LONG TERM LIABILITIES AND FINANCIAL PERFORMANCE OF NON-FINANCIAL FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE, KENYA

Timothy Cheruiyot Bett.
Student, Department of Economics, Accounting and Finance, School of Business and Economics, Jomo-Kenyatta University of Agriculture and Technology, Kenya.
Oluoch Oluoch.
Lecturer, Department of Economics, Accounting and Finance, School of Business and Economics, Jomo-Kenyatta University of Agriculture and Technology, Kenya.
Tumaini Mwikamba.
Lecturer, Department of Economics, Accounting and Finance, School of Business and Economics, Jomo-Kenyatta University of Agriculture and Technology, Kenya.
Cythia Waga.
Lecturer, Department of Economics, Accounting and Finance, School of Business and Economics, Jomo-Kenyatta University of Agriculture and Technology, Kenya.

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ABSTRACT

Despite the fact that in Kenya, many firms have tried to undertake their operations prudently using cost-effective strategies, those firms have ended up liquidated or exiting the market due to inappropriately stretching their financial brawns and wrong credit management schemes which in essence is lack of knowledge on suitable financing. Non-financial firms have not been performing well for the last decade the entire period of this study as per the literature for this study hence the purpose of this study. As a general objective, this study sought to evaluate the effects of long term liabilities on financial performance of non-financial firms listed at Nairobi Securities Exchange, Kenya. The 44 non-financial firms listed at the NSE, Kenya for period of a period 12 years between 2012 to 2023 was a target population of interest for this study. This study employed positivism philosophy and ex-post facto research design. The study used secondary data that was obtained from the respective firms' historical financial reports. The Data was entered into the data collection sheets and later it was entered into EVIEWS v 10.0 for further analysis. Data was then quantitatively analysed using descriptive statistics which included means, standard deviation, maximum values and minimum values. The study further employed the diagnostic tests; stationary, Hausman test, normality, homoscedasticity, serial correlation and multicollinearity was tested. This ensured that the assumptions hold to avoid any misspecifications.

INTRODUCTION

Background of the study

One of a firm's most crucial areas is financing. Finding the best financing mix and balance of liabilities and equity for the firm is very important to a manager in the financing department. The combination of equity and liabilities that a company uses to finance its activities determines the financial structure (Matar & Eneizan, 2018). The ability of businesses to satisfy the needs of many stakeholders is strongly correlated with the structure of capital (Verbeke and Tung, 2013). There has been debate on equity and financial performance since the inception of Modigliani and Miller introduced the current theory of financial structure in 1958, which cleared the path for the advancement of additional theories including the asymmetric information theory and agency cost theory, among others (Yapa Abeywardhana, 2017). It is a framework for funding business activities with both equity and liabilities. Therefore, the goal of financial structure is to maintain a balance between risks and profits in businesses. The

company's owner(s) are equity holders with a long-term duty to the company to expand it in the future. The liabilities holder is the company's creditor and has a long-term commitment to it in exchange for periodic principle and interest payments (Dada & Ghazali, 2016). There are several alternatives' firms can acquire finances to run their operations such as increasing co-owners, borrowing as loan, retaining earned profits, lease financing, use of warrants, issue conventional bonds sign forward contracts, or trade swaps and can also use other unique securities in different combinations in order to mitigate risk and maximize market value (Matar & Eneizan, 2018).

According to Bhaduri (2002), because every financial decision made will have an impact on financial performance the company's goals can be realized by properly implementing financial management functions (Ernayani, Robiyanto & Sudjinan, 2017). According to Uddin (2015), in reality, different businesses may have varied objectives, but the main purpose of every business is to save costs. In terms of the overall cost, the financing cost of financial is of particular relevance to creditors and stock market investors. This may be the case since the liabilities to equity ratio informs creditors of the possibility of default for businesses with high levels of leverage.

Acording Gill Biger and Mathur (2011), a firm's financial structure can have a significant impact on financial performance. A crucial managerial choice is whether to use equity or debt because it affects both the market value of the firm and the return and risk to shareholders (Salim & Yadav, 2012). The dividends paid to shareholders and are impacted by the liabilities-to-equity ratio, which also has an impact on the cost of financial and the financial performance (Tanjung and Wahyudi, 2019). Additionally, as stated by Kerim, Alaji and Innocent (2019), the success of a business depends on the management determining the appropriate finance to support the business.

Fatoki et al. (2021) argue that, many businesses struggle to find the best balance of financing options, which makes it difficult for them to continue operating. The choice of how to finance a company's operations is based on the ratio of liabilities to equity. Acoording to Kliestik et al. (2020), equity and liabilities are the main elements of the financial structure and reflect the major claims on the assets of the organizations (Ogachi et al., 2020). Whitaker & Kräussl (2025), asserts that financially distressed enterprises typically exhibit poor cash flows, erratic financial performance, and a fall in the assets-to-liabilities ratio. Owolabi and Inyang (2013), argue that the funding component is crucial in determining the firm's long-term survival as well as its short-term financial performance. According to Akhtar et al. (2012), a firm's capacity to establish, run, and achieve financial performance is significantly influenced by its access to financing. Lack of access to land, utilities, installation and import procedures are barriers to the expansion and financial performance of non-financial firms listed at NSE, Kenya. The enterprises find it challenging to acquire financing due to a number of other factors, including weak financial management abilities and a lack of necessary collateral.

In their study, Maina and Ishmail (2014), conclude that equity and liabilities are key factors in determining the financial performance of companies listed on the NSE, Kenya. Githire and

Muturi (2015), revealed that internal equity have a positive and impact on financial success. This study's conclusion is that short-term financing reduces financial performance whereas equity and short-term liabilities financing improve financial performance. Buigut et al. (2013), in Kenya, show that, financial performance was significantly influenced by equity. According to Ngui & Atheru (2023), internal equity had a negative effect on financial performance of Kenyan companies listed in the non-financial sector and related industry.

Statement of the Problem

In fact, certain businesses have done exceptionally well as a result of the government's significant investments in fostering a business-friendly climate in Kenya (Girangwa Kakiya, Rono & Mose,2019). However, a number of listed firms in Kenya are performing worse than before, and some have even been taken off the NSE's list in the past ten years (Owade, 2023). The relationship between financial structure and financial performance has been a debate in a significant attempt to revitalise the failing and liquidated enterprises (Ogachi, 2021). M'tuaruchiu (2024), note that managers and practitioners still lack sufficient direction for reaching optimal financing structure decisions. Mukumbi, Eugine and Jinghong (2020) argue that, investors' wealth and trust in the securities market have declined as a result of this circumstance.

Non-financial firms that record good financial performance are able to achieve their going concern principle. However, this is not the actual situation among listed non-financial firms in most jurisdiction around the globe (Galdeano et al., 2019). In Kenya, the financial performance of non-financial firms has dropped from 5% in 2012 to 3.0% in 2023 which is based on equity turn over (NSE reoprt, 2023). In extention, over the years, several non-financial firms listed at NSE in Kenya continue to close operations owing to financial constraints. The fall of Eveready, Uchumi, Mumias Sugar Company, Sameer Africa and African Portland Cement has been linked to weak financial structure (Kakiya & Bosire, 2019). Consequently research on the connection between different finance choices and performance has shown contradictory findings. This investigation was conducted in light of this backdrop. According to Kurere, Tenai and Limo (2021), majority of empirical research on financial structure topic concentrates on studies from developed regions globally. Therefore this study sought to determine long-term liabilities and financial performance of non-financial firms listed at Nairobi Securities Exchange, Kenya.

Research Objectives of the Study

To assess the effect of long-term liabilities on financial performance of non-financial firms listed at Nairobi Securities Exchange, Kenya.

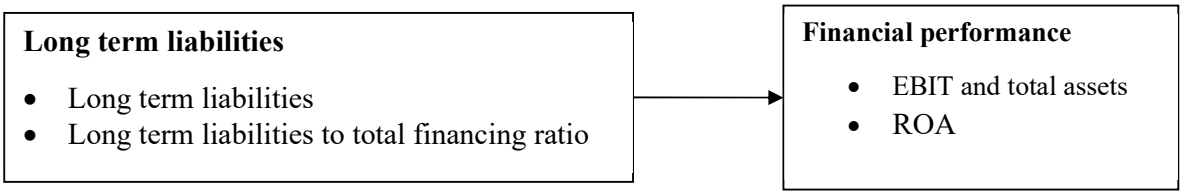
Research Hypotheses

H_0 long-term liabilities has no effect on financial performance of non-financial firms listed at Nairobi Securities Exchange, Kenya.

LITERATURE REVIEW

Conceptual Framework

Figure 1 Conceptual Framework



Independent Variables **Dependent Variable**

Long-Term Liabilities on Financial Performance

According to Githire and Muturi (2015), long-term liabilities comprise items that are recorded as non-current liabilities on a company's balance sheet. Long-term liabilities also refer to amounts owed to lenders from the present balance sheet for duration longer than one year. Long-term obligations, according to Akeem, Terer, Kiyanjui and Kayode (2014), include things like corporate bonds and long-term loans (usually over a year). These studies further argues that those long-term liabilities have a detrimental impact on financial performance since it is expensive to service and typically lowers profits, especially in sub-Saharan Africa.

The effects of long term and short term liabilities on financial performance were examined by Addae, Nyarko-Baasi and Hughes (2013) for 34 out of 35 enterprises registered on the Ghana Stock Exchange over a five-year period from 2005 to 2009. According to their study's financial performance and short term liabilities has a statistically significant positive link, whereas financial performance and long term liabilities have a substantial negative relationship. However, the findings showed that financial performance and total liabilities had statistically significant negative connection total liabilities.

Similarly, in a sample of 272 American manufacturing companies listed on the New York Stock Exchange for a period of three years between 2005 and 2007, Gill, Biger and Mathur (2011), examined the impact of financial structure on financial performance. They found that financial performance is significantly and positively impacted by short term liabilities, long term liabilities and total liabilities ratios. Sultan and Mustafa (2015), use OLS regression analysis on panel data from companies in the industrial sector to examine the impact of financial structure on financial performance among listed enterprises in Iraq (2004-2013). The study comes to the conclusion that total liabilities ratio considerably and positively influences financial performance.

Vatavu (2015), investigates the relationship between long term liabilities and financial performance. The findings of this study show that total debt ratio considerably and adversely affects financial performance. Mwangi, Makau and Kosimbei (2014), examined the relationship between long term liabilities and financial performance over the years 2006 to 2012 of 42 non-financial firms listed at Kenya's Nairobi Securities Exchange. The study employed a panel data analysis using practicable generalized least square (FGLS) regression

approaches. The study found that a long term liability was strongly and negatively linked to financial performance. Nima, *et al.,* (2012) investigated the connection between financial structure and financial performance during the years 2006 to 2011 in Iran. The study used long-term liabilities ratio as one of the independent variables and financial performance measure as the dependent variable. The study found a significant correlation between the long-term liabilities' ratio and financial performance.

Onchong'a, Muturi and Atambo (2016), investigated the impact of debt financing on financial performance of the firm over the short-term and long-term. For the purpose of this study a population 60 firms with debt in their capital structure in Nairobi Security exchange were evaluated. Three independent variables were examined; they include Short term debt ratio (STDR) and long debt term ratio (LTDR) in determining financial performance of the firms in form of return of assets (ROA). This study utilized secondary data from audited financial report of these firms between periods of 2009- 2012. From the study it emerged that the regression analysis coefficient on the debt effects on return on asset suggest that a unit increase of short term debt reduces return on asset by.

Mwiti and Gitagia (2023), determine the effect of long term debts on financial performance of manufacturing firms listed at Nairobi Securities Exchange. The main theory that anchored the study was pecking order theory. The target population was the 9 manufacturing firms listed in the Nairobi securities Exchange. A census of all the manufacturing firms listed in the Nairobi Securities Exchange was done. The study used secondary data from financial reports as published in the NSE handbook and Kenya National Bureau of Statistics for the period between 2017-2021. Panel regressions analysis and Pearson's product moment correlation analysis were used for inferential analysis while means and standard deviations were used for purposes of descriptive analysis. Feasible Generalized Least Square (FGLS) regression results indicated that long term debt had a statistically significant positive effect on financial performance.

Jibrin, Abubakar and Abubakar (2024), employed two financial performance measures which include; return on assets and return on equity, and directly considered with the relationship of long-term debt. The methodology of the study is exclusive criteria; because the study reviewed only recent studies from 2019-2023 that reported on long-term debt and financial performance. The data is gathered through the means of review and analysed through identifying the outcome of the reviewed studies. Therefore, based on the majority, the study found a significant negative influence of long-term debt (LTD) on financial performance measured by return on assets (ROA) of cement manufacturing companies and also, a negative effect was found with the financial performance measured by return on equity (ROE) of cement manufacturing companies.

Research Gaps

It is apparent from literature that most research undertaken emanates from developed economies hence there is huge discrepancy of application of results from studies in developing economies and this arouse the conceptual gap and contextual gap in how firms undertakes the internally generated equity financing. Furthermore, methodological gaps exist in terms of use

of research paradigm, research design and diagnostic tests on the same research study topic hence this research produced more insights on relevant analytical tools, measures and tests that would help in bridging gap for use in future by other researchers on internally generated equity financing and financial performance of financial or non-financial firms.

RESEARCH METHODOLOGY

Research Design

This study employed a positivism research philosophy ex-post facto research design. It is a type of research design that helps to determine the cause-and-effect association between study variables that is predictor variable and the predicted variable (Christy & Nurhasanah, 2024). The predictor variable is not manipulated when considering ex post facto research designs. It is also a type of research design which examines the effect of a particular characteristic or past occurrence on the outcome variable (Sekaran & Bougie, 2016). It was adopted because it allowed inferences to be made on associations and causality and hypotheses. The choice of research strategy according to (Saunders, *et al.,* 2018), is guided by the research question(s), objective(s), the extent of existing knowledge, amount of time and resources available as well as the philosophical underpinning.

Population of Study

A target population is a large collection of people, things, or events that all share certain traits and adhere to a particular specification (Mugenda & Mugenda, 2003). For this study the 44 non-financial firms listed at the NSE for the twelve years between 2012 and 2023 was the target population of interest in this study. In research, the term "population" refers to the total number of the kinds of things (or situations) that are the subject of your study, not necessarily the total number of individuals (Stockemer & Stockemer, 2019). Consequently, a population may consist of specific types of elements like as objects, individuals, groups, or even events (Walliman, 2015). According to Dahabreh and Hernán (2019), a population is the total group of individuals, events, or priceless objects that the analyst want to investigate. The population is made up of all study components. The population for this study was all non-financial firms quoted firms as of the end of 2023. According to NSE data, 44 non-financial firms quoted in Kenya as of 31st December 2023.

Sampling Frame

According to Lavrakas, *et al.,* (2019), a sampling frame is a list of the target population from which the sample is selected, which is usually finite in nature. Thus, for this study, the sampling frame comprised all the licensed 44 non-financial firms quoted, listed on the Nairobi Securities exchange as of 31st December 2023, and as contained in the capital market authority (CMA) Database and NSE database. The capital market authority (CMA) 2023 also provides disaggregated data for the listed companies.

Sample and Sampling Techniques

A sample is a section of the population taken for investigation. Taherdoost (2016), describe a sample as being a collection of units chosen from the population (universe). Furthermore, a sample is defined by Lavrakas (2008) as a subset of components selected from a broader

population. It is economical to use a sample in research (Alvi, 2016). While there are a number of ways to get a sample, the approaches differ in terms of how cost-effective they are and the expertise needed to use them. The purposive sampling strategy was used in this study to determine which units will be included in the sample.

Purposive sampling, according to Callegaro et al. (2014), is the intentional selection of specific units within the population or universe in order to create a sample that is representative of the population. Expert sampling sometimes referred to as purposeful sampling, aims to create a sample that may rationally represent a cross-section of the population without the use of probability. Using this strategy, the researcher can choose participants who gave detailed information on the issue being studied. The approach was used in this regard to choose the responders from each branch.

Table 1 Firms Distribution Categories

Category Of Company	No. Of Companies	Sample Period
Agricultural	6	2012-2023
Automobiles & Accessories	1	2012-2023
Commercial And Services	12	2012-2023
Construction & Allied	5	2012-2023
Energy & Petroleum	4	2012-2023
Investment	6	2012-2023
Manufacturing & Allied	8	2012-2023
Telecommunication	1	2012-2023
Real Estate Investment Trust	1	2012-2023
Total	44	2012-2023

Source: Author Calculation, 2023

Data Collection Procedure

Apuke (2017), defined data collection as the deliberate process of carefully gathering the information required to answer the study's questions. The study's primary objective was to clarify the relationship between internally generated equity and financial performance examined variables through secondary data. Data collection was started after official request was granted and the relevant institutions and personnel issue a letter of authorization. The institutions included but not limited to National Commission for Science, Technology and Innovation, Nairobi Securities Exchange and Firm's Management while the personnel include Supervisors in charge of projects. The secondary data was collected for a period of twelve years from 2012 to 2023 from historical published audited financial statements, NSE, CMA, non-financial firms listed at NSE premises and CBK exchange handbooks.

Data Collection Instrument (s)

The study made use of secondary data from previous financial reports of the individual companies. Financial structure data including from internally generated equity, externally generated equity, short-term debt and long-term debt was collected from the audited financial statements and published financial reports of the chosen companies. The study used data spanning the years 2012 through to 2023. Data was entered into a data collection sheet to organize the data for ease of analysis and data cleaning. Additionally, secondary data for a

report was gathered from published sources and audited financial statements and financial reports of the firms under research study (Tripathy, 2013).

Data Analysis and Presentation

Data analysis is a mechanism for reducing and organizing collected data to produce findings that require interpretation (Ott & Longnecker, 2015). The information entered on the data collection sheet was analysed using EVIEWS version 10.0 statistical software. Computing the relevant variables was based on the formulas discussed in the literature review. A fixed effect panel regression model was used to evaluate the connection between the dependent and independent variables.

Panel Data Analysis

Panel data can be defined as a two-dimensional data where cross-sectional units are observed over a given period of time (Beyaztas & Bandyopadhyay, 2022). Panel or longitudinal data can also be defined as the pooling of observations on a cross-section of organizations, countries, households etc over a given period of time. Further, Hsiao (2022), concluded that longitudinal data allows a researcher to analyse a number of important economic issues that can be addressed using cross sectional or time series data sets with ease. Gujarati (2009) has proposed a number of estimating methods for Random Effect (RE) and Fixed Effect panel data estimation (FE). Firstly,

Model Specification

The study adopted panel regression under the panel data framework. Panel data was suitable for this study because it helps to reveal the change at a specific firms' level over time period. It also helps to establish time order of variables as well as it shows how associations emerge.

Panel Data Regression Model

The specific panel data model that was used for this study is as follows;

$FP_{i,t}=\beta_0 + \beta_1 LTLR_{i,t} + \varepsilon_{i,t}$ ……..…….

Equation 1

$FP_{i,t}$ = Financial performance of firm i at time t., $LTLR_{i,t}$ = Long Term Liabilities of firm Ratio of firm i at time t, i = Non-Financial Firms Listed from 2012 to 2023, t = Time period (2012-2023), ε = Error term

Stationarity Test

The implication for stationarity is that the mean, variance and autocorrelation for variables in a study are constant over time. In this study ADF - Fisher Chi-square will be used to check if the assumption of stationarity is fulfilled. If the p-value is above a critical size, then the null cannot be rejected and the series appears to be with a unit root. If there are unit roots, the series is not stationary. If in case it is confirmed that any of the variables has a unit root, then the author has to differentiate it and run the equations using the differentiated variable.

Hausman Test

The study used Hausman's specification test (1978) to choose between fixed effects and random effects models. In Hausman test, null hypothesis preferred model is random effects and the alternate hypothesis is that the model is fixed effects. If the study fails to reject the null hypothesis, then random effect was an appropriate estimator otherwise in case of rejection of null hypothesis, fixed effect estimation will give better or efficient estimation of betas. Essentially, the tests look to see if there is a correlation between the unique errors and the repressors in the model. The null hypothesis is that there is no correlation between the two, hence interpreting the result from a Hausman test is fairly straightforward: if the p-value is small (less than 0.05), reject the null hypothesis.

Normality Test

The null hypothesis that the sample from which the data was taken is representative of a normally distributed population was tested using the Shapiro-Wilk test (González-Estrada & Cosmes,2019). The null hypothesis H_0 was that the data was normally distributed while alternate hypothesis (H_1) was that the data does not come from a normal distribution. The null H0 would be rejected if the *p*-value was lower than the significance level of 5% which is 0.05, so it is rejected if p-value is <0.05 and vice versa.

Heteroscedasticity Test

This study employed the heteroscedasticity test of Breusch-Pagan. If the p-value was less than <0.05, the Breusch Pagan test's null hypothesis indicated that there was **heteroscedasticity** and if p-value was > 0.05 then there was no **heteroscedasticity** (Dalla, Giraitis & Phillips, 2022)**.** If panel data shows heteroscedasticity to exist, then Feasible Generalized Least Squares (FGLS) model will be applied.

Serial Correlation Test

Serial correlation refers to a situation where the error terms are correlated with each other. That is the disturbance term of one observation is influenced by the disturbance term relating to another observation (Cao & Su, 2025). Breusch-Godfrey Serial Correlation LM test for autocorrelation in panel data was employed in this study. The null hypothesis was that no first order autocorrelation and if the Probability > F = 0.0000 then the null hypothesis was rejected.

Multicollinearity Test

The variance inflation factor was used to test for multicollinearity (VIF). When the VIF number was less than 5, there was assumption of no multicollinearity. The independent variables were correlated or have an influence on one another in this circumstance (Daoud, 2017). Invalid significance tests emerge from this circumstance's issues, which may cause the regression coefficients to inflate or deflate, depending on the situation.

RESULTS AND DISCUSSIONS

Descriptive Statistics

Descriptive statistics are basic features of data obtained in the study. This section presents secondary data descriptive statistics. Table 4.1 shows the descriptive statistics for variables used in the study.

Table 2 Measurers of Central Tendency and Dispersion

Statistic	Long-Term Liabilities (LTLR)	Financial Performance (ROA)
Mean	0.100641	3.426553
Std. Dev.	0.140060	15.10618
Skewness	2.145825	-0.995104
Kurtosis	8.136052	11.93024
Jarque-Bera	985.5404	1841.622
Probability	0.000000	0.000000

From table 4.1, the long-term liabilities had a mean of 0.100641 indicating an average employment of 10.0641 percent long-term liabilities for all the listed companies combined.From the table 4.1, skewness has a value of 2.145825 thus indicating that long-term liabilities were not normally distributed. Positive skewness meant asymmetrical distribution for long-term liabilities with a long tail to the right meaning increase in utilization of long-term liabilities (Eldomiaty, *et al.,* 2023). Kurtosis a value of 8.136052 indicated the data for long-term liabilities is not normally distributed. Karl Pearson in (1905), as cited by Westfall (2014) note that kurtosis is used to measure departure from normality, and coined the terms "leptokurtic," "mesokurtic," and "platykurtic" to indicate cases where kurtosis is > 0, $= 0$, and < 0 respectively. In the case for long-term liabilities the data was "leptokurtic," since $8.136052 > 0$. Jarque-Bera test indicate reject normality at 5% significance level (Glinskiy, *et al.,* 2024). The standard deviation is simply the square root of the variance. This makes the standard deviations of the externally generated equity to be 0.140060. The standard deviation is an especially useful measure of variability when the distribution is normal or approximately normal because the proportion of the distribution within a given number of standard deviations from the mean can be calculated.

From table 4.1, financial performance (ROA) percent had a mean of 3.426553 percent indicating an average return on assets of 3 percent for all the listed companies combined. From the table 4.1 skewness was -0.995104 indicating asymmetrical distribution for financial performance (ROA) with a long tail to the left meaning increase in performance in the observed periods (Iseringhausen, Petrella and Theodoridis, 2023). Kurtosis a value of Kurtosis 11.93024 indicated the data for financial performance (ROA) was not normally distributed. The Jarque – Bera test (JB test) constituted an alternative tool for testing the normality of variables (Jarque and Bera 1987). Jarque-Bera test indicate reject normality at 5% significance level (Cardoso *et al.,* 2025). These findings complements those of (Kabando and Otinga, 2021), analysis of

the return on equity indicate that the average ROA for listed construction and allied firms was 0.134603.

Stationarity Test

The implication for stationarity is that the mean, variance and autocorrelation for variables in a study are constant over time. In this study, ADF - Fisher Chi-square will be used to check if the assumption of stationarity is fulfilled.

Table 3 ADF - Fisher Chi-square Unit Root Test Summary

Series: Financial Performance, Internally Generated Equity		
ADF - Fisher Chi-square	504.026	0.0000

Table 3 presents the null hypothesis of the tests is that there is a unit root, with the alternative that there is no unit root. In this case it was confirmed that none of the variables has a unit root. The associated statistics were; ADF - Fisher Chi-square 504.026, p-value 0.0000.

Hausman Test

This additional assumption test is necessary to verify whether to use a fixed effects model or a random effects model while performing panel data analysis, which the analysis of data is over time, as indicated by (Baltagi, 2005). Essentially, the tests look to see if there is a correlation between the unique errors and the repressors in the model. The null hypothesis is that there is no correlation between the two, hence interpreting the result from a Hausman test is fairly straightforward: if the p-value is small (less than 0.05), reject the null hypothesis and adopt Fixed effect model.

Table 4 Hausman Test

Test cross-section and period random effects				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section and period random		3.927221	1	0.0435
Variable	Fixed	Random	Var(Diff.)	Prob.
Long term liabiliy	0.725038	-4.603896	9.399893	0.0822

Table 4 presents the statistics and show little evidence against the null hypothesis that there is no mis-specification since all the probability values are above 0.05. A central assumption in random effects estimation is the assumption that the random effects are uncorrelated with the explanatory variables. Test Cross-section and period random Chi-Square Statistic, 3.927221, p-value 0.0435. The results on table 4 show that a fixed effect model is superior to random effect and will therefore be adopted in this study.

Normality Test

The null hypothesis that the sample from which the data was taken is representative of a normally distributed population was tested using the Shapiro-Wilk test (Fisher, 2017).

Table 5 Shapiro-Wilk W Test for Normal Data

Variable	W	V	z	Probability
Financial performance	0.83933	2.238	1.446	0.82458
Long Term Liabilities	0.81164	2.624	1.773	0.07413

Table 5 presents the null hypothesis that the variables are normally distributed while alternate hypothesis was that the data does not come from a normal distribution. The associated p-value statistics for the five variables were found to be; Financial performance 0.82458, Internally Generated Equity 0.64125. All the p-values depict variables to be normally distributed. The null hypothesis was not rejected since the *p*-value was found to be higher than the significance level of 5% which is 0.05.

Heteroscedasticity Test

The dependent variable(s) exhibit variance levels that are equal across the range of the independent variable(s), in accordance with the homoscedasticity hypothesis.

Table 6 Breusch Pagan Heteroskedasticity test

Null hypothesis: Residuals are homoskedastic	Value	df	Probability
Chi-squared Test	0.758835	44	0.4687

Table 6 presents this study employed the heteroscedasticity test of Breusch-Pagan. The statistic for Breusch Pagan Test was found to be 0.758835 with an associated p-value of 0.4687. Since the p-value more than >0.05, the Breusch Pagan test's null hypothesis indicated that there was no heteroscedasticity problem and the variables were homoskedastic.

Serial Correlation Test

To detect presence of autocorrelation in panel data, the study employed the Breusch-Godfrey Serial Correlation Test for autocorrelation against the null hypothesis that there was no first order autocorrelation.

Table 7 Breusch-Godfrey Serial Correlation Test:

Breusch-Godfrey Serial Correlation Test:			Probability
F-statistic	2.302806	Prob. F(2,513)	0.1010
Chi-Square	4.609062	Prob. Chi-Square(2)	0.0998

Table 7 presents, the Breusch-Godfrey serial correlation LM test was conducted for the panel data. The test statistics used were F-statistic 2.302806, p-value 0.1010 and Chi-Square, 4.609062, p-value 0.0998.The null hypothesis was that no first order autocorrelation since the Probability > for F-statistic and Chi-Square = 0.0500 then the null hypothesis was rejected.

Multicollinearity Test

The variance inflation factor was used to test for multicollinearity (VIF). When the VIF number is less than 10, there is no multicollinearity. The independent variables are not correlated or have an influence on one another in this circumstance (Gujarati, 2009). Invalid significance tests emerge from this circumstance's issues, which may cause the regression coefficients to inflate or deflate, depending on the situation.

Table 8 Collinearity Test Statistics

Variables	Variance Inflation Factor VIF	Tolerance
Long Term Liabilities	6.156982	0.737792

Table 8 presents, the test for the presence of multicollinearity for those variables having variance inflation factor (VIF) of at least 10 as advised by Gujarati to test the existence of the issue. From table 4.7 the statistics were; internally generated equity variance inflation factor of 6.156982 and tolerance 0.737792,

Long - term liabilities effect on financial performance

The following were the model specification assumptions adopted in the calculation of estimates in the regression model for hypothesis testing; Dependent Variable: ROA, Method: Panel Least Squares, Sample: 2012-2023, Periods included: 12, Cross-sections included: 44, Total panel (balanced) observations: 528, Effects Specification, Cross-section fixed (dummy variables).

Table 9 Long - term liabilities on financial performance

Variable	Coefficient	Std. Error	t-Statistic	P-value
Long - term liabilities	-14.74935	4.658516	-3.166106	0.0016
C	4.910936	0.802945	6.116153	0.0000
R-squared	0.357014	Mean dependent var		3.426553
Adjusted R-squared	0.298439	S.D. dependent var		15.10618
S.E. of regression	12.65282	Akaike info criterion		7.995012
Sum squared residuals	77325.29	Schwarz criterion		8.358855
Log likelihood	-2065.683	Hannan-Quinn criteria		8.137449
F-statistic	6.095058	Durbin-Watson stat		1.654399
Probability(F-statistic)	0.000000			

The third hypothesis of the study stated that there is a significant effect of long - term liabilities on financial performance of non-financial firm listed at Nairobi securities exchange, Kenya. long - term liabilities was found to have a negative and statistically significant effect on the financial performance of non-financial firm listed at Nairobi securities exchange, according to the regression coefficient results (Beta = -14.74935, p-value = 0.0016). According to the data, increasing long - term liabilities by one unit will result in an increase in financial performance of non-financial firm listed at Nairobi securities exchange of -14.74935units. The Durbin-Watson statistic was discovered to be 1.654399, which is firmly within the desired range of a well-established model. The model summary results showed that long - term liabilities accounts for 35.7014% of the fluctuations in financial performance of non-financial firm listed at

Nairobi securities exchange, with other factors accounting for the remaining proportion. Salim and Yadav's (2012), found long term liabilities (LTD) had a negative association with financial performance in Malaysia. Abor (2005), looked into how the financial structure of listed companies on the Ghana Stock Exchange impacted their financial performance and discovered a significant positive correlation between the ratio of short-term liabilities to total assets and ROE and a negative correlation between the ratio of long-term liabilities to total assets and ROE. Hypothesis testing undertaken using p-value which in this study rejects the null hypothesis if p-value calculated is less than significant level of 0.05 and hence fail to reject alternative hypothesis if p-value is more than 0.05, therefore <0.05 null hypothesis is rejected and >0.05 fail to reject alternative.

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of the Findings

Examining the long-term liabilities and financial performance of non-financial listed companies on the Nairobi Stock Exchange was the main goal of the current study. According to the results of the correlation analysis, long-term liabilities and financial performance of Nairobi Securities Exchange-listed non-financial companies are correlated. Additionally, the results of the multiple regression analysis showed that long-term liabilities have a statistically significant effect on the financial performance of non-financial listed companies in Nairobi. This suggests that the Nairobi Securities Exchange should improve the long-term liabilities financing decisions of listed non-financial companies.

Conclusions

The study comes to the conclusion that listed non-financial firms, particularly those involved in the stock market, must have financing policies that aim to reduce financing activities by using long-term liabilities since the relationship was found to be negative and statistically significant effect. The findings suggest there is a negative association between long-term liabilities and financial performance of non-financial listed companies in Nairobi stock market are also supported by the regression results.

Recommendations

The study offers advice to the managers of listed non-financial firms in Kenya, advising them to concentrate on strengthening their long-term liabilities management strategies because doing that would results in a better financial performance of listed non-financial companies at the Nairobi Securities Exchange. The non-financial listed firms can achieve this by engaging in procedures including adhering to financial long-term liabilities management for balancing internal financing and liabilities.

Areas of Further Studies

The Nairobi Securities Exchange's non-financial listed companies were the subject of the current investigation. Since this study was restricted to the Kenya Securities Exchange, it is necessary to perform additional research on other non-financial listed companies in other nations. The study went on to prove that the long-term liabilities accounts for 35.7014% of variations in financial performance of non-financial listed companies in Nairobi securities

exchange. The report suggests conducting additional research on additional non-financial listed firms in Kenya and other countries across the world.

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