, S., Muturi, W., & Ngugi, P. (2022). Long-term debt and financial performance of manufacturing firms listed at the Nairobi Securities Exchange. *International Journal of Finance*, 7(2), 33-49.
- Rahman, M. M., Zheng, C., & Ashraf, B. N. (2020). Debt financing and firm performance: Evidence from an emerging South-Asian country. *Business and Economic Research*, 10(1), 40–54.
- Ratten, V. (2025). *International encyclopedia of business management*. Academic Press.

- Saunders, M., Lewis, P., & Thornhill, A. (2019). Research methods for business students (8th ed.). Pearson.
- Wanjiru, T., & Mwangi, M. (2024). Strategic investment financing and value creation among listed manufacturing firms in Kenya. *Journal of Business and Economic Development*, 9(2), 55–70.
- Weygandt, J. J., Kieso, D. E., Wiecek, I. M., Warfield, T. D., & McConomy, B. J. (2022). *Intermediate accounting* (Vol. 2). John Wiley & Sons.