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EFFECT OF LONG-TERM DEBT ON FIRM'S RISK EXPOSURE IN NON FINANCIAL FIRMS LISTED IN THE NAIROBI SECURITIES EXCHANGE

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Abstract

In the last one decade, business environment in Kenya has become more turbulent with firms experiencing an increase in risk exposure as a result of changing consumer needs, changing economic conditions as well as global pandemics like COVID 19. To remain competitive, non-financial firms have adopted long-term debt financing as one of the strategies to financial their operations and expansions. However, even after the adoption of long-term debts, performance remains poor and firms remain exposed to various types of risks. Therefore, this study sought to examine the effect of long-term debt on risk exposure in non-financial firms listed on the Nairobi Securities Exchange. The study was anchored on the Modigliani–Miller theorem. The research design applied in this study was an explanatory research design. The target population was forty-six firms covering a period of period of five years from 2016 to 2020. Secondary data was used to collect data from audited financial statements of the various firms. The data was analyzed using descriptive statistical techniques and panel regression analysis. The study found that long term debt had a positive and significant influence on firm's liquidity risk exposure in non-financial firms listed in the Nairobi Securities Exchange. The study recommends that regulators should promote frameworks that encourage firms to align long-term debt with their liquidity profiles and operational cash flows. Implementing regular stress tests and requiring detailed reporting on long-term debt management could enhance oversight and prevent potential liquidity issues. In addition, firms listed at NSE should diversify sources of long-term debt by accessing different types of lenders, such as banks, bonds, or institutional investors. They should also assess the interest rate risks associated with long-term debt, especially if it includes variable-rate or floating-rate instruments.

Keywords: *Long-Term Debt, Risk Exposure, Liquidity Risk, Non-financial Firms*

Introduction

In a business environment, the main objective of those involved is wealth creation and maximization. There are four decision areas in financial management which are capital budgeting, financial decision, dividend decision and working capital decision. A company requires capital to finance its operations made up of debt and equity (Kibunja & Fatoki, 2020). Jones and Edwin (2019) indicate that debt financing plays a crucial role as a primary capital source for numerous expanding companies, particularly when their retained earnings are inadequate or inaccessible. At times firms face financing issues as a result of poor planning and

failure to use funds optimally this has acts as a reason why they end up using debt in their financing (Nazir, Azam & Khalid, 2021). Companies are advised not to take loans if they are unable to pay or take loans that are on their limit of operation.

Long-term debt significantly impacts a firm's risk exposure by increasing its financial leverage, which heightens both the potential rewards and risks (Ahmed & Siddiqui, 2019). When a firm incurs long-term debt, it obligates itself to consistent interest and principal payments over many years, regardless of its profitability (Bokpin, Aboagye & Osei, 2019). This fixed obligation can place a strain on the firm's cash flow, especially during economic downturns or periods of lower-than-expected revenue, thereby elevating the risk of financial distress or default. Moreover, a higher level of long-term debt can lead to increased borrowing costs and a downgrade in the firm's credit rating, further exacerbating its financial risk. The burden of long-term debt can also limit the firm's financial flexibility, making it more difficult to respond to market changes or invest in new opportunities (Opoku-Asante, Winful & Neubert, 2022). Thus, while long-term debt can be used to fuel growth, it also increases the firm's overall risk exposure, making it more susceptible to financial challenges.

Long-term debt significantly influences a firm's risk exposure across various contexts. In Pakistan, Ahmed and Siddiqui (2019) found that debt financing, measured through financial leverage, notably impacted profitability metrics like Return on Equity (ROE) and Return on Assets (ROA). Similarly, in the United States, Alhudhaif, Berger, and Kim (2021) highlighted that both short-term and long-term debt significantly affect a firm's risk exposure. In Jordan, Mohammad (2019) observed that while leverage can amplify returns, it also increases risk, particularly if returns do not meet debt obligations. In Ghana, Bokpin, Aboagye, and Osei (2019) emphasized that debt introduces credit risk, heightening the likelihood of default. This trend is also evident in Nigeria, where debt financing often comes with restrictive covenants that increase operational risks. In Kenya, Mukui, Onjala, and Awiti (2020) noted that long-term debt significantly impacts performance, especially in terms of liquidity and earnings per share, underscoring the delicate balance between leveraging debt for growth and managing the associated risks.

Statement of the problem

In the last decade, business environment in Kenya has become more turbulent with firms experiencing an increase in risk exposure as a result of changing consumer needs, changing economic conditions as well as global pandemics like COVID 19 (Yator & Gitagia, 2023). To remain competitive, non-financial firms have adopted debt financing as one of the strategies to financial their operations and expansions. However, even after the adoption of long-term debt financing, their performance remains poor and they remain exposed to various types of risks (Mugambi, Muturi & Njeru, 2023). Even though the Capital Market Authority does not have a policy indicating the acceptable levels or risks in a firm, including credit risk, the level of credit risk among non-financial firms listed at the NSE has been increasing (Capital Market Authority, 2022). The firm risk exposure, measured in terms of current ratio, increased during the study period from 1.60 in 2016 to 1.66 in 2017, 1.71 in 2018, 1.74 in 2019 and 1.81 in 2020, but decreased to 1.78 in 2021 and 1.64 in 2022 (Nairobi Securities Exchange, 2022).

According to Mbuthia and Gatauwa (2022), a company with too much debt is likely to default on repayment of interest hence bankruptcy proceedings and financial distress. The total debt in non-financial firms listed in the NSE has been increased for the period between 2016 and 2022 with long term debt increasing from 0.38 to 0.65 (Nairobi Securities Exchange, 2022). The study considers the financial analyst who argues about the use of debt where some consider its use as

good in enhancing performance if acquired at a favorable rate and used well. However, for firms like Uchumi supermarkets, Mumias sugar company, and Kenya Airways, the case has been different after they acquired huge debts exceeding their net gains hence great risk, poor performance, fewer investors' confidence hence collapses and even closure to some of the firms (Gathiru, M. Khamah & Nyakora, 2023). Some firms have been closed example being the Cadbury East Africa and Pan Paper Mills Company in Webuye while others are contemplating closing their operations as a result of facing risks during their operations like Eveready East Africa. Research done by Nazir, Azam and Khalid (2021) revealed that long term debt financing has a negative sign on the presentation of non-monetary firms in Pakistan.

Various studies have been conducted in Kenya on long term debt financing and risk exposure. For instance, Naomi (2023) conducted a study on the impact of long term debt on the Return on Assets (ROA) of manufacturing firms listed on the NSE, concluding that long-term loans positively influence ROA. Conversely, Kyengo, Roche and Kavale (2023) found that long-term, short-term exert a negative and statistically significant impact on ROA, yet no discernible effect on Return on Equity (ROE). The absence of a direct examination into the effect of long-term debt on risk, coupled with discrepancies in theoretical interpretations, underscores the necessity for further research in this area. The research explores the question: What is the effect of long-term debt on firm's risk exposure in non-financial firms listed in the NSE?

LITERATURE REVIEW

Theoretical framework

The study was anchored on Modigliani and Miller theory. Modigliani and Miller (1958) put forth several propositions regarding capital structure. They argued that a firm's market is influenced by its operating income, independent of the investment risk. They identified various factors beyond mere market perceptions that impact financing decisions (Brusov, 2022). Proposition II refers that the cost of equity rises as the firm increases its use of debt financing, depicting the risk of equity depends on two things: the riskiness of the firm's operations (business risk) and the degree of financial leverage (financial risk).

In 1963, Modigliani and Miller revised their original theory to incorporate additional considerations, such as the impact of taxes on capital structure. This updated version highlighted how acquiring external debt can enhance financial performance by leveraging tax shield benefits (Brusov & Filatova, 2022). Specifically, interest payments on debt reduce the taxable income of corporations, which in turn lowers the amount of taxes owed to the government. As a result, the corporation retains more of its cash flows, which can be distributed to investors or reinvested in the business, thereby potentially increasing overall financial performance (Daiva & Liudmila, 2018). This revision provided a more comprehensive view of how debt financing interacts with taxation and corporate financial management.

This theory operates under several key assumptions: no brokerage costs, no taxation, no bankruptcy costs, uniform borrowing rates for both investors and corporations, equal access to information between investors and management regarding the firm's future prospects, and the unaffected nature of earnings before interest and taxes due to debt usage. Additionally, it posits that if the leveraged value of shares surpasses the unleveraged value, investors opt for personal debt to finance their firms (Giglio, 2022). According to MM, although a leveraged firm may initially appear more valuable during disequilibrium, this discrepancy is short-lived, leading to a scenario where the firm becomes overvalued, prompting investors to shift towards unleveraged firms. This theory primarily concerns the leverage of firms and highlights a positive correlation between leverage and firm risk.

Modigliani and Miller (M&M) argue that under perfect market conditions, the capital structure of a firm, including the proportion of long-term debt, does not affect its overall value or risk exposure. However, in the real world where taxes, bankruptcy costs, and information asymmetry exist, M&M suggest that long-term debt can increase a firm's risk exposure. For non-financial firms listed on the NSE, higher levels of long-term debt elevate financial risk due to the obligation to make fixed interest payments. This increased leverage amplifies the firm's vulnerability to economic downturns, potentially leading to higher default risk and greater overall risk exposure. Daiva and Liudmila (2020) used Modigliani and Miller (1963) theory to explain the relationship between long term debt and liquidity management among firms.

Empirical rReview

Nazir, Azam, and Khalid (2021) investigated the impact of long-term debt financing on the performance of firms listed on the Pakistan Stock Exchange. Their study employed pooled ordinary least squares regression, as well as fixed- and random-effects models, to analyze a cross-sectional sample comprising 30 Pakistani companies operating within the automobile, cement, and sugar sectors throughout the period from 2013 to 2017. The findings revealed a significant negative correlation between long-term debt and firm profitability, indicating that a high-debt policy driven by agency issues may contribute to diminished performance.

Nguyen and Nguyen (2022) examined the relationship between long-term debt and equity risk. Research and analysis of panel data with generalized least squares (GLS) via industry construction companies listed on the Vietnam Stock Exchange from 2015 to 2019. The data analysis results showed that long-term debt typically requires regular interest payments. These interest expenses can reduce a firm's profitability and cash flow, especially if the interest rates are high or the debt burden is substantial. Higher interest payments may lead to lower net income and cash available for other business activities.

A study conducted by Kumar, Sharma, and Patel (2021) explored the effect of long-term debt on the financial performance of Indian firms. The researchers aimed to understand how long-term debt impacts key financial metrics such as return on assets (ROA) and return on equity (ROE) within the Indian corporate sector. They employed a sample of 100 publicly traded firms over a period of seven years. The study utilized panel data regression analysis to assess the relationship between long-term debt and financial performance. The findings revealed that moderate levels of long-term debt positively influenced financial performance by enabling firms to undertake significant investments and expansion projects. However, excessive long-term debt was found to negatively affect profitability and increase financial risk, suggesting that firms should balance their long-term debt levels carefully.

In Pakistan, a study by Ahmed, Khan, and Ali (2022) investigated the impact of long-term debt on the financial performance of firms listed on the Pakistan Stock Exchange. The study aimed to determine whether long-term debt enhances or detracts from firm performance, focusing on financial ratios such as ROE and net profit margin. Using a sample of 80 firms over a six-year period, the researchers employed a multiple regression analysis approach. The results indicated that long-term debt had a positive effect on financial performance up to a certain threshold. Beyond this point, further increases in long-term debt were associated with higher financial risk and lower performance, highlighting the need for prudent debt management.

A study by Ojo, Bello, and Eze (2023) examined the effect of long-term debt on the financial performance of Nigerian firms. The research aimed to evaluate how long-term debt influences key performance indicators, including ROA and ROE. The study analyzed data from 90 Nigerian firms over a period of five years, employing a panel data regression model. The findings showed

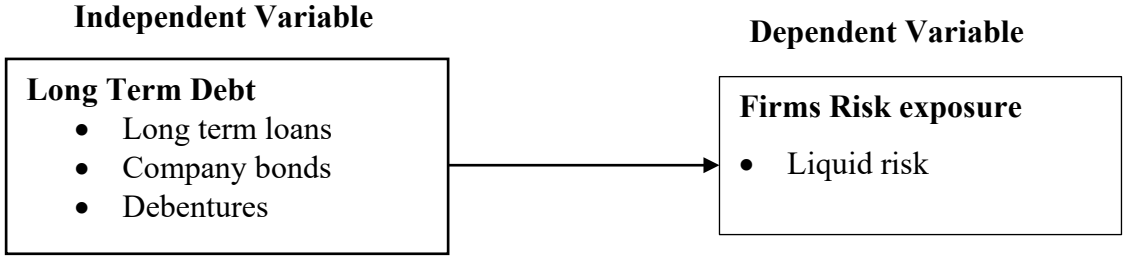
that long-term debt had a generally positive impact on financial performance by facilitating growth and investment. However, excessive reliance on long-term debt was linked to increased financial distress and lower profitability, suggesting that firms should manage their long-term debt judiciously to optimize performance.

In Ghana, the study by Appiah, Mensah, and Osei (2021) focused on the relationship between long-term debt and the financial performance of firms. The purpose was to assess whether long-term debt contributes to or hinders financial performance, with an emphasis on metrics such as ROE and return on investment (ROI). The researchers used a sample of 70 firms listed on the Ghana Stock Exchange over a seven-year period. Through regression analysis, the study found that moderate levels of long-term debt positively impacted financial performance by providing capital for expansion and operational improvements. However, excessive long-term debt was found to negatively affect profitability and increase financial risk, indicating the need for careful debt management.

A study by Muriuki, Wanjiru, and Ndegwa (2022) explored how long-term debt affects the financial performance of firms listed on the Nairobi Securities Exchange (NSE). The study aimed to analyze the impact of long-term debt on financial performance indicators such as ROA and ROE. Using a sample of 60 firms over a six-year period, the researchers applied panel data regression analysis. The findings revealed that long-term debt generally had a positive effect on financial performance by supporting growth and investment opportunities. However, the study also highlighted that excessive long-term debt could lead to financial instability and reduced profitability, emphasizing the importance of maintaining an optimal level of long-term debt.

Conceptual framework

Latwal (2020) defines conceptual framework as a structure which a researcher believes can best explain the natural progression of a phenomenon to be studied. In the study, firms risk is the dependent variable while the independent variable is long-term debt.



Source: Author (2022)

Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

This study adopted an explanatory research design. An explanatory research design is ideal for establishing causal relationships, as it allows for a detailed investigation into how variations in long-term debt financing influences financial risk. The target population was 46 non-financial firms listed within the NSE. These first are categorized into 10 sectors, which include agriculture, commercial & services, automobiles & accessories, energy &petroleum, telecommunications and technology, manufacturing and allied as well as construction and allied, growth enterprise market segment (NSE, 2022). The study excluded the banking and insurance sectors.

Table 1: Firms in the Target Population

Sector	Number of firms in the sector	Percentage %)
Agricultural	6	10
Automobile Accessories	2	3
Commercial and services	9	14
Construction and Allied	5	8
Energy and petroleum	5	8
Investment and investments services	4	6
Manufacturing and Allied	9	14
Telecommunication and Technology	1	2
Growth Enterprise Market Segment	4	6
Real Estate Investment Trust	1	2
Total	**46**	**100**

The study made use of a census approach and hence all the 46 non-financial firms listed in 10 sectors at the NSE. The research tool employed in the data collection process was a secondary data collection matrix, specifically designed to systematically organize and analyze data from various sources. This matrix was instrumental in collecting comprehensive data from several key resources, including audited and published financial statements of non-financial firms listed on the Nairobi Securities Exchange (NSE) and Capital Markets Authority (CMA) reports.

Inferential and also descriptive statistics were used in data analysis, and Statistical Package for the Social Sciences (SPSS version 2023) was used for all statistical analysis. Descriptive statistics included frequency distributions, percentages, means, variances, and standard deviation. Panel regression analysis was used to perform inferential statistics. Tables were be used to present the study's results. A panel regression model was a statistical technique used to analyze data that involves observations over time for multiple entities, such as individuals, firms, or countries. This model is particularly useful for studying dynamics that change over time within these entities, as it accounts for both cross-sectional and time-series variations. The model was as follows;

$$Y_{it} = \beta_{0it} + \beta_{1it}X_{1it} + \varepsilon$$

Where; Y= liquidity risk (current ratio); β_0=Constant; X_1 Long term debt measured in terms of ratio of long term debt to total assets; β= Coefficient of the model; $\boldsymbol{\varepsilon}$ =Error term; *t* subscript symbolize time; *i* subscript symbolizes firms listed at the NSE

RESULTS

The study collected and analyzed data from 46 non-financial firms listed on the Nairobi Securities Exchange (NSE) over a comprehensive period of five years, spanning from 2016 to 2020. This dataset provided a robust foundation for examining the financial and operational dynamics of these firms, allowing for in-depth analysis and understanding of trends, patterns, and relationships that emerged during this timeframe.

Descriptive Statistics

In this study, descriptive statistics included number of observations as well as mean, standard deviation,maximum, and also minimum values of study variables. The results were presented in Table 2.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Long Term Debt	230	.3444542	.2703624	.0029	.9759
Liquidity Risk	230	1.7015	1.264076	.15	9.43

As shown in Table 2, the average long-term debt ratio in the 46 non-financial firms listed on the Nairobi Securities Exchange for the period 2016-2020 was 0.3444542. The standard deviation of these ratios was approximately 0.2703624, indicating the variability of long-term debt-to-assets ratios among the firms. The minimum ratio observed was 0.0029, showing that at least one firm had a very low level of long-term debt relative to its total assets, while the maximum ratio was 0.9759, indicating a high level of long-term debt relative to assets for at least one firm. In addition, the average liquidity risk in the 46 non-financial firms listed on the Nairobi Securities Exchange from 2016 to 2020, measured by the current ratio, was 1.7015. This indicates that, on average, these firms had more current assets than current liabilities, suggesting a positive liquidity position. The standard deviation was 1.264076, reflecting significant variability in current ratios among the firms. The minimum current ratio was 0.15, and the maximum was 9.43, showing a wide range in short-term liquidity.

Diagnostic Tests

In panel data analysis, diagnostic tests refer to statistical techniques and procedures that are used to assess the quality, validity, and appropriateness of the chosen panel data model and the assumptions underlying it (Krishna, 2020). Diagnostic tests in this study include test for normality and test for heteroscendasticity.

Test for Normality

Testing for normality is a common step in statistical analysis to assess whether a dataset follows a normal distribution. The normal distribution, also known as the Gaussian distribution or the bell curve, is characterized by its symmetrical shape and is important in many statistical techniques (Latwal, 2020). According to Bhattacherjee (2018), normality tests help in determining if a dataset's deviations from normality are significant enough to affect the validity of certain statistical analyses. Normality tests are used to assess whether the deviations from normality are significant enough to affect the validity of statistical analyses based on the assumption of normality.

The study used Jarque- Bera Test in testing for normality. The Jarque-Bera test is a statistical test used to assess whether a given dataset follows a normal distribution. It is a goodness-of-fit test that checks whether the data's skewness and kurtosis are consistent with those of a normal distribution (Mukherjee, 2020). In essence, the test examines whether the data has the characteristic bell-shaped, symmetric distribution of a normal curve. The null hypothesis (H_0) of the Jarque-Bera test is that the data follows a normal distribution (the skewness and kurtosis of the data match those of a normal distribution). The alternative hypothesis (H_a) is that the data does not follow a normal distribution (the skewness and kurtosis are significantly different from those of a normal distribution).

Table 3: Test for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	Joint	
				Adj chi2(2)	Prob>Chi2
Long term debt	230	0.1293	0.9873	11.672	0.1124
Liquidity risk	230	0.1988	0.1233	14.277	0.1423

Measuring the skewness, the variables long term debt (p-value=0.1293) and liquidity risk (p-value=0.1988), were normally distributed. This is because the p-values were higher than the significance level. Measuring kurtosis, the variables, long term debt (p-value=0.9873), liquidity risk (p-value=0.1233). These findings imply that the long term debt and liquidity risk had normally distributed data. The means that the data leads to more efficient hypothesis tests, which in turn leads to more precise and interpretable results. It often simplifies the

interpretation of model parameters and facilitates hypothesis testing.

Heteroscedasticity Test

Heteroscedasticity is a statistical term that refers to the unequal variance of errors (residuals) in a regression model. The Breusch-Pagan test is a statistical test used to detect heteroscedasticity in regression analysis (Kumar, 2019). In the Breusch-Pagan test, the null hypothesis (denoted as H_0) is that there is no heteroscedasticity in the regression model. In other words, the null hypothesis posits that the variance of the residuals is constant across all levels of the independent variables (Devi, 2019). The alternative hypothesis (denoted as H_a), which is the opposite of the null hypothesis, suggests that there is heteroscedasticity, indicating that the variance of the residuals is not constant across different levels of the independent variables.

Table 4: Breusch-Pagan Test for Heteroskedasticity

Breusch-Pagan/Cook-Weisberg test for Heteroskedasticity
H_0: Constant variance
Variables: fitted values of Liquidity Risk
Chi2(1) = 1.27
Prob>chi2 = 0.2607

A p-value of 0.2607 in the Breusch-Pagan test indicates that there is no enough evidence to reject the null hypothesis of homoscedasticity at a conventional significance level (such as 0.05). In other words, the test does not provide strong evidence to suggest that heteroscedasticity is present in the data set. This suggests that the data set had homoscedasticity. Homoscedasticity, which means "homogeneity of variance" or "constant variance," is a statistical term used to describe a situation in regression analysis and other statistical modeling where the variability or spread of the residuals (the differences between observed and predicted values) is approximately the same or constant across all levels of the independent variable(s).

Hausman Test

The Hausman test is a statistical test used in econometrics and regression analysis to assess the consistency of estimated coefficients in two different models, typically the fixed-effects (FE) model and the random-effects (RE) model (Hall, 2020). Null Hypothesis (H0) in the Hausman test assumes that both the fixed-effects (FE) and random-effects (RE) models are consistent estimators of the parameters. In other words, it posits that there is no systematic difference between the parameter estimates obtained from the two models (Latwal, 2020). The alternative Hypothesis (Ha) in the Hausman test suggests that one of the models is inconsistent, implying that there is a systematic difference between the parameter estimates from the two models. The results were as presented in Table 5.

Table 1: Hausman Test

	Coefficients			
	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
LTD	2.125864	1.85777	.2680943	.0799452

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(1) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 11.25
Prob>chi2 = 0.0008

The results indicate that the p-value for the Hausman test is 0.0008, which is significantly below the standard threshold of 0.05. This low p-value suggests that there is a statistically significant difference between the fixed-effects and random-effects models. As a result, the null hypothesis, which posits that there is no systematic difference between the models, is rejected. Therefore, the fixed-effects model is deemed more appropriate and reliable for interpreting the relationship between long-term debt (LTD) and the dependent variable in this study.

Panel Regression Analysis

Panel regression analysis is a statistical method used to analyze data that has both cross-sectional and time-series dimensions. It is particularly useful when there are observations on multiple entities (such as firms) over multiple time periods. The goal of panel regression analysis is to examine relationships between variables while accounting for both the individual-specific effects and the time-specific effects. The panel regression model was as shown below;

$$Y_{it} = \beta_{0it} + \beta_{1it}X_{1it} + \varepsilon$$

Where; Y= Firm's risk exposure; Measured credit risk (non-performing loans ratio) and liquidity risk (current ratio); β_0=Constant; X_1 =Leverage measured in terms of debt ratio (total debt / total assets); X_2 =Long term debt measured in terms of ratio of long term debt to total assets; β= Coefficient of the model; ε =Error; *t* subscript symbolize time; and *i* subscript symbolizes firms listed at the NSE.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.508[a]	0.258	0.235	0.3359

The R-squared shows variation in dependent variable that can be explained by independent variables. As shown in Table 6, R-squared within the listed firms was 0.258. This means that long term debt can explain 25.8% of liquidity risk in non-financial firms listed in Nairobi Securities Exchange.

Table 3: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	99.339	1	99.339	184.806	.000[b]
	Residual	122.557	228	0.538		
	Total	221.895	229			

a. Dependent Variable: liquidity risk (current ratio)

b. Predictors: (Constant), Long Term Debt

The results indicate that the model significantly predicts liquidity risk, as evidenced by the F-Statistic of 184.806, which far exceeds the F-Critical value of approximately 2.706 at a 0.05 significance level. The p-value of 0.000 further supports the model's significance, confirming that the predictor—Long-Term Debt—has a meaningful impact on liquidity risk. This suggests that the variation in liquidity risk is well explained by the model, making the predictor statistically significant in understanding the current ratio.

Table 8: Regression Coefficients

LR	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_cons	.968237	.0927373	10.45	0.000	.7863164	1.152158
Long term debt	2.125864	.2605535	8.16	0.000	1.611932	2.639796

From the findings, long term debt, measured in terms of ratio of long term debt to total assets, had a positive and significant influence on firm's liquidity risk exposure in non- financial firms listed in the NSE (β_1=2.125864, p-value=0.000). The p-value (0.000) was less than the significance level of 0.05 and the effect of long term debt on firm's liquidity risk exposure was statistically significant. This implies that a unit increase in long term debt would lead to a 2.125864 increase in firm's liquidity risk exposure in non-financial firms listed in the NSE. The findings contrast with those of Kumar, Sharma, and Patel (2021) indicating that long term debt had a negative effect on firm performance in Ecuador. The finding also contrast with the findings of Nazir, Azam, and Khalid (2021) indicating that long-term debt financing had a negative effect on performance among firms listed in the Pakistan Stock Exchange. The findings also contrast with the findings of Muriuki, Wanjiru, and Ndegwa (2022), which showed that long-term debt had a negative effect on financial performance in state-owned sugar firms in Kenya.

Conclusion and Recommendations

The study concludes that long term debt had a positive and significant influence on firm's liquidity risk exposure in non-financial firms listed in the NSE. This means that an increase in long-term debt (borrowed over extended periods) for these non-financial firms was associated with a higher level of liquidity risk exposure. This shows that companies with higher levels of long-term debt were more vulnerable to liquidity-related issues. Liquidity risk exposure, on the other hand, refers to the degree to which a company is vulnerable to financial difficulties due to its inability to meet short-term financial obligations. This suggests that companies with a larger amount of long-term debt are more susceptible to facing liquidity-related issues.

Given that long-term debt significantly affects liquidity risk, policies should incentivize firms to manage long-term debt cautiously. Regulators could promote frameworks that encourage firms to align long-term debt with their liquidity profiles and operational cash flows. Implementing regular stress tests and requiring detailed reporting on long-term debt management could enhance oversight and prevent potential liquidity issues. In addition, firms listed at NSE should diversify sources of long-term debt by accessing different types of lenders, such as banks, bonds, or institutional investors. They should also assess the interest rate risks associated with long-term debt, especially if it includes variable-rate or floating-rate instruments. The management of these firms should also review the terms and covenants associated with long-term debt agreements. Negotiate favorable terms that allow flexibility in challenging times.

Areas for Further Research

The general objective of this study was to determine the effect of long term debt on firm's risk exposure in non-financial firms listed in the NSE. However, the study only focused on the non- financial firms listed in the NSE. As such, the findings of these studies cannot be generalized to financial firms listed in the NSE as well as companies not listed at the NSE. This study therefore recommends further studies on the effect of debt financing on firm's risk exposure among firms in different sectors of the economy including manufacturing sector, financial sector and insurance sector among others. In addition, the study found that long term debt can explain 25.8% of liquidity risk in non-financial firms listed in Nairobi Securities Exchange. As such, further studies should be conducted on other factors affecting liquidity risk in non-financial firms listed in Nairobi Securities Exchange.

REFERENCES

Ahmed, F., & Siddiqui, D. A. (2019). Impact of debt financing on performance: Evidence from textile sector of Pakistan. *Journal of Management, 12*(9), 90-113.

Ahmed, M., Khan, Z., & Ali, R. (2022). Impact of Long-Term Debt on Financial Performance of Firms in Pakistan. *Journal of Business and Financial Studies*, 19(1), 78-92.

Alhudhaif, E., Berger, A. & Kim, H. (2021). Firm Risk Exposure Concentration and Debt Structure Choice. *Asia Pacific Business Review, 28*(4), 467-492.

Appiah, K., Mensah, J., & Osei, M. (2021). Long-Term Debt and Financial Performance of Firms in Ghana. *Ghana Journal of Economic Studies*, 14(2), 55-72.

Bhattacherjee, A. (2018). *Social Science Research: Principles, Methods, and Practices*. Free Press.

Bokpin, G., Aboagye, A. & Osei, O. (2019). Risk exposure and corporate financial policy on the Ghana Stock Exchange. *Journal of Risk Finance, 11*(3), 323-332.

Brusov, P. (2022). *Capital Structure: Modigliani–Miller Theory*. Cham: Springer International Publishing.

Brusov, P., & Filatova, T. (2022). Recent Development of Modigliani-Miller Theory. *Strategies in Accounting and Management*, *3*(5), 1-2.

Daiva, B. & Liudmila, D. (2020). Capital Structure Impact on Liquidity Management. *International Journal of Economics, Business and Management Research, 2*(1), 110-123.

Gathiru, M. K., Khamah, A., & Nyakora, M. (2023). Influence of Marketing Turnaround Strategies on Performance of Uchumi Supermarket in Nairobi City County, Kenya. *Asian Journal of Economics, Business and Accounting*, *23*(13), 96-104.

Giglio, F. (2022). The Capital Structure through the Modigliani and Miller Model. *International Business Research*, *15*(11), 1-11.

Jones, A. S., & Edwin, O. A. (2019). Effect of debt financing on the corporate performance: A study of listed consumer goods firms in Nigeria. *Journal of Policy and Development Studies*, *289*(6569), 1-12.

Kibunja, P. N., & Fatoki, O. I. (2020). Effect of debt financing on financial performance of listed non-financial firms in Kenya. *Archives of Business Review*, *8*(7), 485-496.

Krishna, B. (2020). *Guide to Research Methodology and Biostatitics*. Rutledge.

Kumar, A., Sharma, R., & Patel, S. (2021). Effect of Long-Term Debt on Financial Performance of Firms: Evidence from India. *Indian Journal of Finance*, 15(2), 45-62.

Kyengo, F. N., Roche, C., & Kavale, S. (2023). Effect of bank loan financing on financial performance of SMEs in Mombasa County, Kenya. *The Strategic Journal of Business & Change Management*, *10*(2), 973-980.

Latwal, G.S. (2020). *Research Methodology.* CRC Press.

Mbuthia, J. N., & Gatauwa, J. M. (2022). Corporate sustainability practices and financial performance of firms listed in the Nairobi Securities Exchange, Kenya. *International Academic Journal of Economics and Finance, 3*(7), 89-112.

Modigliani, F., & Miller, M.H. (1958). The cost of capital, Corporation Finance, and the Theory of Investment. *American Economic Review, 48 (1),* 261-297.

Modigliani, F., Miller, M.H., (1963). Corporate Income Taxes and the Cost of Capital: A Correction. *The American Economic Review, 53*(3), 351-358.

Mohammad, S. J. (2019). Impact of external debt on economic growth in Jordan for the period (2010–2017). *International Journal of Economics and Finance*, *11*(4), 114-118.

Mugambi, P. M., Muturi, W., & Njeru, A. (2023). Effect of liquidity on financial performance of star rated hotels in Nairobi County, Kenya. *International Academic Journal of Economics and Finance, 3*(8), 305-322.

Mukherjee, S.P. (2020). *A Guide to Research Methodology: An Overview of Research Problems, Tasks and Methods.* CRC Press.

Mukui, G., Onjala, J., & Awiti, J. (2020). Effect of tax and debt financed government expenditure on economic growth in Kenya. *Journal of Economics, Management and Trade*, *26*(1), 1-13.

Muriuki, G., Wanjiru, D., & Ndegwa, I. (2022). Effect of Long-Term Debt on Financial Performance of Firms in Kenya. *East African Journal of Business and Finance*, 16(3), 97-115.

Naomi, I. W. (2023). Debt Financing and Financial Performance of Manufacturing Firms in Kenya. *African Journal of Commercial Studies*, *3*(2), 86-95.

Nazir, A., Azam, M. & Khalid, M.U. (2021). Debt financing and firm performance: empirical evidence from the Pakistan Stock Exchange. *Asian Journal of Accounting Research, 6*(3), 324-334.

Nguyen, A. T. & Nguyen, D. V. (2022). The relationship between financial decisions and equity risk. *Heliyon, 8*(8), e10036.

Ojo, O., Bello, A., & Eze, C. (2023). Effect of Long-Term Debt on Financial Performance of Firms in Nigeria. *African Journal of Business Management*, 17(3), 120-135.

Opoku-Asante, K., Winful, E. & Neubert, M. (2022). The Relationship between Capital Structure and Financial Performance of Firms in Ghana and Nigeria. *European Journal of Business and Management Research, 7*, 223-249.

Yator, J., & Gitagia, F. (2023). Effect of equity financing on the financial performance of manufacturing firms listed in Nairobi Securities Exchange. *International Academic Journal of Economics and Finance*, *3*(9), 426-436.