



**International Academic Journal of Economic and Financial
Research**

**Financial Structure and Liquidity of Manufacturing Firms Listed at
the Nairobi Securities Exchange, Kenya**

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Article History:

Published on: 3/12/2026

DOI:

<https://doi.org/10.5281/zenodo.18995831>

How to Cite: Nduati, P. K., Aluoch, M. O., & Mapesa, J. (2026). Financial Structure and Liquidity of Manufacturing Firms Listed at the Nairobi Securities Exchange, Kenya. *International Academic Journal of Economic and Financial Research*, 3(2), 1–20.

<https://doi.org/10.5281/zenodo.18933880>

Abstract:

Purpose: This study examined the relationship between financial structure and liquidity among manufacturing firms listed on the Nairobi Securities Exchange. The study specifically assessed the influence of short-term financing, debt financing, and equity financing on the liquidity position of these firms.

Methodology: The research adopted a descriptive research design targeting all nine manufacturing companies listed on the Nairobi Securities Exchange as of December 2023. Due to the small population size, consensus sampling was applied to include all firms in the analysis. Secondary data were collected from financial statements for a five-year period (2019–2023). Liquidity was measured using the cash ratio as a proxy indicator.

Data analysis involved both descriptive statistics and inferential statistics. Diagnostic tests including normality, autocorrelation, and multicollinearity were conducted to ensure the reliability of the regression model. Hypothesis testing was carried out at a 5% significance level.

Findings: The results indicate that short-term financing has a positive and statistically significant effect on the liquidity of manufacturing firms. Conversely, debt financing and equity financing were found to have no statistically significant influence on liquidity. These findings suggest that effective management of short-term financing plays a critical role in sustaining liquidity levels within manufacturing firms.

Unique Contribution to Theory, Practice and Policy:

The study contributes to financial management literature by providing empirical evidence on the relationship between financial structure and liquidity within the Kenyan manufacturing sector. Practically, it highlights the importance of efficient short-term financing strategies for liquidity management. From a policy perspective, the findings offer insights for corporate managers and regulators in improving financial structuring decisions to enhance firm liquidity and financial stability.

Keywords: *Debt Financing, Equity Financing, Financial Structure, Short Term Finance, Liquidity and Manufacturing Firms*

JEL Classification: *G32, G31, G30, L60*

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1.0 INTRODUCTION

The manufacturing sector is the bedrock of innovation and mechanics change because most changes are first received and commercialized in this place area, making it the core jockey of mechanics change and financial happening therefore holds an extraordinary position in the minds of procedure-creators. The next step in financial progress and development is industrialization. It is becoming increasingly acknowledged and supported that machine control cannot be guided by display forces alone to the level of Germany, Japan, or the United States, which initiated machine control sufficiently early. Policymakers expanding frameworks should focus more on industrialized strategies proposed at chartering system centers to allocate funds to specific production subdivisions in an effort to advance and rejuvenate the sector in order to combat the problem (Stettner & Yudken, 2019).

In order to establish an adaptable and powerful economy that can foster professions, reduce confidence, and inspire poverty, the manufacturing sector plays a crucial role worldwide in encouraging and advocating financial development and improvement. For the most part, not very many nations on the world have skillful elevated scopes of finances incident and strength, accompanied socially extreme work invention competency without bearing an energetic production industry. Since the 1960s, Singapore, South Korea, Taiwan, and Hong Kong each with its own government have skillfully and consistently maintained accompanying inflated financial qualities, placing them among the world's most well-supplied nations (Watson, 2016). While Singapore and Hong Kong are prominent financial centers, general production and data novelty are centered in South Korea and Taiwan.

Several industries in Kenya face liquidity challenges on account of various determinants such as display dynamics, supervisory issues, and economic environments. Here are some examples: Agriculture: While agriculture is a significant contributor to Kenya's economy, many farmers and agribusinesses struggle with liquidity challenges. Factors such as unpredictable weather patterns, inadequate access to credit, high production costs, and market inefficiencies can lead to cash flow constraints for farmers, especially smallholders. Additionally, delayed payments from buyers and middlemen further exacerbate liquidity issues within the agricultural value chain (Mileva & Zafirova, 2019). Manufacturing: Many manufacturers grapple with working capital constraints, especially in industries like textiles, where production cycles are lengthy, and payment delays from buyers are common. Additionally, frequent power outages and infrastructure bottlenecks can disrupt production schedules and impact cash flow.

The production sector in Asian nations has been able to approach capital economically thanks to financing options based on low capital costs, accelerating the region's development. According to Were (2016), this is a component of the expenditure structure that, if supported, will manage increase the area's productivity and, consequently, value. Historically, Kenya's economy has had little impact on production because the division's contribution to GDP has been declining (Wanala et al., 2022). It contributed 10% of GDP from 1964 to 1973, rose to 13.6% from 1990 to 2007, and then fell to less than 10% thereafter, reaching its lowest level in 2017 at 8.4%. Through the Big Four Agenda, there is still a renewed effort by each government to renovate the region. In order to achieve the anticipated business-related elasticity and stability, the management anticipates that the production sector will contribute 15% of GDP in 2022 as a result of this.

1.1 Financial Structure

Investment decisions are based on the financing structure, and a company's financial performance is significantly influenced by its selection of financing options. According to Muthoni et al. (2019), central management of an organization must make a crucial decision regarding the appropriate combination of short-term and long-term funding sources. Companies typically use equity (such as ordinary shares, preference shares, and retained earnings) to finance only a portion of their assets; the remaining portion is funded by other means, such as long-term financial debt or liabilities (such as bonds, bank loans, and other loans) and short-term liabilities. Share capital, long-term debt financing, short-term debt financing, and retained earnings are some of the financial structure options available to businesses. Short-term payment is indispensable to allied chief's day to epoch selections. Legitimate harmony between long haul and short term financing is basic to a business monetary flourishing. Short-term financing is essentially worried about the choices of everyday running of a business (Eniola, 2021).

These choices incorporate the fitting measure of money, receivables, payables, inventories and as well as the degree of blend of short-term financing. Decrease in an organizations monetary execution is more probable because of incapable and wasteful administration of short-term financing choices. Eniola (2021) contends that a firm which successfully deals with its functioning capital has a high capability of working on its monetary execution. Accounts payable constitute a further significant source of working capital. Account payables, accrual, and bank overdraft all contribute to a company's short-term liabilities, which we refer to as "short term financing." Customers who are willing to or have already provided the organization with goods and services on credit terms are considered to be the institution's accounts payable (Rijanto, 2021). They consist of a company's trade credit as well as any expenses that have already been accrued, both of which work together to provide ongoing financing for a company's operations. The majority of businesses are forced to offer trade credits despite the fact that they would prefer to sell their products or services for cash rather than on credit. Trade credit, in contrast to the credit offered by firms, does not require any formal collateral but instead relies on trust and reputation. The payables turnover ratio was used in order to determine how much of an impact the firm's accounts payable have on its liquidity. The cost of merchandise convinced in the end of the fiscal year was detached for one average stock to accomplish a figure that maybe used to calculate the payables change percentage.

Mutegi (2019) asserts that decisions regarding financing structure primarily influence a company's demise. Because a particular choice affects loan costs, which in turn affects the risks a company is exposed to, the financing decision takes into account that a combination of the various payment options affects the company's value and, ultimately, the abundance of financiers. Therefore, curators must select a spending decision that can both improve returns by increasing financier wealth and firm worth while simultaneously reducing loan costs and instability. Both preference shares and ordinary shares are included in equity expenditure. The impartiality percentage may be measured in percentage by this change. This ratio shows how effectively property could have been financed by bill by using the total impartiality and total amount of money saved from the assertion of commercial position. According to Khawaja (2021), an impartiality ratio of less than 0.50 indicates that the business is leveraged, whereas an impartiality ratio of greater than 0.50 indicates that the business is prudent and cautious

when applying for credit. There are likely to be two distinct methods for issuing equity; This could happen as a result of a hidden public deal in which a different arrangement opens up to the entire world by appealing to interesting parts of an inexact association. The other option is to hawk their approved yet unissued offers to acquire additional property through a meticulously adapted issue for spent money arrangements.

According to Nasimiyu (2023), debt financing is a strategy that generates a rate of return that exceeds the total cost of the borrowed funds in order to increase owners' return on investment. Leverage financing entails acquiring interest-bearing instruments with specific term structures that are secured by assets. Debt financing is a tool used by businesses with insufficient financial resources to address funding gaps and is a major source of external funding for many businesses. Organizations that lack sufficient internal funds to support their operational activities and investments can use it to fill financing gaps. According to CMA Statistical Bulletin (2015), numerous Kenyan businesses are experiencing financial distress as a result of significant debt, declining business performance, insufficient cash flow for operations, and difficulties meeting bank payment deadlines. Kenya Airways (Annual Report, 2014) and Mumias Sugar Co. (Annual Report, 2013) both reported cash flow shortfalls that hindered their ability to meet debt obligations. Nine businesses have been barred from business in recent years, including Hutchings Biemer in 2014, City Trust in 2013, A Baumann in 2008, CMC and EAPCC in 2011, BOC and Carbacid in 2005, and Uchumi Supermarket in 2006. Additionally, a few businesses were taken off the market, including Access Kenya in 2013, Unilever Tea in 2008, and CMC Holdings in 2014. Financial distress and other disclosures were the primary causes of these suspensions and delistings.

1.3 Liquidity

By working out the proportions of its complete obligation, momentary obligation, and long haul obligation, an organization's liquidity is a significant monetary mark of its capacity to reimburse its obligations. This mixture of capital, which includes both equity and liabilities in their entirety, is the basis for the various forms of financing utilized by the businesses. Every business needs to keep an eye on how the liquidity relationship with the financial structure and common equity relates to its value, risk, and liquidity (Zimon et al., 2021). The liquidity needs of a firm are fundamentally affected apiece nature of allure trade. Companies complicated in business and economic duties generally have a depressed expenditure implant property, but demand a big investment in current property. Firms complicated in sell stores must win big stocks of a variety of merchandise to appease the different demand of consumers. Manufacturing associations and building firms also should establish considerably in venture capital but only some theoretical amount implant assets (Marquez et al., 2019). However public serviceableness has a restricted need for venture capital and should provide substantially implant property. Their necessities for venture capital are supposed because they have cash sales only and they supply duties only. Therefore the amount of cash hampered accompanying debtors or in stocks is very narrow. The needs for venture capital of most of the manufacturing concerns fall middle from two points two together extreme necessities of public serviceableness and business companies.

The change in inventory demonstrates the connection between the average stock and the costs of the goods sold. The rate at which inventory is converted into marketing is known as inventory turnover. A high rate of stock turnover indicates efficient stock management

because stockholders frequently believe that less cash is required to finance stock. According to Lampert et al. (2020), a lower percentage of stock turnover indicates wasteful stock management, excessive stock financing, slow trade, and distressing characteristics of the product, all of which contribute to a decrease in profit as compared to the amount of financing. An arranging can underrate allure needs for liquidity by ruling efficiently allures money needed to run a business. By growing operating effectiveness the use of liquidity will increase and pace of cash era will be increased. Better use of possessions develops appropriateness and helps the pressure on liquidity.

Operating adeptness is calculated by utilizing the total advantage to sale percentages. This measures the proportion of asset in property that is to say necessary to produce the annual reductions level. If the allotment is very extreme, it perhaps shows that an institution is not being assertive in allure marketing exertions (Owolabi, 2011). In this study, liquidity is measured using the cash ratio. The cash ratio assesses the proportion of a company's cash and cash-like assets relative to its current liabilities. This metric indicates how effectively a company can settle its short-term obligations using its most liquid assets, such as cash and easily convertible investments. It also provides investors and lenders with insights into financial stability of the firm in the short-term and its aptitude to honor financial commitments that are immediate. When this cash ratio is high, a liquidity position that is strong and lower risk of insolvency is suggested, whereas liquidity issues are indicated when it is low (Blessing & Sakouvogui, 2023). Therefore, cash ratio helps analysts and creditors evaluate the liquidity of a company by showing how much of its current liabilities can be covered with quick-to-sell assets.

1.4 Manufacturing Firms

The manufacturing sector significantly contributes to the country's Gross Domestic Product (GDP) by serving both the domestic market and exporting to the Eastern Africa region. The sector is expected to experience enhanced growth due to various government strategies, such as increasing power supply capacity, opening the East Africa Customs Union, establishing agreements with the Common Market for Eastern and Southern Africa, providing duty exemptions on manufacturing machinery, allowing manufacturing under bond, and lifting restrictions on the repatriation of foreign capital, particularly for multinational subsidiaries. The sector's robust performance and continued expansion are crucial for achieving the government's ambitious development plan, Vision 2030 (Lekaram, 2014). This picture assumes a significant part in supporting the association's believability, expanding its bartering power, and by implication building mindfulness and prominence concerning its items and administrations. Also, the spread of organization data through true CMA channels is helpful to the organization with regards to improved public acknowledgment and validity (Wagacha 2021). These advantages acquired are what might be compared to significant promoting costs which non-recorded contenders need to pay to create and acquire a comparative standing and public acknowledgment. Businesses are powerfully considered by current analysts to assess the Marginal benefit of either bill to impartiality loan to the borderline cost of either manner of loan and where likely to decide the optimum levels of long-term indebtedness that would spur progress in their businesses.

1.5 Nairobi Securities Exchange

A structured trading and exchange platform for securities is provided by the Nairobi Securities Exchange (NSE). The National Stock Exchange (NSE) has developed into a world-class venue for equity and bond trading over the past six years. Carbon credits, financial and commodity derivatives, and Exchange Traded Funds (ETFs) are among the upcoming offerings planned by the NSE. Global and local investors seeking exposure to East Africa's capital markets use it as a key market. The National Stock Exchange (NSE), which is governed by the Capital Markets Authority (CMA), encourages savings and investment as well as provides low-cost capital access for local and international businesses in Kenya. Currently, there are 63 government bonds and 19 corporate bonds and notes from 9 companies listed on the NSE. None of the corporate bonds has an issued value exceeding Kshs. 2 billion. The total value of all listed government bonds is approximately Kshs. 400 billion, while the listed corporate bonds amount to about Kshs. 54.5 billion, resulting in a total market capitalization of approximately Kshs. 454.5 billion for the NSE debt market.

1.6 Statement of the Problem

Firms often face a dilemma in choosing between debt and equity financing, and it is crucial for them to evaluate and manage associated risks effectively. Many firms struggle to find an optimal capital structure that can balance risk and sustain performance (Boshnak, 2022). Manufacturing firms frequently experience delays in receiving payments from customers, fabricating activities normally require critical working funding to cover costs like unrefined components, work, and above costs. Unfortunate administration of working capital can bring about liquidity issues. Moreover, restricted admittance to reasonable supporting choices, for example, bank advances or credit extensions, can additionally oblige an assembling company's liquidity, especially for more modest or fresher organizations with restricted records. Universally, the assembling area has been perceived as a critical driver of quick development.

In Kenya, the contribution of the manufacturing sector to the country's Gross Domestic Product (GDP) has been declining, consistently remaining below 10% on average. For example, it contributed 10% to GDP in 2014, but this decreased to 9.4% in 2015, 9.1% in 2016, 8.4% in 2017, 7.7% in 2018, and further dropped to 7.61% in 2020 (KAM, 2021). This downward trend indicates that the manufacturing industry is shrinking. In response, the government, together with trade partners, has shifted focus toward revitalizing the sector. Their goal is to increase the manufacturing sector's contribution to GDP to 15% by 2022, aiming to foster a more stable and resilient economy (KAM, 2018). Additionally, Olweny and Mukanzi (2021) examined how the liquidity of equities traded on NSE is influenced by accounts payable conversion period. Their findings revealed that the liquidity of equities on the NSE was significantly impacted by the length of the accounts payable conversion period. The goal of the study by Eligova and Kotukova (2019) was to look at how companies in the Czech Republic's food industry's liquidity was affected by various loan funding sources from 2006 to 2016. Using Granger causality tests, correlation analysis, and the extended method of moments (GMM), they compared the debt funding structures and liquidity of various organizations. The relationship examination uncovered that drawn out advances decidedly impacted the liquidity of Czech food area organizations, as proven by enhancements in their money proportions and speedy proportions. By conducting a regional analysis of how financing affects NSE-listed manufacturing in Kenya, this review seeks to fill a void. Previous research on this topic within the Kenyan context has yielded mixed and contradictory results, highlighting the need for further investigation.

1.7 Objectives of the Study

The study was guided by both general and specific objectives as follows: The general objective was to assess financial structure influence on liquidity of manufacturing firms listed in Nairobi Securities Exchange. The specific objectives for the study were as follows:

- (i) To examine how short term finance influences liquidity of listed manufacturing firms at the Nairobi Securities Exchange.
- (ii) To assess debt finance influence on liquidity of listed manufacturing firms at the Nairobi Securities Exchange.
- (iii) To establish how equity finance influences liquidity of listed manufacturing firms at the Nairobi Securities Exchange

1.8 Research Hypothesis

H₀₁: Short debt finance does not significantly influence liquidity of listed manufacturing firms at the Nairobi Securities Exchange

H₀₂: Debt finance does not significantly influence liquidity of listed manufacturing firms at the Nairobi Securities Exchange

H₀₃: Equity finance does not significantly influence liquidity of listed manufacturing firms at the Nairobi Securities Exchange

1.9 Scope of the Study

The scope of the study focused on examining how monetary policies influence liquidity of NSE-listed manufacturing firms. The independent variables in this study include short-term cash, short-term obligations, and financial value, while the dependent variable is the liquidity of these listed manufacturing firms. These variables are viewed as critical in impacting the liquidity execution of NSE-recorded firms. Information for these factors were obtained from dependable and predictable records, including CBK's yearly administrative reports, the KNBS site, distributed yearly reports from the separate firms' sites, NSE handbooks, and the CMA site. The unit of investigation manufacturing firms recorded on the NSE. Optional information was gathered utilizing an information assortment sheet for a five-year time frame between 2019 and 2023 to guarantee that the information is both late and solid. The objective populace comprises of 10 manufacturing firms recorded on the NSE.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Pecking Order Theory

It was originated by (Myers, 1984) explaining the company's optimal financial structure. The theory depends on the managers, that supervisors have data about their organizations than financial backers. It manages the job of lopsided data in deciding how much obligation and value a firm will issue. Firms ought to back ventures first with interior assets, then, at that point, with safe obligation, trailed by dangerous obligation lastly with value to lessen the unfriendly signs that might be radiated (Yıldırım & Celik, 2020). This also means that debt decreases as the company increases its internal funds. Firms continue to hold surplus internal funds to reduce the cost of adverse selection, thus accumulating surplus cash that can be used to pay off debt as it becomes due. Companies that do not follow a restricted investment policy simply use cash flow to increase liquidity. External financing can be very costly, especially for financially constrained companies, due to listing costs and information asymmetry issues.

Companies prefer to use their cash flow to improve liquidity without leverage. Therefore, decisions made by corporate management regarding corporate financing determine the company's level of debt and self-financing (Ferreira, 2017). This is done with the intention of intentionally preserving the interest of their existing shareholders. Contrary to this hypothesis, Fama and French (2005) supports the lack of impartiality regarding arrears. They contend that organizations can keep away from realities costs or negative races by giving worth that is less disposed to be presented to unusual real factors also those impartialities.

2.1.2 Trade-Off Theory

The theory presented by Kraus and Litzenberger (1973) suggests that the rationale behind firms' capital structure decisions is influenced by a trade-off between tax benefits and the costs associated with debt. Specifically, their investigation indicates that firms evaluate tax savings from debt against mounting costs of distress and the potential shortage costs of maintaining certain assets. As firms take on more debt, they face higher financial distress costs, which include the risk of bankruptcy and the associated expenses, as well as the opportunity costs from asset shortages. This dynamic explains why well-planned firms tend to balance these factors, seeking leverage's optimal level that augments value while minimizing costs related to debt financing. Companies taking on the risk typically create an impression DER and do everything in their power to acquire it. The set point changes across firms spread out various firm credits (Myers 1984). Because of the question regarding the MM aphorism, Mill operator (1977) subsequently projected the speculation. Pecking order, on the other hand, emphasizes the specific connection between liquidity and cash available for use. The adjustment belief takes into account various aspects of financial construction and emphasizes the need for skilled professionals to conduct cost-benefit analyses and select high-quality financial construction solution combinations.

2.1.3 Modigliani and Miller Theorem

The Capital Structure Irrelevance Hypothesis, proposed by Modigliani and Miller in 1958, asserts that a company's overall valuation is unaffected by its capital structure. According to their theory, the market is assumed to have complete and perfect information about the company's operations, meaning that any information asymmetry does not influence the firm's value (Brigham and Ehrhardt, 2008). The hypothesis assumes that both investors and firms have equal access to all relevant financial data, leading to an efficient market where the company's performance metrics are fully known. Under this theory company's valuation remains constant regardless of whether it is financed primarily through debt or equity. For example, whether a firm takes on high leverage or maintains a lower debt ratio, it does not impact its market value or shareholder wealth. Instead, the firm's stock price is determined solely by its operating income and profitability. In practical terms, if a company seeks to optimize its capital structure perhaps to meet short-term financing needs or maximize certain benefits it must do so without expecting any change in its overall value. The firm can raise new capital as needed, choosing the most appropriate financing method without concern for affecting its market valuation, provided the assumptions of perfect markets and complete information hold true (Brigham and Ehrhardt, 2008).

2.1.4 Liquidity Preference Theory

Keynes (1936) developed this theory, which asserts that the demand for cash as a resource is influenced by the interest income forfeited by not investing in bonds. Keynes regarded money as the most liquid asset, highlighting that the more quickly an asset can be converted into cash, the more liquid it is (Abioro, 2013). The theory notes that, liquidity needs is driven by three main reasons: The Transaction Motive: Individuals require liquidity to manage routine transactions; The Precautionary Motive: Individuals prefer to hold cash as a safeguard against unexpected circumstances or emergencies; The Speculative Motive: Individuals keep cash to take advantage of potential changes in security prices, aiming to benefit from arbitrage opportunities (Baafi, 2020). The belief states when parties' business unending securities, financiers will mainly demand bigger rates of interest. This operation exactly inclines to extreme risk since, all different determinants unaltered, allied financiers pick to hold liquidity or cash. Based on this model, rates of interest on temporary investment bonds is usually reduced because allied financiers buy assets in long- or medium-term financing bonds, so relinquishing less liquidity. The premise of the model is that mainly liquid expenditures in a party are easier to command a price of whole effect (Abioro, 2013). This belief suggests that all additional belongings being equal, most investors will desire to purchase liquid assets to properties that are pronounced expected profitable for cash, that is to say, illiquid investments and will chase a properties premium that offer further their maturities. This theory elucidates why firms maintain liquid assets.

2.2 Empirical Reviews

An empirical review of literature encompasses the evaluation of previous studies that are similar to the one being proposed about acquiring the knowledge of their conceptualization, methodologies, contextualization, findings, and conclusions. This allows reproaches to determine the gaps to be filled with this study (Kothari, 2012). This study offers a comprehensive analysis of the correlation between different aspects of financial structure and liquidity of manufacturing firms listed at the Nairobi Securities Exchange.

2.3 Empirical Literature

2.3.1 Short Term Finance and Liquidity

Kimutai and Gakobo (2022) examined the impact of current obligations to support small and medium-sized enterprises in the Bomet region. The review, upheld by profession Off Hypothesis, Stewardship Hypothesis, and Food Chain Hypothesis, used graphic exploration plan and broke down information from 59 SMEs north of five years. The relapse examination uncovered a R worth of 0.784, showing areas of strength for a between the indicator factors and monetary execution. The R-squared worth of 0.614 proposed that 61.4% of the variety in monetary execution could be made sense of by rent finance, transient advances, overdrafts, and exchange credit, leaving 38.6% owing to different variables. The investigation discovered that an expansion in overdrafts, transient advances, and exchange credit varyingly affected monetary execution, with rent finance decidedly affecting monetary execution. Strategy proposals incorporate further examination concerning the impacts of transient liabilities, computerized credits, and development on SME execution. The two examinations center around various settings and kinds of firms. Onkware (2022) led an experimental examination of transient obligations and monetary execution, zeroing in on SMEs in Uganda. They analyzed the connection between working capital deficiencies and momentary obligations through graphic cross-sectional examination, using separated irregular inspecting and

purposive testing for key respondents. Essential information assortment was utilized to acquire an exhaustive comprehension.

2.3.2 Debt Finance and Liquidity

Adobo (2022) evaluated the connection between obligation funding and monetary execution of recorded assembling firms in Kenya. Dominance hierarchy and tradeoff hypothesis were utilized to support the review discoveries. Unmistakable examination configuration was embraced in this paper. The review designated 9 assembling firms and monetary reports between 2018 to 2022 were utilized as the unit of examination. It was resolved that there was an inconsequential connection between a mix of the autonomous factors (obligation supporting, interests charge safeguard and liquidity) and ward variable (monetary execution) ($F(1,34) = 1.678$; $p = 0.204$) and they could make sense of 98.2% variety of monetary execution ($Adj R^2 = 0.982$). It was additionally resolved that a unit expansion in the red funding added to 14.9% decline in monetary execution yet the relationship was unimportant, since $p\text{-esteem} > 0.05$ ($\beta = -0.149$; $t = -0.879$; $p = 0.389$). It was additionally resolved that a unit expansion in interest charge safeguard added to 11.2% decline in monetary execution yet the relationship was immaterial, since $p\text{-esteem} > 0.05$ ($\beta = -0.112$; $t = -0.659$; $p = 0.515$). It was additionally resolved that a unit expansion in liquidity added to 43% increment in monetary execution and the relationship was measurably critical, since $p\text{-esteem} < 0.05$ ($\beta = 0.430$; $t = 2.777$; $p = 0.009$). It very well may be inferred that there is a frail negative and inconsequential connection between obligation funding and monetary execution. The concentrate by Adobo (2022) gives bits of knowledge into how obligation supporting, interest charge safeguards, and liquidity influence the monetary exhibition of NSE-listed assembling firms. It underscores liquidity's significant role in enhancing fiscal liquidity while indicating that debt financing and interest tax shields may not currently add substantial value. The recommendations for policy improvements and further research aim to help firms better manage their capital structure and improve overall performance.

2.3.3 Equity finance and Liquidity

Muigai (2018) decided financial structure impact on monetary fitness of non-monetary visitors recorded in Kenya. Furthermore, instances of working however monetarily battling undertakings have happened marked. This has not just disintegrated agents' trust in the capital publicize yet has still peaked in hardship of investors' assets. Ensuing examination reports by the executives instrumentalities have attributed this unfortunate marvel to the shift by documented social orders to connect with aggressive cost methodology coming about to over-prepare. Experimental investigations have still demonstrated that utilization of appropriated capital isn't strikingly harming to firms. Taking into account the heading out in a different direction methods of united supporting (obligation and fairness), gifted is need to address through what unprejudiced nature installment impacts partnered financial sufficiency. This focus was then required to address increasing independence effects on Kenya's NGOs' business strength. The research plan for the review working panel. The review identified the Hausman test results as the particularized board inversion model for erratic effects. Noor (2020) examined how the use of fair financing affected SMEs' financial performance in Garissa Region, Kenya. The study's specific objectives were to assess the impact of various financial factors, including the availability of favorable lenders, return on investment, operational efficiency, and land-backed assets.

Over 3097 restricted and medium endeavors were judged utilizing revealing appraisal orders, and the lithograph public was the receiver. The blamed for the review were the money bosses, agents and owner of SMEs. A fundamental dossier was compiled for a single solicitation use. With the help of the boss, content and face legitimacy were enhanced. Unfazed quality grade of 0.7 was embraced

2.4 Conceptual Framework

A conceptual framework is a structured model that visually or narratively illustrates the relationships between different variables within a study. It helps to clarify how independent variables influence dependent variables and serves as a guide for the research process. The primary purpose of a conceptual framework is to provide a clear, visual representation of the theoretical structure underlying a research study. It outlines the connections between various variables and helps to define the scope of the research.

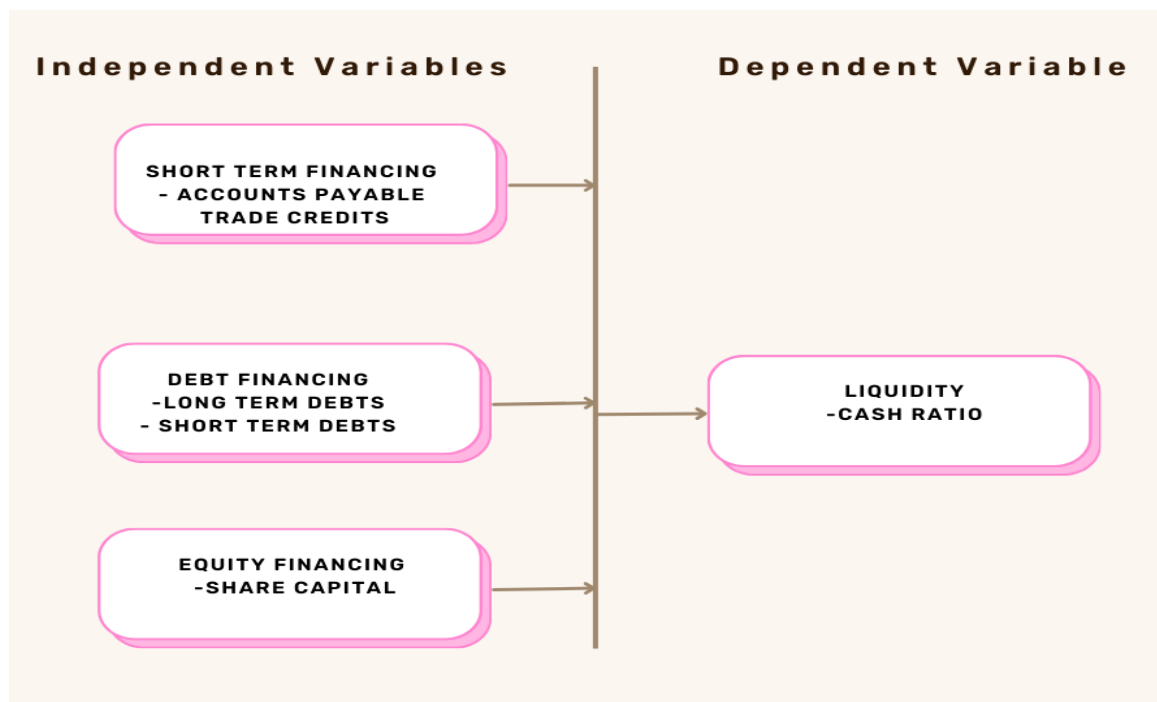


Figure 1 Conceptual Framework

Source: Researcher (2026)

3.0 RESEARCH METHODOLOGY

3.1 Research Design

Research design, according to Upagade and Shende (2012), is a theoretically defined process and environment design for the accumulation and study of dossiers with the goal of connecting relevance to the research purpose and saving in process.

According to Coopers and Schindler (2011), it depicts the accepted plan or method for conducting a research study to obtain answers to research questions. The descriptive research design was preferred for this study. An explanatory test arrangement is a non-preliminary plan used to detail the sociability in middle from two points or accompanying determinants. Explanatory research design, in accordance with Akhtar (2012), inquires to organize a pre-existent links betwixt two or more variables that are under the physicist's control. Explanatory research is favorite in this place study because it will help decide by means of what the financial building influences result firms' liquidity on the Nairobi Security Exchange.

3.2 Empirical Model

The following function served as the foundation for the regression model:

$$Y = \beta_0 + \beta_1X_1+ \beta_2X_2+ \beta_3X_3 + e$$

Where:

Y represents the parameters (cash ratio) on Liquidity

B₀ represents Constant

β₁, β₂ and β₃ represent Regression coefficients of Independent variables are;

X₁ represents Short term Financing

X₂ represents Debt Financing

X₃ represents Equity Financing

e represents Error Term

3.3 Operationalization of Study Variables

Based on the goals of the study, the variables of the study were made into operations. The factors under the review incorporated the monetary design as free factor and monetary sufficiency as the reliant variable.

Table 1 Operationalisation of Study Variables

Variable	Type	Measurement	Operationalization	Scale of Measurement	Directional hypothesis
Short term finance	Independent Variable	Accounts payable turnover Ratio	<i>Accounts Payable Turnover Ratio = Net Credit Purchases / Average Accounts Payable Balance</i>	Ratio	+/-
Debt finance	Independent Variable	Long term debts	= to	Ratio	+/-
		Short term Debts		Ratio	+/-
Equity finance	Independent Variable	Share Capital		Ratio	+/-
Liquidity	Dependent Variable	Cash Ratio	Cash ratio = (Cash + Cash equivalents) / Current liabilities	Ratio	+/-

Source: (Researcher, 2026)

3.4 Target Population

This is the specific group of individuals or entities to which the study’s results are meant to be generalized. As noted by Coopers and Schindler (2011), it is the particular population that the research findings aim to address. These firms are chosen due to their significant capital-raising potential and the high level of accountability they have towards their shareholders and the public. Listed firms are subject to rigorous auditing requirements, ensuring the availability and reliability of financial data. Listed manufacturing firms have greater opportunities for raising capital compared to non-listed firms, making them a valuable focus for examining financial structure and liquidity. These firms are legally required to disclose audited financial reports, which guarantees access to accurate and reliable data necessary for the study. Nine NSE-listed manufacturing companies as at December 2023 was the focus of the study (NSE, 2023) which was the complete set within the period. Data was collected over a 5-year period, from 2019 to 2023. This time frame allows for a comprehensive analysis of liquidity trends over several years. The selection of 10 firms provides a sufficient data pool for analysis, ensuring that the study's findings are robust and reliable. Limiting the study to listed manufacturing firms ensures a focused analysis of the impact of financial structure on liquidity within a specific sector and market context. The target population of listed manufacturing firms on the NSE and the chosen time frame of 2019-2023 align with the study's objectives to analyze the impact of financial structures on liquidity. By concentrating on this specific group of firms, the study aims to deliver meaningful insights that are applicable to the listed manufacturing sector in Kenya, providing a foundation for both academic research and practical financial management.

4.0 RESULTS AND DISCUSSIONS

4.1 Descriptive Statistics

The explanatory enumerations secondhand are mean, predictable difference, minimum and maximum. Below is a summary of the helpless and independent variables accompanying their distinguishing resources, predictable difference, maximum and minimum principles, accompanying mean building the average advantage of the dossier and predictable difference that gave an exact likeness by virtue of what dossier has existed scattered above and beneath the mean.

Table 2: Descriptive Statistics

Year	Mean	SD	MAX	MIN
Liquidity	1.24	0.49	1.93	0.53
Short Term Financing	15.24	3.69	21.96	10.31
Debt Finance	65.61	10.58	76.38	41.20
Equity Finance	14.32%	4.57%	23.67%	8.82%

Source: Researcher (2026)

In Table 2: The average liquidity during was erect expected 1.24. The best possible of liquidity of 2.27 was written in the period 2019 while hostile level of 0.23 was written in the old age 2023. The standard deviation in liquidity are registered apiece average predictable difference of 0.49.

Firms’ average annual short term expenditure range middle from two points an extreme of 17.02 and depressed of 13.04. The maximal maximum worth was 24.97 registered in the period 2023 accompanying the minimum worth of 8.05 recorded the 2019. The average predictable difference of dossier was 3.69 describing a high difference. the average debt financing was 65.61%, with a standard deviation of 10.58, indicating some variability among firms. The maximum average debt financing observed was 76.38%, while the minimum was 41.20%. The average mean of equity finance for the period was 14.32%, the average standard deviation recorded was 4.57% with an average maximum value and minimum value is 23.67% and 8.82% respectively.

4.2 Correlation Matrix

The existing degree of association between two variables while taking into consideration their strength and direction is evaluated using pearson's correlation matrix tool, where values can range from - 1 (indicating a perfect negative linear relationship) to +1 (which indicates a perfect positive linear relationship), and no correlation between variables indicated by zero (Saunders and Cornett , 2003). The correlation coefficients value ranges from 0.0 and 1.0; with a closer proximity to 1.0, indicating a stronger correlation between the two variables. When a variable increases as the other also increases, it is considered to have a positive correlation while if a variable increases and the other variable decreases, the relationship is said to be negative correlation. The value of probability below 0.05 indicates a statistically significantly correlated.

Table 3 Correlation Matrix

		Liquidity	Short term finance	Debt finance	Equity finance
Liquidity	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	30			
Short term finance	Pearson Correlation	.389*	1		
	Sig. (2-tailed)	.034			
	N	30	30		
Debt finance	Pearson Correlation	-.318	-.291	1	*
	Sig. (2-tailed)	.087	.118		
	N	30	30		
Equity finance	Pearson Correlation	.489**	.002	-.397*	1
	Sig. (2-tailed)	.006	.991	.030	
	N	30	30	30	
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Researcher (2025)

Correlation only indicates correlation existence or nonexistence, rather than providing insight on the relationship. Short term finance and liquidity had a person correlation of 0.389 which depicts short term finance have direct and positive impact on liquidity. Debt finance negatively influence the liquidity as shown by correlation of -0.318. Equity finance has a positive relation with liquidity as depicted by the figure of -0.006. Table 3 delineates findings' summary showing limited correlation between independent and dependent variables.

4.3 Regression Analysis

The described approach is a quantitative research method that involves analyzing multiple variables to comprehend dependent-independent variables' relationship. This method typically includes components such as the model summary, analysis of variance (ANOVA), and regression coefficients, which collectively help interpret these relationships' strength and significance. In this context, the coefficient of correlation (R) indicates variables' relationship degree and direction, providing insight into how strongly and in what way the variables are associated. The study specifically used the Adjusted R-Square to assess the goodness of fit of the regression model. Unlike the regular R-Square, the Adjusted R-Square accounts for the number of predictors in the model and only increases when a new predictor improves the model's relevance to the study. It decreases if the added variable does not contribute meaningfully, thus providing a more accurate measure of the model's explanatory power. On the other hand, the R-Square (coefficient of determination) was not used because it can be biased—tending to increase simply when more variables are added, regardless of their relevance—potentially leading to misleading conclusions about the model's explanatory capacity.

Table 4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.682 ^a	.465	.403	.32335	1.791
a. Predictors: (Constant), Equity finance, Short term finance, Debt finance					
b. Dependent Variable: Liquidity					

Source: Researcher (2025)

Based on the model summary presented in Table 4, the coefficient of correlation (R) is 0.682, indicating a strong positive relationship between the independent variables and the liquidity of listed manufacturing firms. The coefficient of determination (R-Square) is 0.465 (46.5%), which suggests that the combined effect of the independent variables—Equity Finance, Short-term Finance, and Debt Finance—explains approximately 46.5% of the variation in the firms' liquidity. Furthermore, the Adjusted R-Square is 0.403 (40.3%), meaning that after adjusting for the number of predictors in the model, about 40.3% of the changes in liquidity can be attributed to these variables at a 95% confidence level. This indicates a substantial, though not exclusive, influence of the tested financial factors on liquidity of Kenya's NSE-listed manufacturing firms. This suggests that additional determinants, not included in the research, contributed 59.7% to liquidity variation.

Table 5 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.360	3	.787	7.523	.001 ^b
	Residual	2.718	26	.105		
	Total	5.078	29			
a. Dependent Variable: Liquidity						
b. Predictors: (Constant), Equity finance, Short term finance, Debt finance						

Source: Researcher (2025)

In Table 5, ANOVA test produced an F value of 7.523, significant at 0.001, suggesting a linear relationship among the study variables. At the 95% confidence level, equity finance, short-term finance, and debt finance were statistically significant in predicting liquidity of Kenya’s manufacturing firms listed at the NSE.

Table 6: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.949	1.332		2.214	.036
Short term finance	.066	.021	.480	3.175	.004
Debt finance	-.026	.014	-.313	-1.896	.069
Equity finance	7.744	3.339	.366	2.319	.029
a. Dependent Variable: Liquidity					

Source: Researcher (2025)

The coefficients are used to answer the following regression model which relates the predictors (independent) and dependent variables. As per the SPSS generated table 6, the established regression equation was: $Y = \beta_0 + \beta_1 \text{short term finance} + \beta_2 \text{Debt finance} + \beta_3 \text{Equity Finance}$

$$Y = 2.949 + 0.066 * \text{short term finance} - 0.026 * \text{Debt Finance} + 7.744 * \text{Equity Finance}$$

Holding Short-term Finance, Debt Finance, and Equity Finance constant, the predicted liquidity of the manufacturing firms would be 2.949.

4.4 Testing of Hypothesis

This is applied in research citations to evaluate results in line with the study objective, helping to either accept or reject the null hypothesis. Terms secondhand involve test unit of the mathematical system which wealth that the resolution either to acknowledge or deny the null theory is fashioned established this advantage; therefore, if the premeditated test detail of action worth is inferior the fault-finding value, we acknowledge the theory, alternatively, we dismiss the hypothesis (Saunders & Cornett, 2003). Another term is significance level, which denotes confidence with which a null hypothesis is either accepted or rejected. The determining determinant in all the tests was that when the p-value falls under the 0.05 threshold, the null hypothesis is dismissed and the alternative is supported. Conversely, if the p-value exceeds 0.05, the null hypothesis is upheld. The study secondhand the verdicts in table 4.10 above in experiment the hypotheses.

H₀₁: Short debt finance does not significantly influence liquidity of listed manufacturing firms at NSE

Table 4.10 reports a 0.066 beta coefficient, indicating a negative effect on liquidity. However, p-value is $0.004 < 0.05$, confirming statistical significance. On this basis, the null hypothesis was rejected and the alternative accepted, meaning short-term debt finance significantly negatively influences liquidity of listed manufacturing firms.

H₀₂: Debt finance does not significantly influence liquidity of listed manufacturing firms at NSE

With a Beta of -0.026 and a p-value of 0.069, the effect was negative but statistically insignificant. Because the p-value exceeded 0.05 threshold, the study upheld the null hypothesis, confirming that debt finance does not significantly influence liquidity of listed manufacturing firms.

H₀₃: Equity finance does not significantly influence liquidity of listed manufacturing firms at NSE

As per Table 4.10, equity finance recorded a 7.744 Beta with p-value=0.029. This value is below the 0.05 threshold, indicating statistical significance. The findings therefore reject the null hypothesis and confirm that equity finance significantly influences liquidity of listed manufacturing firms.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The findings of this study, in alignment with existing literature, suggest that short-term finance plays a significant role in shaping liquidity. However, the impact varies depending on how short-term financing is managed within an organization. Empirical studies indicate that excessive reliance on short-term debt financing can negatively affect liquidity due to high repayment obligations and short maturity periods (Myers & Rajan, 2020). As revealed by analysis and existing literature, it is evident that short-term finance has a critical but complex influence on liquidity performance. The study outcomes indicate that debt finance does not significantly influence liquidity of manufacturing firms listed on the Nairobi Securities Exchange (NSE). This aligns with existing literature, which suggests that while debt financing is an essential source of capital, its direct impact on liquidity is often dependent on how it is managed. Empirical studies have shown mixed results regarding the relationship between debt finance and liquidity. According to Myers and Rajan (2020), firms that rely heavily on debt financing may experience financial rigidity, leading to potential liquidity constraints due to interest obligations and repayment schedules. The study findings indicate that equity finance positively and statistically significantly influenced liquidity of manufacturing firms listed on the NSE. This contradicts the null hypothesis that equity finance has no significant effect on liquidity, suggesting that firms that rely more on equity financing tend to have better liquidity positions. Existing literature supports this conclusion, emphasizing that equity financing enhances financial stability and reduces liquidity risk compared to debt financing (Myers & Rajan, 2020). Unlike debt finance, which imposes fixed repayment obligations, equity finance provides firms with financial flexibility, allowing them to allocate capital more efficiently without the burden of periodic interest payments.

5.2 Recommendations

Based on the study findings and existing literature, it is evident that short-term finance has a critical but complex influence on liquidity. While it provides essential capital for short-term needs, excessive reliance on short-term debt financing negatively impacts liquidity, potentially leading to financial distress. Therefore, firms listed on the NSE should adopt a balanced financing approach that minimizes liquidity risks by combining short-term financing with sustainable long-term financial strategies. Given that debt finance does not have a statistically significant influence on liquidity, NSE-listed manufacturing firms should focus on optimizing their capital structure by balancing debt and equity financing. Proper working capital management, coupled with sustainable financing strategies, is essential for maintaining liquidity stability and financial health in the long term. Given the study's findings and supporting literature, it is evident that equity finance plays a significant role in enhancing liquidity for NSE-listed manufacturing firms. To maintain strong liquidity positions, firms should consider leveraging equity financing while ensuring efficient capital utilization to maximize returns. A well-balanced capital structure that integrates equity and other financing options can contribute to long-term financial sustainability.

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