

Influence of Asset Tangibility on Financial Performance of Non-Listed Building and Construction Firms in Kenya

Bonface Onyango Okombo¹, Dr. Jackson Lumbasyo², Moses Wanyoike³

¹Degree of Master of Business Administration, University of Nairobi

²Mount Kenya University

³Lead Researcher, Gofuture Insights

DOI: <https://doi.org/10.51583/IJLTEMAS.2026.150600143>

Received: 28 June 2026; Accepted: 03 July 2026; Published: 17 July 2026

ABSTRACT

Asset tangibility constitutes a fundamental determinant through which business entities secure financing and enhance their operational capacity, thus necessitating strategic management of tangible asset portfolios. The principal challenge resides in optimizing the utilization of fixed assets to generate superior financial returns while maintaining adequate collateral value for borrowing purposes. Kenya's building and construction industry recorded performance metrics of 3.2/3.5 in third order during the 2014/2016 study period, representing a notable decline when juxtaposed against the 5.8 and 6.0 percentages achieved during 2005/2006. This suboptimal performance trajectory within the construction sector, according to extant literature, was attributable to the asset composition and utilization patterns among industry participants. This circumstance prompted the current investigation into the effect of asset tangibility on the financial performance of non-listed building and construction enterprises operating in Kenya. The research endeavor sought to assess the influence of asset tangibility ratios on profitability metrics of these non-listed construction firms. The study employed Return on Assets (ROA) and Return on Equity (ROE) as proxies for financial performance evaluation. The investigation covered the period spanning 2014 to 2016. The theoretical framework incorporated Pecking Order theory. A descriptive survey design was adopted as the research methodology. Secondary data were extracted from consolidated financial statement records maintained at the National Construction Authority and the Kenya Association of Manufacturers. The target population encompassed all 10 Tier 1 non-listed building and construction firms registered with the National Construction Authority during the three-year study window. The sample size corresponded to the entire target population, with secondary data serving as the primary information source. Analytical techniques comprised mean calculations, correlation regression modeling, and ANOVA (F-test). Findings were interpreted and presented through tabular and graphical representations, utilizing SPSS software version 2.1 for efficient data processing. The outcomes derived from this analysis demonstrated that asset tangibility exerts a discernible influence on the financial standing of non-listed building and construction firms in Kenya. The evidence indicated that financial performance tends to improve when tangible assets are effectively managed and utilized within the capital structure of the respective firm. This observation provides compelling justification for strategic investment in fixed assets as opposed to maintaining excessive liquid holdings. Proper asset management proved to enhance operational efficiency as it facilitates access to credit through collateralization while generating productive capacity that exceeds the benefits expected of holding non-productive assets. The findings of this study will enable management and financial practitioners to evaluate corporate growth characteristics, asset utilization efficiency, and financial performance metrics to project future enterprise value. The research recommends that business entities should work on optimizing asset tangibility ratios within their capital structures as a strategy for enhancing financial performance and maximizing shareholder wealth creation.

Keywords: asset tangibility, financial performance, non-listed building and construction firms, Kenya

INTRODUCTION

Background of the study

Determining optimal levels of asset tangibility consistently presents a significant consideration for corporate managers, as imprudent asset acquisition and management decisions can adversely affect organizational performance unless thorough due diligence precedes the adoption of a viable asset structure. Whenever an enterprise requires capital to sustain its operations and fund capital expenditures, deliberations regarding asset composition inevitably emerge. Asset tangibility represents the proportion of a firm's total assets that are comprised of tangible fixed assets such as property, plant, and equipment, reflecting the extent to which an organization possesses physical assets that can serve as collateral or generate productive capacity (Myers, 2014). Business activities cannot proceed without adequate physical resources, making the availability of tangible assets indispensable for organizational functionality. Every investment decision concerning fixed assets necessitates concurrent consideration of funding mechanisms, given the direct implications for corporate profitability. Various theoretical perspectives offer divergent views on the optimal asset composition, underscoring the importance of rigorous analysis in formulating asset management policies that can serve as strategic guides for enhancing corporate performance and delivering superior shareholder returns (Mwangi et al, 2014).

Asset tangibility quantification is accomplished through the comparative analysis of fixed assets against total assets, expressed as a ratio or percentage. Well-managed enterprises typically integrate both tangible and intangible assets as complementary elements of their financial strategy (Dawar, 2014). Theoretical discourse surrounding asset structure and profitability has remained particularly significant since Modigliani and Miller (1958) posited that, in the absence of corporate taxes, bankruptcy costs, information asymmetry, market inefficiencies, and transaction costs, firm value would ultimately remain indifferent to asset composition decisions (Jermias, 2008). Collateral value can be enhanced through tangible asset accumulation, suggesting that appropriate asset structure could optimize corporate value. Numerous theoretical frameworks have subsequently emerged to elucidate corporate asset management patterns. Understanding the composition and utilization of assets is essential, as this knowledge directly influences a firm's competitive positioning within its industry. It therefore falls upon corporate management to determine the optimal asset mix that will maximize financial performance (Abor, 2007).

Asset acquisition and management through securities exchange markets has gained increasing prevalence in Kenya. Non-listed building and construction firms have accumulated substantial tangible asset portfolios as a mechanism for raising operational capital through collateralization and asset-backed financing (Anyanzwa, 2015). Many organizations employ asset tangibility to leverage their capital base with the objective of enhancing profitability. Nevertheless, the efficacy of tangible assets in improving corporate financial health varies considerably across enterprises, contingent upon prevailing economic conditions and asset utilization efficiency at any given time (Maher & Andersson, 2013). Asset tangibility fundamentally represents the share of a firm's assets that are physical and can serve as collateral, encompassing land, buildings, machinery, equipment, and vehicles. This metric has direct implications for organizational financial health and shareholder returns. The increasing reliance on tangible asset accumulation by non-listed companies provided the impetus for investigating its effects on financial position, constituting the primary motivation for this research. Furthermore, the absence of consolidated theoretical perspectives on the causal chains linking asset tangibility to financial performance reinforced the necessity for this investigative undertaking.

The manner in which an organization structures its asset portfolio fundamentally shapes its financial profile and performance trajectory. This represents one of the most consequential financial decisions confronting management, as it determines the enterprise's capacity to satisfy the diverse expectations of its stakeholders (Jensen, 2015). Asset tangibility involves the acquisition and maintenance of physical resources such as land, buildings, machinery, and equipment. Unlike liquid assets, tangible assets provide collateral value that can facilitate access to credit while simultaneously generating productive capacity. The organization bears the obligation to maintain and depreciate these assets while ensuring they generate sufficient returns to justify their

acquisition costs. Inefficient asset utilization can result in reduced profitability, liquidity constraints, or business collapse (Bichsel & Blum, 2015). Tangible assets present both advantages and disadvantages that affect organizational growth and long-term viability.

The utilization of tangible assets can confer certain benefits, including collateral provision for borrowing, enhanced operational capacity, and improved creditor confidence, while simultaneously reducing the risk of financial distress through productive asset deployment (Fama & French, 2010). Prudent management dictates that executives should carefully balance such benefits against the costs of asset acquisition and maintenance, making judicious decisions regarding asset composition to optimize performance (Krause & Litzenberger, 2010). Asset tangibility ratios serve as the primary metrics for evaluating asset structure, enabling comparison of fixed assets against total assets. Lower ratios indicate greater reliance on intangible or liquid assets, whereas higher percentages reflect substantial investment in physical assets.

Financial performance essentially represents an organization's effectiveness in utilizing available resources to generate revenue. It provides a basis for informed decision-making regarding business expansion strategies, asset acquisition, and management oversight (Tehrani & Rahn timer, 2016). Performance measurement reflects managerial accomplishments in quantitative terms over specified periods, enabling comparisons with industry competitors. According to Onger i (2014), financial performance constitutes the monetary expression through which business activities can be evaluated. It illustrates the extent to which shareholders have experienced financial improvement over a given trading or accounting period compared to their initial position. This can be effectively demonstrated through financial ratios derived from financial statements or market share price movements. The primary corporate objective centers on maximizing shareholder wealth, with performance measurement essentially assessing how much richer shareholders have become as a consequence of prudent investment decisions over time (Barger & Pati, 2013).

Various absolute and relative indicators serve as measures of financial performance, including expenses, earnings before tax and interest (EBTI), revenues, income levels, returns on assets, and returns on equity. The most commonly employed performance metrics are ROA and ROE (Reese & Cool, 2016). Return on Equity reflects the returns generated for shareholders, calculated by dividing net profit after tax (NPAT) by total equity capital (TEC). This indicator demonstrates a firm's profitability relative to the total shareholder investment. Similarly, Return on Assets reveals the returns generated by all assets employed, serving as a comprehensive index of financial health. This is computed by dividing net income after tax (NIAT) by total assets (TA) (Khrawish, 2014). For the purposes of this investigation, ROA was utilized to measure the performance of non-listed building and construction firms.

Kenya hosts a well-established and progressive construction industry within the East African region. The sector encompasses enterprises engaged in the construction of commercial and residential structures, engineering projects, and related trade services. The construction industry makes substantial contributions to the national Gross Domestic Product (GDP), serving not merely as a significant economic player but also as a catalyst for broader economic growth. According to the Kenya National Bureau of Statistics (KNBS), the construction and real estate sectors have emerged as the most significant drivers of Kenya's economic expansion over the past five years. The sector contributed 7 percent of the country's GDP in 2015, establishing its status among the nation's most developed industries.

The construction sector has prioritized the maintenance of existing infrastructure while simultaneously integrating efficient and safer transportation systems and benchmarking infrastructural services against international standards. The industry seeks to establish globally accepted performance standards that ensure customer satisfaction and attract private sector participation in infrastructure provision, complementing government interventions. As documented in the Economic Survey 2016 published by KNBS, the economy experienced significant growth within the construction sector in 2015, registering a 13.06 percent increase in value addition. Employment within the sector also grew by 11.4 percent, reaching 148.00 thousand employees in 2015 compared to 132.90 thousand in the preceding year. Road expenditure increased by 79.2 percent during the same period. The Government's expenditure index rose from 263.4 in 2014 to approximately 386.7 in 2015,

reflecting support for various projects. The sector expanded by 9.2 percent in 2016 compared to the slightly higher growth rate of 13.9 percent recorded in 2015. The moderated growth rate was attributable to reduced activity levels within the sector, partly due to the nearing completion of the Standard Gauge Railway (SGR) project.

Building and construction firms operate within a regulated environment, with the National Construction Authority (NCA) serving as the primary regulatory body for standardization purposes within the industry. The NCA was established through an Act of Parliament and mandated with the responsibility of streamlining, regulating, and building capacity within the construction sector. This regulatory framework encompasses project registration, worker and supervisor accreditation, and contractor registration processes. The NCA maintains comprehensive records of individual firms, serving as the final reference in case of disputes.

Research Problem

Asset tangibility plays a significant role in revealing the financial condition of enterprises, provided that the results are accurately analyzed and applied. Nevertheless, determining what constitutes an optimal asset structure remains an unresolved paradox within financial circles (Kajola, 2010). The relationship between asset composition and profitability continues to generate debate, with prevailing theories and empirical studies offering inconsistent conclusions. Modigliani and Miller (1984) proposed that asset structure may not affect firm value in perfect markets. Conversely, other theoretical perspectives suggest that tangible assets enhance firm value through collateral provision and operational efficiency. Jensen and Meckling (2010) supported this perspective by characterizing tangible assets as a mechanism that reduces information asymmetry and enhances creditor confidence, thereby positively influencing financial performance. These theoretical contradictions and the ongoing debate provided the impetus for further investigation, motivating the present research.

The government's commitment to undertaking major construction projects as part of its development agenda has prompted many non-listed building and construction companies to pursue enhanced performance through substantial asset accumulation. There exists considerable argumentation regarding asset tangibility as a mechanism for enhancing profitability, provided that assets are acquired at favorable terms and deployed productively. Tangible assets facilitate access to financing through collateralization while generating productive capacity that can improve organizational performance if efficiently utilized (Anyanzwa, 2015). However, many non-listed companies that have accumulated substantial fixed assets to improve their financial health have failed to achieve their objectives, instead experiencing significant losses and eventual dissolution, as exemplified by Athi River Mining Company, a cement manufacturer (Juma, 2016). The poor performance of such non-listed entities despite substantial asset holdings underscores the necessity of investigating whether asset tangibility genuinely affects performance outcomes.

Empirical investigations have produced divergent findings. Abor (2010) examined the relationship between asset structure and profitability among listed Ghanaian corporations, finding a positive correlation between tangible asset utilization and financial position. Kajirwa (2016) investigated the impact of asset structure on the performance of Kenyan banks listed on the Nairobi Securities Exchange (NSE) using secondary data and qualitative analysis techniques. The findings revealed a positive effect of tangible assets on bank profitability, leading to recommendations for strategic asset acquisition.

Gleason (2011) conducted a study on performance and asset structure using data from 2008-2009 across 14 European Union countries, utilizing ROA as the performance metric. The results indicated that asset tangibility significantly affected firm performance as measured by ROA. Abor (2010) similarly investigated the relationship between asset structure and profitability among listed Ghanaian firms, finding substantial significance for both parameters. Kaumbuthu (2010) examined the effects of asset structure on the financial performance of manufacturing firms listed on the NSE, revealing a positive asset tangibility relationship. Raza (2013) studied the impact of asset structure on firm performance among construction companies listed on the Karachi Stock Exchange in Pakistan over the period 2004-2009, confirming that tangible assets positively affected firm performance. These findings collectively reveal an empirical gap regarding the optimal asset

composition and its subsequent effects on financial performance.

LITERATURE REVIEW

Theoretical Literature Review

Pecking Order Theory

This significant theoretical framework was primarily developed by Myers and Majluf in 1984. It posits that organizations consistently prefer to utilize internal resources before considering external borrowing. When companies require financing, they typically favor long-term tangible asset investment over short-term liquid asset accumulation. Tangible assets are generally regarded as a preferred investment option due to their collateral value. Due to information asymmetry, firms maintain a distinct hierarchy of asset preferences, typically investing in fixed assets to enhance long-term operational capacity.

The theory further illustrates that companies maintain a preferred order of asset investment when funding their operations (Cooper & Holmberg, 2015). In the absence of adequate information about investment opportunities, firms prefer investing in tangible assets over intangible alternatives. Myers and Majluf further argued that by investing in tangible assets, firms can mitigate information asymmetry problems. This explains why tangible asset investments are particularly valuable, as information asymmetry between internal and external dimensions is reduced through the observable nature of physical assets. The theory recommends that companies with substantial information asymmetry should consider tangible asset investment, which provides collateral and signals financial strength.

Bhaduri (2012) confirmed that when firms require external capital, they exhibit a preference for tangible asset investment as a signal of creditworthiness. This creates a hierarchy of preference: fixed assets followed by other investment types as an extreme choice. Regardless of the specific preference order, the critical element remains the availability of financing sources. Internal earnings are preferred when available, but when external financing is required, tangible assets become more attractive as they facilitate borrowing. Pandey (2010) concurred with the pecking order proposition that corporate managers first resort to internally generated resources, only considering external financing as a last option, with tangible assets serving as important collateral.

However, this theory has attracted criticism regarding its specific and general propositions. Adedji (2013) argued that the theory's assertion that tangible assets serve as optimal motivators for resource mobilization is problematic, as it fails to account for other significant factors in asset investment decisions, including depreciation rates, maintenance costs, and regulatory authority interventions. Cull and Xu (2014) confirmed that the utilization of tangible assets remains contingent upon the firm's ability to mobilize funds from external sources and maintain asset efficiency.

Empirical Literature Review

Al-Tal (2014) investigated the relationship between profitability and asset structure among Ghanaian listed firms over the period 1998-2002. The findings indicated that tangible assets positively correlate with profitability due to enhanced operational capacity and collateral value. The study also found a positive relationship between asset tangibility and profitability, attributed to the operational efficiency generated by fixed asset investment. Adekunle (2014) examined the effects of asset structure on profitability among non-financial Nigerian listed firms during 2001-2007. Utilizing secondary data and asset tangibility ratios as independent variables with ROE and ROA as dependent indicators, the ordinary least squares estimation revealed that asset tangibility ratios have a significant positive impact on firm performance.

Dufera (2010) conducted research on asset structure effects on profitability among Nigerian listed entities over 2001-2007. The investigation targeted 30 companies, employing asset tangibility ratios as independent variables and ROE and ROA as dependent measures. Secondary data analysis revealed positive effects of asset tangibility

on profitability for the sampled firms. Aliu (2015) examined asset structure determinants among manufacturing corporations across America, France, Britain, Japan, and Italy, sampling 4,557 manufacturing firms and utilizing secondary data. The findings indicated that asset tangibility positively correlates with profitability, although the impact varies with firm size.

Langat et al. (2014) assessed the effect of asset structure on profitability among Kenyan tea manufacturing companies. The study concluded that fixed asset investment positively relates to profitability at 1% and 5% significance levels respectively. Pouraghajan and Malekian (2012) investigated how asset structure affects profitability, establishing a positive correlation between asset tangibility and corporate profitability among 100 Iranian-listed construction firms. Muchugia (2013) examined the effects of asset structure on Kenyan commercial bank financial performance. The study utilized firm size, tangible assets, and fixed assets as independent variables with ROE as the dependent measure across 46 banks. The findings indicated that tangible assets positively affect profitability. Masiega et al. (2013) investigated asset structure effects on profitability among Kenyan listed manufacturing firms over 2007-2011, sampling 30 companies. The results demonstrated a positive correlation between asset tangibility and performance, with positive performance impacts.

RESEARCH METHODOLOGY

The selected design of research was descriptive with a significant set of quantitative analysis (Abubakar, 2015). This type of research design was selected owing to its enabling nature of giving descriptions on a given research area, making an establishment on a relationship, and giving explanations on collected data in order to pay attention to and prosecute both the differences and prevalent similarities on the subject references over a stipulated time scope. The main focus was to establish the relationship between capital structure and financial performance of the firms. In accordance to Construction Kenya, there are 10 tier one construction companies in Kenya. The intended population of this work included all the 10 Tier 1 building and construction non-listed firms registered and regulated by the National Construction Authority within the three-year study period of 2014 to 2018. All 10 tier 1 firms were included, therefore arose no need for sampling.

The study employed the use of predominantly data which is secondary. Data thus was collected through yearly reports which included statements of financial position including all other corresponding relevant reports published within study period of 2014- 2018. Such relevant financial information was thus collected from stored sampled companies' finance statements from the information desk upon submission of an introductory letter from the school. A letter of introduction handed to the researcher by the school was in turn presented to respective non-listed building and construction firms' managers for purposes of gaining both consent and access to published statements of financial position for the sole purpose of due analysis.

Collected data were however analyzed by clear use of mean, correlation (Pearson's), and the regression model. Analyzed data were interpreted and presented using figures and tables. A correlation technique was used to illustrate the level of relationship among the identified variables. Correlational technique is important in research as it aids knowing the level and nature in relationship over the list of variables used in the study. Correlation results are also easier to interpret, cost friendly, and is commonly used in modern day to day decision making among business entities. For the purposes of testing this respective research activity hypotheses, adoption of descriptive type of data analysis; Pearson's means of correlation, multiple regression analysis was also made use of in order to test the relation between liquidity, asset tangibility and ratios of debt on firm performance. The significance of regression co-efficient was established by looking at t-values

Data Analysis and Research Findings

Descriptive Statistics

The descriptive statistics in this section laid down maximum, minimum, mean, and the standard deviations used in describing data. It summarized the sampled information. It simplifies the information for ease of understanding of the used data, by displaying the standard deviation, mean, maximum and minimum of the sampled set of data.

Table 1. Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
AssTang	50	0.27	1.21	.5281	.63725
ROE	50	-1.06	1.27	.0506	.52532
Valid N (listwise)	50				

Source: Research Findings, (2023)

Asset tangibility and utilization is normally used to test ratios of tangible assets to total assets. The mean of assets tangibility based on the observations is 0.5281, the standard deviation is 0.63725, suggesting uniformity in the industry. This ratio suggests these companies can use their fixed asset to secure the amounts they borrow. The mean ROE is indicated as 0.0506 or 5.06%, not surprising is that some firms reported negative return on equity.

Asset Tangibility and Firms Performance (ROE)

The results on table 2 on show significant effect on a firm's performance at a set significance level of less than 0.05.

In this section asset tangibility is used to predict financial performance, measure as return on equity. Presented and explained below are model summary, analysis of variance, and the coefficient of predictor variable. Dependent indicator is ROE, while independent one is asset tangibility. Such an idea is aimed to establish whether asset tangibility on its own strength explain variation in return on equity.

Table 2. Model Summary, Asset Tangibility				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.033 ^a	.001	-.020	.53047
a. Predictors: (Constant), AssTang				

The above summary, exhibits relationship strength between model and the dependent indicator. The R-square, a statistic that show the variation in independent variable (ROE) explained by variations in debt level (independent variable) is at a low of 0.001 or 1%. Suggesting asset tangibility may not be used in instances of predicting return on equity (ROE) because debt explains only 1% of variation in ROE.

Table 3. Coefficients: Asset Tangibility and ROE

Model	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	0.050	0.075	—	0.663	0.510
Asset Tangibility	-0.027	0.119	-0.033	-0.230	0.819

Model Summary

R ²	Interpretation
0.001	Asset Tangibility explains 0.1% of the variation in ROE.

Dependent Variable: Firm performance (ROE)

Table 3. Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.015	1	.015	.053	.819 ^a
	Residual	13.507	48	.281		
	Total	13.522	49			
a. Predictors: (Constant), AssTang						
b. Dependent Variable: ROE						

ANOVA does check the model's fitness, that is, tests the acceptability of the model. There were 50 observations. The Regression row does display the respective models accounted for information, in this respect, 0.015. Residual that is, the model's none accounted for variation, is 13.507, much higher than the regression (0.15), suggesting that asset tangibility does not predict ROE. The significance value of the regression, which is 0.819, is more than α -level of 0.05, a clear indication that explained variations by the model is simply by chance.

As exhibited in table 3 above, Asset tangibility can evidently explain 6.4% subsequent changes over firm's performance. Total assets turnover is 0.17, a clear suggestion that returns on assets make improvement by the said margin of 0.17 in percentage. Significantly, this can give an explanation that in instances where assets' tangibility is rightly managed, it does have an effect on a firm's success. Hence, that denotes some form of improvement on the performance of the business entity. In accordance to displayed results, hypothesis H01 is thus accepted, that asset tangibility has statistical significance; positive in effect on firm performance.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This research investigation was undertaken to ascertain the effects of asset tangibility on the financial performance of non-listed building and construction firms in Kenya over the designated period 2014-2018. The independent variable of this study was asset tangibility, while the dependent variable was financial performance measured through return on equity (ROE). Descriptive statistics derived through mean, standard deviation, and regression analyses were employed to examine the effects of asset tangibility on financial performance. The descriptive analysis findings indicated that the mean asset tangibility ratio was 0.5281 with a standard deviation of 0.63725. The average ROE stood at 0.0506 with a standard deviation of 0.52532.

The research concluded that there exists no statistically significant association between asset tangibility and firm performance. The coefficient of asset tangibility (-0.027) with a significance value of 0.819 indicates that tangible assets do not exert a measurable influence on return on equity. The relationship between asset structure and performance, while suggesting a weak inverse pattern, fails to achieve statistical significance, indicating that asset tangibility levels cannot reliably predict firm performance in the context of the sampled firms.

Conclusions

This research exercise examined the influence of asset tangibility on the financial performance of non-listed building and construction firms in Kenya. Data were sourced from secondary sources, with the sample comprising all 10 Tier 1 non-listed building and construction companies. The findings indicate that tangible asset investment does not necessarily enhance shareholder value through improved ROE. This conclusion aligns with certain earlier studies while contradicting others, suggesting that the relationship between asset structure and firm performance remains a subject requiring continued investigation.

Recommendations

The findings of this research carry compelling significance for individual firms, the broader industry, and the macro-economy. Given the observed negative correlation between asset tangibility and firm performance, this study recommends that business managers should exercise prudence in optimizing asset composition within their capital structures. Strategic asset investment can serve as a mechanism for increasing firm value and enhancing shareholder wealth.

This research further recommends that firms should carefully evaluate the cost-benefit implications of significant fixed asset investments. Since many firms rely on collateralization for borrowing, the relationship between asset acquisition costs and operational benefits should be carefully assessed. Financial managers must remain proactive in comprehending the effects of asset structure fluctuations on their firms' financial performance. Firms with balanced asset portfolios appear to perform better compared to those with excessive fixed asset concentration within the industry.

Limitations of the Study

This research exercise focused exclusively on the 10 Tier 1 non-listed firms registered with the National Construction Authority. Consequently, the research findings cannot be generalized to all firms operating in Kenya. The primary objective of this study was to examine the relationship between asset structure and financial performance of building and construction companies; therefore, the results are limited specifically to non-listed building and construction firms. Additionally, the investigation was conducted within Kenya's geographical boundaries, limiting applicability to other jurisdictions.

The study was constrained by information deficiencies regarding the relationship between asset tangibility ratios and enterprise performance. Furthermore, the research was confined to the three-year period between 2014 and 2016, which may have been limiting, as a longer timeframe could have revealed more comprehensive patterns. The study also focused on a limited number of performance metrics, specifically ROE, for assessing firm performance. Finally, this work concentrated predominantly on major construction companies, excluding smaller medium-sized construction enterprises in Kenya.

REFERENCES

1. Abubakar, A. (2015). Relationship between financial Leverage and Financial Performance of Deposit Money Banks in Nigeria. *International journal of Economics, Commerce and Management*, 3(10), 759-778.
2. Abort, J. (2007). The effect of Capital Structure on Profitability: An Empirical analysis of Listed Firms' in Ghana. *Journal of Risk Finance*, 6(4), 38-47.
3. Adekunle, H. (2013). The investigation Effect of Financial Leverage and Environmental Risk on Performance Firms' Listed Companies in Tehran Stock Exchange. *Journal of Applied Science and Agriculture*, 8(3), 249-255.
4. Aliu, N. (2010). Effect of Capital Structure on the Performance of Quoted Manufacturing Firms' in Nigeria. Unpublished Thesis. Ahmadu Bello University.
5. Al-Tally, H. A. (2014). An Investigation on the Effect of Financial Leverage on Firm Financial Performance in Saudi Arabia's Public Listed Companies. Doctoral thesis, Victoria University; Melbourne, Australia.
6. Anyanzwa, A., Kungu, G. & Githui, T. (2015). Determinants of the Performance of Firms' Listed in the Nairobi Securities Exchange. *Research Journal of Finance and Economics and Accounting*, 4(7), 1-20.
7. Anyanzwa, J. (2015). Nairobi listed firms turn to debt financing to raise capital. *The East African*, posted 14th March 2015. Retrieved from <http://www.theeastafrican.co.ke/business/Nairobi-listed-firms-turn-to-debt-financing-to-raise-capital/-/2560/2653420/-/7c6vtaz/-/index.html>
8. Banafa, A & Ngugi, K. (2015). The Impact of Leverage on Financial Performance of Listed Non-Financial Firms' in Kenya. *International Journal of Finance and Accounting*, 4(7), 1-20.
9. Bahti et al. (2019). *Intermediate Financial Management*, 10th edition. South-Western.
10. Baker, M. & Wurgler, J. (2012). Market Timing and Capital Structure, *Journal of*

11. Finance, 57(1), 1–32.
12. Bichsel, G. & Blum, N. (2015). Capital Structure and Financing of SMEs: Australian.
13. Bhaduri, W, Kallberg, J & Liu, C (2012). An analysis of REIT security issuance decisions, Real Estate Economic, 38(1), 91–120.
14. Brocking, R. (2016). Financial Management. (1992 Edition). London, ELBS.
15. Chepkemai, N. (2013). An analysis of the effect of capital structure of SMEs on financial performance: A Case of Nakuru town, Unpublished research project of Kabarak University
16. Cooper & Holmberg, (2015). The CAMEL Rating System in Banking Supervision: A Case Study of Arcada University of Applied Sciences, International Business journal.
17. Cull & XU. (2014). Testing Competing Capital Structure Theories of Non-profit Organizations.
18. Journal of Finance and Economics, 7(114), 119-143.
19. Charles, M. (2010). Performance, Capital Structure and Home country. An analysis of Asian Corporations. Global Finance Journal, 8(12), 129-143.
20. Dimgati et al. (2021). Financial Performance Evaluation: A case Study of Awash International Bank. Unpublished Msc. Project. Mekelle University, Ethiopia.
21. Fama, E., & French, K. (2002). Testing Trade-Off Theory and Pecking Order Predictions about Dividends and Debt, Review of Financial Studies.
22. Forte & Tavares. (2019). Research Methods in Business Studies. 3rd ed. UK: Prentice Hall.
23. Gleason, L. (2011). Basic Managerial Finance. 2nd edition. New York: Harper & Row
24. Graham, J. R., and Harvey, C., (2014). The Theory and Practice of Corporate Finance: Evidence from the field, Journal of Financial Economics, 60, 187- 24
25. Graham & Litzenberger (2012). Effect of Financial Leverage on Financial Performance of Deposit Taking Savings and Credit Co-operative in Kenya. International Journal of Academic research in Accounting, Finance and Management Sciences, 4(2), 176-184
26. Itiri, I.O. (2014). Impact of Financial Structure on Performance of Quoted Firms' in Nigeria. University of Nigeria.
27. Jensen, M. C. (2015). Agency Cost of Free Cash Flows, Corporate Finance and Takeovers.
28. American Economic Review, 76 (1), 323-339.
29. Jensen and Meckling (2002). Theory of the Firm, Managerial Behavior Agency Costs and Capital Structure. Journal of Financial Economics, 6(23), 127-135.
30. Juma, V. (2016). Six NSE companies in survival dogfight as massive debt hurts. The business daily posted 22RD February 2016. Retrieved from <http://www.businessdailyafrica.com/image/view//3087492/medRes/1263757//chws6j/-/NSE.jpg>.
31. Junaid & Ali (2020). Theory of the Firm, Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3(7), 303-360.
32. Kaumbuthu, H. (2015). Impact of Financial Structure on the Performance of Quoted Firms' in Nigeria. University of Nigeria
33. Kajirwa, N. I. (2015). Factors that Influence the Capital Structure of Public Companies in Kenya. University of Nairobi. Unpublished MBA Thesis.
34. Langat, C. P., Chepkoech L., Shavulimo M. P., Wachira, M., & Thuo D. (2014). The Effect of Debt Financing on the Profitability of Kenya Tea Development Authority Processing Factories. Retrieved May 1, 2015, from <http://eserver.kabarak.ac.ke/OCS/index.php/conf05/conf05/paper/view/182>
35. Maghanga, E & Kalio, M. (2012). Effects of Leverage on Financial Performance of Parastatals: A case of Kenya Power. International Journal of Science and Research, 3(10), 990-994.
37. Maher & Anderson. (2013). Corporate Financing and Investment Decisions when firms have information investors do not have. Journal of Financial Economics, 13, 187-221.
38. Miller, M. (1977). Debt and Taxes. Journal of Finance, 32(1), 261-275.
39. Modigliani, F & Miller, M. (1958). The Cost of Capital, Corporation Finance and Theory of Investments. American Economic Review, 53(13), 261-297.
40. Modigliani, F & Miller, M. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. American Economics Review, 53(13), 433-443.

41. Musiega, M. G et al (2013). Capital Structure and Performance: Evidence from Listed
42. Non-Financial Firms on Nairobi Securities Exchange (NSE), Kenya. International Journal for Management Science and Technology, 1(2).
43. Mwangi, L. W. Muathe, S. K. and Kosimbei, G. (2014). Relationship between Capital
44. Structure and Performance of Non-Financial Companies Listed in the Nairobi Securities Exchange, Kenya. Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics, 1(2), 72-90.
45. Mugenda, O & Mugenda, A. (2012). Research Methods, Qualitative and Quantitative Approaches. Nairobi Acts press. Myers, S. (2010). The Search for Optimal Capital Structure. Midland Corporate Finance, Journal, 1(6), 10-16.
46. Omondi, O. & Muturi, w. (2013). Factors Affecting the Performance of Listed Companies at Nairobi Securities Exchange in Kenya. Research Journal of Finance, 4(15), 99-104.
47. Omondi W. A. (2005). A study of Capital structure in Kenya. Unpublished MBA project University of Nairobi.
48. Raza, M. (2013). Effect of Financial Leverage on Firm performance. Empirical Evidence from Karachi Stock Exchange. Online at <https://mpa.ub.uni-muenchen.de/50383/>.
49. Su, G & Vol, T. (2010). Relationship between Corporate Strategy, Capital Structure and Firm Performance. An Empirical Study of the Listed Companies in Vietnam. International Journal of Finance and Economics. 3(13), 234-251.