

**EFFECT OF CAPITAL STRUCTURE ON FINANCIAL
PERFORMANCE OF NON-FINANCIAL FIRMS LISTED AT THE
NAIROBI SECURITIES EXCHANGE**

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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Date: 12th November, 2021

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This research project has been submitted for examination with my approval as University Supervisor.

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DEDICATION

To my wife Margaret Kemunto and sons Abel Ogamba and Jayden Osebe who have always believed in me and supporting me throughout the duration of my studies and successful completion of this course.

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
CBK	Central Bank of Kenya
CMA	Capital Markets Authority
KPLC	Kenya Power and Lighting Company
NSE	Nairobi Security Exchange
ROA	Return on Assets
ROE	Return on Equity
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
VIF	Variance Inflation Factors

ABSTRACT

Non-financial companies listed at the NSE have a crucial role to play in the enhancement of economic growth of a country. The lack of a vibrant non-financial sector will limit the growth of the economy of a country. By having an optimal and beneficial capital structure, firms in the sector will experience growth in benefits such as cost reduction. The goal of the study was to see how capital structure affected the performance of NSE-listed non-financial companies. The study's population included all 42 NSE-listed non-financial companies. Capital structure, defined as the total debt to total assets ratio in a particular year, was used as a predictor variable in this study. Liquidity was assessed by the current ratio, total assets natural log measuring company size, and management efficiency was measured by the ratio of total revenue to total assets per year. Return on assets served as the response variable for financial performance. Secondary data was collected on a yearly basis for five years (January 2016 to December 2020). The research variables were analyzed using a descriptive design. SPSS software being utilized to conduct the analysis. The conclusions yielded a 0.294 R-square value, indicating that variations in the chosen independent variables account for 29.4 percent of changes in financial performance amongst non-financial firms, whereas other factors accounting for 70.6% of variance in financial performance amongst NSE listed non-financial firms. Independent variables had a good relationship with company performance ($R=0.542$) in this study. The F statistic was significant at 5% with $p<0.05$, according to the ANOVA results. This demonstrated that the overall model was effective in establishing the variables' relationships. Capital structure had a negative as well as statistically significant impact on financial performance, but liquidity as well as management efficiency had a positive as well as statistically significant impact on the performance of the NSE listed non-financial companies. In this research, the size of the firm had no statistical significance. This study recommends that NSE-listed non-financial companies should focus on achieving the best degree of capital structure, improving liquidity positions, and improving management efficiency, as the three factors has a substantial impact on their financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A desirable capital structure level is an important aspect of business performance (Alkhatib, 2012). Firms may occasionally need to float a number or a combination of stocks and securities in a mixture of debts, property, credit finance and retained earnings. If a firm succeeds in making this combination, it maximizes its value and achieves targeted financial performance. This position is agreed by Dhaliwal, Heitzman and Zhen (2006); Miglo (2014). According to Subaii (2012), capital structure has a positive relationship to firm profitability. Insufficient liquidity on the other hand makes a business fail to meet its debt obligations. Consequently, this can have an effect on the firm's profitability and business operations. According to Bhushan (1991), there exists a relation between capital structure and performance.

This research was anchored on Myers' tradeoff theory (1984). The tradeoff theory gives an emphasis on a balance between tax savings that comes from debt, reduction in agent cost, financial distress costs and bankruptcy. It is relevant as it relates debt financing with working capital and financial performance of a firm. Other theories supporting this study include Modigliani and Miller (1958) irrelevance theory which demonstrated that under conditions of efficient, competitive and capital markets that are complete, firm performance is not dependent on its financing structure. Pecking order theory by Myers and Majluf (1984) contends that debt financing made by a firm is dependent on the available sources and that firms prioritize them from the cheapest to the most expensive.

NSE-listed non-financial corporations were the focus of this study. CBK regulates capital and liquidity decisions for financial companies, although non-financial enterprises are not subjected to these rules despite being a part of the Capital Markets Authority (CMA). Thus, because non-financial corporations are theoretically free to choose any capital structure and liquidity configuration in order to finance their operations, it follows that these companies may adopt any capital structure and liquidity configuration of their choosing. Non-financial companies are predisposed to gearing too much and incurring severe financial hardship because of this laissez-faire attitude (Bitok, Masulis, Graham, & Harvey, 2017).

1.1.1 Capital Structure

Capital structure entails the approaches adopted by a firm to finance its assets through a mixture of debt and equity (Ross et al., 2005). Arindam and Anupam (2016) define capital structure as the combination of debt, equity and other financial instruments. Saurabh and Anil (2016) define capital structure as a composition of preferred stock, common stock and debt which a firm uses to finance its operations, total assets and financial growth. The founding studies about capital structure irrelevance and tax shield benefit by Modigliani and Miller (1958; 1963) created a basis to advance other theories. Jensen and Meckling (1976) contended that an optimal capital structure of a firm will encompass the trade-off between the effects of corporate and personal taxes, bankruptcy costs and agency costs.

The decision on capital structure is an important issue in firm financing. Bolton and Scharfstein (1990) for instance posit that increased debt will result to increased output both in the firms and industry level thereby making competition stiffer. Therefore capital structure helps in enhancing competition among firms in a particular sector.

Opler and Titman (1994) opine that firms which are highly leveraged during industry downturns are the most vulnerable. They found out that firms having larger debts normally end up losing market share and sales more as compared to their counterparts who are conservatively financed. This therefore reduces their financial performance. Capital structure also have an impact on the performance and value of the firm as it has the ability to inhibit the interest conflict that arises amongst debt holders and shareholders as well as the costs allied to bankruptcy and financial distress (Bhagat & Jefferis, 2002).

The composition of capital structure includes debt and equity as the key components (Margaritis & Psillaki, 2007). According to Pandey (2005), determination of capital structure can be done using capital proportion which entails preference shares, debentures among others. Capital structure is operationalized by the Debt ratio that is the total debt divided by the total assets, equity ratio that is the total equity to total assets and total debt (Total book value of debt) divided by total capital (market value of equity + book value of debt).

1.1.2 Financial Performance

Almajali, Alamro, and Al-Soub (2012) describe financial performance as a company's capacity to meet a set of financial objectives, like profitability. The degree to which a company's financial standards have been fulfilled is referred to as financial performance. It displays how well financial goals have been met (Nzuve, 2016). As per Baba and Nasieku (2016), financial performance reveals how a company utilizes assets in generating income and thus guiding stakeholders in making their decision. The current research defines financial position as a company's capability to earn income from its assets.

Financial performance is vital to shareholders, investors, and, by extension, the entire economy. The return on investment is completely worthwhile to investors, and having a good firm can provide greater and long-term revenue to individuals who invest (Fatihudin & Mochklas, 2018). A firm's financial performance is vital to its health as well as existence. A company's excellent performance demonstrates its efficiency and effectiveness in managing its assets throughout operations, investments, and financial transactions (Karajeh & Ibrahim, 2017).

Different ways of measuring financial performance are employed, and they should be unified. Return on Assets (ROA), business size, Return on Equity (ROE), and Return on Sales (ROS) are financial performance variables identified by Ngatia (2012). Carter (2010) used Tobin's Q and ROA to gauge financial success, but Wang and Clift (2009) employed ROA and ROE. ROA and ROE are the most recognized ways of measuring financing performance. The ROA is a metric of evaluating company's profitability relative to its total assets whereas ROE measures the net income achieved as proportion of shareholders equity (Mwangi & Murigu, 2015). Baba and Nasieku (2016) posit that market based metrics like earnings per share, dividend yield, market to book value of equity and market capitalization can too be employed in financial performance measure. The current research used ROA as a metric of financial performance as it is the most recognized measure (Fatihudin & Mochklas, 2018).

1.1.3 Capital Structure and Financial Performance

Theoretically anticipated association between the two study variables is well captured and illustrated by the trade-off theorem which proposes that business entities determine the ideal debt level by matching the debt costs and the debt benefits with the goal of ensuring that the benefits are more than the costs. Jensen and Meckling

(1976) suggest that cost is represented by agency costs and financial distress costs while Myers (1984) suggests that the tax allowance represents the benefits. Debt finance results in tax benefits given that the interest expenses on the debt is tax allowable hence it is expected that a firm with debt finance will face relatively a lower tax obligation compared to a firm that utilizes on equity finance (Frank & Goyal, 2011). However, as debt finance increases, other risks such as risk of bankruptcy and risk rating of the equity shares gradually set in. With increase in the risk levels, the equity shareholders as well as additional debt providers will demand more returns as a compensation for the increased risks. This, therefore, implies that theoretically, a positive correlation between the two study variables exists.

Agency theory by Jensen and Meckling (1976) asserted that managers who work to maximize wealth of the shareholders do not always work for firms on the contrary work towards pursuing their own self-interest. The agency theory states that, financing using debt is a key tool for controlling restriction tendency upon opportunistic behavior by managers for individual benefit. Financing using debt minimizes a firm's free cash flows through payments of interest that tend to be fixed, forcing managers to avoid investments which are negative and therefore work in shareholders' interest.

An earlier modification on the irrelevance of capital structure posited about its inconsequential effect in the determination of the value of the firm. This theory had its basis on the reasoning that tax shield is obtained by the use of debt. By laying basis on this assertion, companies' choice would be a capital structure that is all-debt. Brigham and Gapenski (1996), on the contrary differed positing that the Miller Modigliani

(MM) model has truth only theoretically. This is due to the existence of bankruptcy invalidation effort of MM theory as forwarded by Maina and Kondongo (2013).

1.1.4 Non-Financial Firms Listed at the Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) is a public exchange issued by listed companies in Kenya. The objective of the NSE is to facilitate the trading of securities, debt instruments, derivatives and other related instruments. The NSE is responsible for the company's listing on the stock exchange and allows venture capitalist to trade the company's securities, so it is responsible for the health of the stock market. The highest regulatory authority is the Capital Market Supervisory Authority NSE non-financial corporations are divided into seven sectors. Here they are; Agriculture, Trade and Services, Telecommunications and Technology, Automobiles and Accessories, Manufacturing and Allied, Construction and Allied, Energy and petroleum (NSE, 2020).

The NSE is an ideal marketplace. This offers foreign investors the opportunity to be exposed to the Kenyan economy, and as a multi-listed company expands beyond the Kenyan border, it operates as an entrance to the regional economy. The most common resources available to companies in the NSE are equity and debt. The prime blend of equity and debt upturns the company's profits and yielding improved financial performance. However, the share base of companies listed on the NSE has recently increased significantly. Random observation shows that leverage ratios decreased significantly, although return on equity improved significantly. Capital structure is the major determining factor of the financial performance of non-financial firms, firms which have adopted adequate capital structure have continually reported improved financial performance (Juma, 2016).

1.2 Research Problem

Capital structure is the deployment of borrowed funds by a firm to meet its investment goals and objectives. This implies that a firm considering to apply capital structure has to carefully assess the costs and benefits thereof before adopting this financing strategy (Jensen & Meckling, 1976). Many firms apply a combination of both borrowed capital and equity capital but the optimum level or mix of the two that maximizes returns remains a puzzle to date since the works of Modigliani and Miller (1958) who suggested that various sources of business finance have no impact when determining firm's market value. Myers and Majluf (1984), through the pecking order theorem, argue that firms have a pre-determined order and preferences when sourcing for funds with internal sources coming first followed by external sources. The decisions on the financing method aim at achieving the lowest possible weighted average cost of capital and sending favourable market signals. Capital structure is therefore a key element affecting financial results of many businesses.

Non-financial companies listed at the NSE have a vital function to play in the enhancement of economic growth of economies and fulfilling their objectives. The lack of a vibrant non-financial sector will limit the growth of the economy of a country. By having an optimal and beneficial capital structure, firms in the sector will experience growth in benefits such as cost reduction, an optimal capital mix for energy investments, making this research crucial. Financial analysts have supported the use of debt finance in firm's performance improvement as long as it is gotten at a rate that is favorable and the takings used efficiently (Juma, 2016). The sector has recently faced performance issues as evidenced by the collapse of Uchumi, Mumias Sugar and the struggles being faced by Unga Group and Kenya Airways.

Numerous empirical researches have been conducted on the impact of capital structure on performance, though results varied. This can be explained by the different methodologies used as well as conceptualizing of the study variables. Different contextual backgrounds can also explain the differences in previous findings. Khan et al. (2017) conducted a longitudinal study in Pakistan on the influence of capital structure on performance. Capital structure has no effect on financial success as assessed by ROA and ROE, according to the research. Thu-Trang (2019) focused on the impact that capital structure has on financial performance of 102 companies quoted at the Ho Chi Minh Exchange, Vietnam. The findings were that capital structure is significant to performance.

Locally, Gichuhi (2016) discovered an unsubstantial correlation between the capital structure and financial performance choice of listed Kenyan companies. Macharia (2016) discovered a negative association between capital structure and companies in the construction and allied sector that are listed on the NSE profitability. Ogotu et al., (2015) confirmed this result when conducting an investigation of capital structure choice and performance. The findings contrasted those of Njeri and Kagiri (2015) found capital structure to have a positive relation to financial performance of listed commercial banks. Makau (2019) using ordinary least squares concluded that leverage has a substantial negative influence on ROA. From the preceding, it is apparent that previous studies in this area have arrived at contradicting findings. The previous studies have also used various methodologies to achieve their objectives and this might explain the differences in findings. Different contextual backgrounds might also explain the differences. The lack of agreement among prior researchers, both internationally and locally, was motivation enough to pursue additional research in this field. This study leveraged on these research gaps by providing answer to the

research question: What is the effect of capital structure on financial performance of non-financial firms listed at the NSE?

1.3 Research Objective

This research objective was to establish the effect of capital structure on financial performance of non-financial firms listed at the NSE.

1.4 Value of the Study

This research will be of great implication to debt financing theories such as trade off theory and Modigliani and Miller irrelevance theory by adding to their development. Academicians, researchers, and students who intend to do research in this or similar fields will utilize the research findings as a guide. Scholars and researchers will gain the most advantage from this study because it will aid them in identifying other subjects for future research by outlining related topics that need additional research as well as gaps that need to be filled.

The findings are expected to be useful to firm managers who are responsible for managing investors' assets, approving investment decisions, and, most importantly, obtaining financing for these investments, as this research offers valuable information as well as suggestions to assist them in making informed decisions that lead to optimal firm performance.

This research will be helpful to government and regulators in the creation and execution of laws and guidelines that govern capital structure, in order to provide stability in company financial performance and prevent the economy's spiral effects. This will aid in the progress of businesses and the improvement of the economy as a whole.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter clarifies the theories on which capital structure and financial performance is based. It further discusses the previous empirical studies; knowledge gaps identified and summarizes with a conceptual framework and hypotheses displaying the expected study variable relationship.

2.2 Theoretical Framework

This segment examines theories which underpin the capital structure and financial performance research. Trade-off theory, irrelevance theory and pecking order theory are all dealt with in theoretical reviews.

2.2.1 Trade-off Theory

This is the current study's main theory. The theory was founded by Myers (1984) and stress on a balance between tax savings that comes from debt, reduction in agent cost, financial distress costs and bankruptcy. Different authors use the term trade off theory to describe a number of theories that are related. Trade-off theory gave a suggestion on the modified MM proposition which insists that the gains of tax shield are eroded by the firm's agency costs and financial distress.

This theory posits that every company has a ratio that is optimal of equity-debt that leads to maximization of firm value. The affirmation of the theory is that a company's capital structures are optimal and this can be determined by transacting off the costs-benefit of using either debt or equity. Benefits accrued from debt shield are thus adjusted against financial distress. Other costs to be mitigated include Agency cost

and information asymmetry. The attainment of optimal point is when the benefits that arise out of debt issues exactly diminishes the rise in the costs that come out of the issuance of more debt present value (Myers, 2001).

Authors in agreement with this theory include Sheikh and Wang (2010) who posited that trade off theory has an expectation of choosing a target capital structure that leads to firm value maximization by the minimization of the prevailing costs of market imperfections. Authors who oppose this theory posit that there is an assumption that each source of money has a return and cost of its own. These have an association with the company's capacity to earn and its insolvency, business and risks (Awan & Amin, 2014). Based on this theory, the performance of listed firms will not increase irrespective of the form of capital structure adopted (Chen, 2011). This theory has huge implications on the debt financing firm managers make in carrying out firm operations. Firm managers can make use of the tradeoff theory to determine the debt-equity ratio to embrace in order to enhance shareholders value. The theory is pertinent to the current study as it relates debt financing to working capital and in essence financial performance of firms.

2.2.2 Pecking Order Theory

Founded by Myers and Majluf (1984) posits that managers of firms incline to hold more information than investors in firms that they are managing. This great difference in information is called information asymmetry. When investments that are new are being undertaken by firms, there may be severe underpricing to the extent that investors that are new get comprehension more than the project net present value (NPV). This results in value dilution to investors that already exist. The result of this is under-investment, which will cause the project to be rejected. In order to prevent

this from happening, preference conditions come in, whereby, financing projects internally is highly considered than seeking external funding (Donaldson, 1961; Myers & Majluf, 1984).

Pecking order theory makes a proposition relying on information asymmetry derived costs between the market and firm managers. The assumption of this theory is that financing using debt are of lesser significance in comparison to an asymmetric information presence costs of issuance of new securities. There is a tendency of less subjugation to information asymmetries of tangible assets. These assets are usually highly valued in case of firms facing bankruptcy (Danso & Adomako, 2014).

Some authors are in agreement with the assertions of this theory. Authors such as Danso and Adomako (2014) who posit that the financing cost drives the hierarchy involved in the corporate debt financing. However, Pecking order theory has criticism from others, in that there is optimal capital structure consideration (Luigi & Sorin, 2009). Further, Myers and Majluf (1984) like Modigliani assume a perfect market. Based on this theory, the performance of listed firms will increase depending on the form of capital structure employed. This for instance is well articulated by the engineering firms in Pakistan that make use of the Pecking order theory (Abdul et al., 2013). This is as a result of the financing cost associated with debt that drives the hierarchy involved in the corporate debt financing. The firm management is also to a larger extent inclined to the use of equity instead of debt as a result of higher costs relating to the cost of capital (Danso & Adomako, 2014). Firm managers are also more likely to embrace liquidity that best serves firm financial obligations thereby helping spur firm performance (Boodhoo, 2009). Pecking order theory can help firm managers choose best capital structure to use in their debt financing. This will involve taking

into consideration the cost of capital. Therefore, firm managers can choose internal financing instead of external financing to help promote financing performance.

2.2.3 Capital Structure Irrelevance Theory

This theory was formulated by Modigliani and Miller (1958). It examines the role capital structure plays in firm's value determination. The argument of the theory is that in perfect market transaction, costs don't exist, taxes and bankruptcy exist, the firm that finances its operations using debt options has value similarity to that not using equity as it sources of capital financing. This theory has several angles to it which explain the value of firms.

The foremost of the proposition of the capital structure irrelevance is that value of a firm not established by its debt and equity mix and the average cost of capital. Another proposition is that there is no substantial causal effect of firms leverage on the cost of capital that is weighted. The third proposition is that dividend policy adopted by a firm doesn't affect its value (Abdul *et al.*, 2013). Modigliani and Miller (1958) emphasis that debts finance leads to an increase in corporate value because interests on debt are tax deductible whereas there are no tax deductions on equity costs.

Modigliani and Miller (1958) held an assumption that every firm converge to a "risk class," firms in countries in the world with a semblance in income. However, Stiglitz (1969) offered a proof on the insignificance of this assumption; thereby showing it to be out of touch with the reality. Based on this theory, the performance of listed firms will not increase irrespective of the form of capital structure adopted. This is due to the tax cost implications associated with equity financing and the risk of bankruptcy

associated with debt financing (Breuer & Gurtler, 2008). However, this theory will not have an effect on working capital and firm performance relationships.

2.3 Determinants of Financial Performance

Components both inside and outside the company can have an influence on the firm's performance. Capital structure, management efficiency, dividend decisions, business liquidity, firm size, and organizational culture are just a few of the internal aspects. Management has no influence on external forces. They are variables that are beyond the control of the company, but they must be addressed with appropriate tactics (Athanasoglou, Brissimis & Delis, 2005).

2.3.1 Capital Structure

The ratio of debt-to-equity capital is regarded as capital structure. The cost of capital and the firm's worth are both affected by this ratio (Pandey, 2010). The debt amount of a company determines its financial performance. As per Jensen (1986), the level of debt financing accessible to managers reduces moral hazard behavior by reducing cash flow. This raises the pressure to perform, which improves the financial performance of the company. As a result, large companies with high debt are in a better position to perform financially. Numerous \ scholars have researched on correlation between firm performance and leverage discovering high gearing lowers the conflicting interests that managers have with shareholders thus enhancing performance because of this positive relation.

Baker (1976) studied on the relation between industry profitability and influence additionally, he merged the predicted influence of risk on a sector productivity. By using information for a period of ten years, this relation was analyzed and measured on the basis of value to aggregate resources. A Lower leverage estimation suggested

that obligation capital was being utilized more as compared to obligation value or to total assets. Net profit was the measure for profitability. The inference from the research was that the industry conditions have an impact on the company's decision to influence. Additionally, the study concluded that firms with higher obligatory capital registered more productivity.

2.3.2 Firm Size

The economies of scale amount a company earns is proportional to its size. The larger the company, the lesser production scale and the higher the efficacy in operating activities due to substantial economies of scale. Regardless of their size, huge corporations might lose control of their strategic as well as operational activities, resulting in a decrease in efficiency (Burca & Batrinca, 2015).

Large corporations have more market power and can diversify their portfolios more. They're also more prone to suffer from organizational wastage if the company grows rapidly. The size of the company has a significant impact on the quantity of cash flow that can be invested. The number of employees, property owned, and sales volume are all important factors to consider when defining the firm's size (Almajali et al., 2012).

2.3.3 Firm Liquidity

Liquidity refers to a company's ability to meet its debt commitments in a year's time utilizing cash or cash equivalents. They are assets that are in nature short-term and can be changed to cash quickly. Liquidity is defined as the management capability to meet obligations without turning to the financial asset's liquidation (Adam & Buckle, 2003).

Companies can use liquid assets in funding processes and invest in the situation wherein external funding is lacking (Liargovas & Skandalis ,2008). Companies

possessing with strong liquidity are better capable of unanticipated problems and financial needs dealings. According to Almajali et al. (2012), liquidity can have a substantial impact on a company's efficiency; as a result, companies should strive to increase current assets whilst reducing liabilities. High liquidity levels, on the other hand, may be damaging to a business (Jovanovic, 1982).

2.3.4 Management Efficiency

This is a critical internal quality aspect for determining and measuring a company's operating effectiveness. This quality will be measured in a variety of ways, including management's capacity to efficiently employ resources, raise funds, as well as properly assign that funding (Kusa & Ongore, 2013).

Management efficiency, as operational efficiency determinant, is a qualitative measure indicated by staff quality, the effectiveness as well as efficiency of internal controls, as well as the management systems efficiency (Athanasoglou, Sophocles & Matthaois, 2009). Management quality has an impact on operational costs, that in turn has an impact on a business's bottom line. As a result, management efficiency has a significant impact on firm efficiency (Kusa & Ongore, 2013).

2.4 Empirical Review

Local as well as global researches have established the relation between capital structure and financial performance, the objectives, methodology and prior research results have been discussed in this segment.

2.4.1 Global Studies

Ajibolade and Sankay (2013) did research to determine whether working capital and capital structure interact to produce synergetic effect on profitability. The study was based on two year panel data of manufacturing Nigerian stock exchange listed firms.

Using Panel and Factorial-ANOVA estimation methods, the study concluded that on individual basis, a positive significant association exist amongst capital structure and profitability but no significant association amongst the working capital composition and profitability. However, the research found that when a firm's working capital composition reacts concurrently with its capital structure, profitability improves. The research recommended that, financing decision should be considered in relation to working capital composition in order to optimize profitability and to sustain healthy liquidity position.

Enekwe, Agu and Eziedo (2014) explored how capital structure impacts the financial performance of Nigerian pharmaceutical firms. The research relied on secondary data from 2001 to 2012 and sampled three firms. The Pearson correlation as well as regressions models were employed in analyzing the data. The conclusions exhibited that both debt ratio and debt-equity ratio were negatively related to profitability which was given by ROA. The findings also showed that the interest coverage ratio positively impacted profitability of the selected Nigerian firms. In contrast, the findings also showed that debt to equity ratio, debt ratio as well as interest coverage has a low impact on profitability of the Nigerian firms in the pharmaceutical industry.

Khan et al. (2017) conducted a longitudinal study in Pakistan. Between 2004 and 2009, 100 Pakistani firms listed at the KSE were studied. ROE, Tobin's Q and ROA and market capitalization were used to measure firm performance. Debt and equity attributed to the measure of financing decisions. Curiously, there was no significant impact created by leverage and firm's performance. ROA of firms with huge base of assets had a greater ROA. From the new added cost of capital, the Tobin Q suggested that the market value of firms' assets remained unaffected. Similarly, the market value

of firms remained unaffected. This paper affirmed with earlier papers that a firm's performance is unaffected by capital structure.

Thu-Trang (2019) put his context in an emerging economy, Vietnam. This study was longitudinal on 102 firms listed at the Ho Chi Minh Exchange. With the measure of performance being ROA, and capital structure utilizing total debt to total assets, long-term debt to total assets and short-term debts to total assets. The paper revealed a significant correlation between capital structure and firm performance. An increase in the use of debt was found to decrease firm performance. Firms should thus be cautious when deciding to use debt. This paper did not show if the firms that used more equity performed significantly better.

Doan (2020) did an investigation on how capital structure affects firm performance in Vietnam. The target population was firms quoted at the Ho Chi Minh Stock Exchange and a sample of 102 firms non-financial firms were sampled. The study period spanned from 2008 to 2018. In overcoming the weaknesses of the model so as to ensure reliability and reliability, generalized method of moment is used. To measure firm performance ROA was used. Additionally financing leverage was measured using three measures: short-term debt to total assets, long-term debt to total assets and total debt to total assets. The control variables comprise of inflation rate, economic growth and firm size. The research conclusions established that capital structure has a correlation with firm performance. The results were that firm performance declined as more debt was consumed.

2.4.2 Local Studies

Njeri and Kagiri (2015) investigated the impact that financial structure had on financial performance of NSE listed banks. Debt to equity ratio was selected to

indicate capital structure whereas net profit margin, ROA as well as ROE were utilized in the measurement of financial performance. The study utilized the descriptive design with the aid of primary data obtained through the administration of questionnaires to 35 participants who were primarily the division administrators of the listed banks. The data obtained was then analyzed using correlation as well as multiple regression analysis, which led to the conclusion that 56.4% of the financial performance of the listed banks was as a result of the capital structure decisions. Because the study mainly relied on the opinions of branch managers as opposed to utilizing secondary data, the findings may be limited to only responses as opposed to facts.

Mwangi and Birundu (2015) investigated the impact that capital structure had on the financial performance of SMEs in Thika from 2009 to 2011. The design selected for the study was the descriptive design with multiple regressions as well as correlation analysis aid. The observation made from the study was that capital structure, asset tangibility and asset turnover are not substantial influencers of the financial performance firms being studied.

Chahenza (2017) carried out a study on the same topic using the same variables for energy utility companies in Kenya. Seventeen firms in energy utility sector in Kenya formed the study population. The sample was the three big players in the sector, namely, KPLC, KenGen and Ketraco. The study measured capital structure using the debt ratio while profitability was given by ROE. The research covered a span of seven years (2009-2016) and data collected on semi-yearly basis. By applying the descriptive cross-sectional design and multiple linear regression model, the study

findings indicated statistically insignificant relationship amongst the variables for the energy utility companies in Kenya within the period of study.

Ongombe and Mungai (2018) did a study on the influence of capital structure decision on financial performance of sugar milling firms in Kisumu County. All the 3 sugar manufacturing firms in Kisumu County were the targeted population by the study. Secondary data was utilized and was extracted from published financials for the period 2011-2015. Simple and multiple regression analysis together with correlation analyzed the data quantitatively so as to establish the level of influence of each of the autonomous variables. Narrations and tables were used to present the data. The findings revealed that debt ratio negatively and insignificantly related with financial performance whereas debt-equity ratio had a significant and negative impact on financial performance of sugar manufacturing companies in Kisumu County. Furthermore, it was established that WACC positively as well as substantially affected financial performance of sugar firms.

Mwaura (2017) carried out a similar study on NSE listed firms covering the period 2011-2016. The study population was 65 firms out of which 36 formed the study sample. The study applied secondary data acquired from the NSE Handbooks and published annual financial reports. The collected data was organized and analysis done using Regression Analysis Model and SPSS. The study findings showed that as debt ratio increases, the return on equity decreases (inverse relationship) hence concluding on a negative correlation between external long term borrowings and returns on investment.

2.5 Summary of the Literature Review and Research Gaps

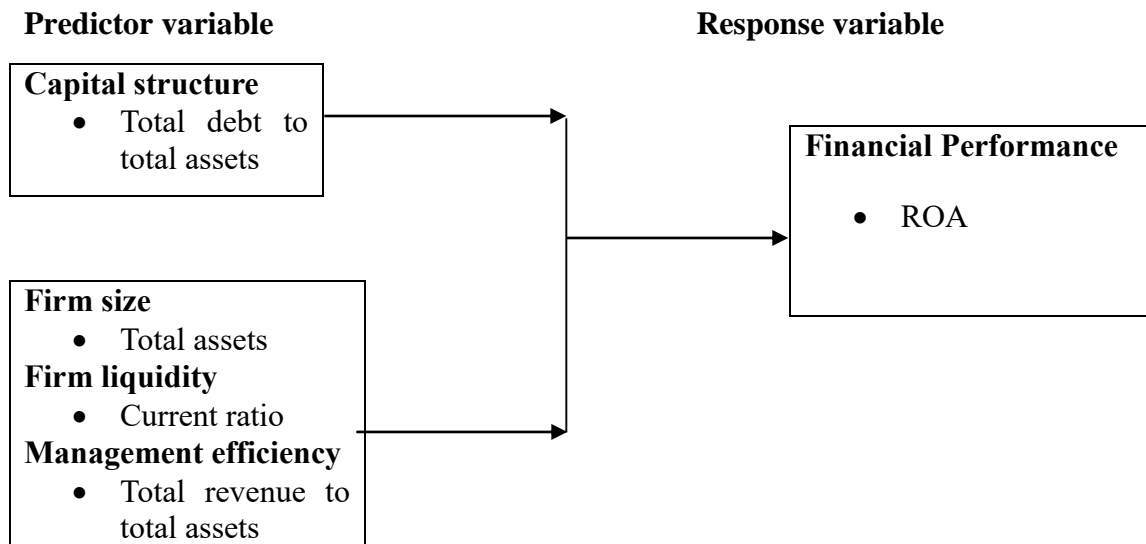
This chapter critically reviewed the documented relationships between capital structure and financial performance. There is a clear indication from the studies and conclusions evaluated that those financial scholars do not concur on how capital structure impacted financial performance as well as capital structure on financial performance. The study shows some of the different researchers' conceptual arguments on the relationship between the factors that have been established. In this critical review of literature, three key theories underpinning the relationships between capital structure and financial performance have been highlighted. These are; trade off theory, capital structure irrelevance theory and pecking order theory.

Numerous relevant publications on the study variables were analyzed as part of the empirical review to identify research gaps and analysis approaches. Capital structure has an impact on financial performance, according to the studies evaluated. However, the results were mixed, with some research concluding that there is a strong beneficial association and others concluding that there is none. Nevertheless, the investigations were all conducted using various approaches and data was collected over different time periods, which could explain the disparities in the outcomes. The study contexts were also different with some studies focusing on a single sector and other focusing on several sectors. The operationalization of the study variables have also been varied and this can also explain the differences in previous studies. This study will leverage on these research gaps

2.6 Conceptual Framework

The model below depicts the anticipated relationship between the variables. Capital structure, as measured by total debt to total assets ratio for each year, was the study's

predictor variable. Firm size, liquidity, and managerial efficiency were the control variables. The financial performance as measured by ROA was the dependent variable.



Control Variables

Figure 2.1: The Conceptual Model Source:

Researcher (2021)”

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter includes the various stages that were followed to complete the study. Therefore, the following subsections constitute the chapter: study design, target population, sample population, strategies for data collecting and analysis.

3.2 Research Design

The methodology or procedure used to gather, measure, and analyze data is referred to as research design. It also refers to the relationship between variables or the structure of the problem at hand (Amin, 2011). This research utilized a descriptive research design since it entails observation with the goal of portraying the subjects in an accurate way without any form of manipulation. The researcher opts for this design because the data obtained was analyzed without subjecting them to further manipulation.

3.3 Population

The target population refers to relevant people within the locality the research study (Gravetter & Forzano, 2012). The variables whose characteristics the research aimed to characterize are referred to as a population. All the 42 NSE listed non-financial firms as of December 2020 formed current study's population (see appendix I).

3.4 Data Collection

For the period between January 2016 and December 2020, Annual financials of the businesses under investigation were retrieved from the CMA, and each company's annual report was checked for financial data, providing secondary data that were

reported in a data collection sheet. The precise data gathered was inclusive of total assets, net income, current liabilities, current assets, and total revenue.

3.5 Diagnostic Tests

3.5.1 Stationarity Test/ Unit Root Test

Using Augmented Dickey-Fuller (ADF) tests, the researchers used a stationarity test to determine the presence of a unit root. The test being performed in regard to avoid the issue of erroneous and inconsistent regression results. In general, a p-value of below 5% indicating the null hypothesis of a unit root is rejected. The computed DF_T the calculated critical value was also compared to the statistic. The null hypothesis of a unit root was rejected since the DF_T statistic was more negative than the table value. It's worth noting that the lower the DF test statistic, the more evidence that the null hypothesis of a unit root was rejected.

3.5.2 Cointegration Test

Cointegration prior to the VAR analysis was carried out to see if the variables have a long-run or short-run correlation. The presence of cointegration was detected via the Johansen test in this study.

3.5.3 Normality Test

Jarque-Bera was used to establish the normality of the data, which was found to be true for all variables. The data was declared not normally distributed incase p-value obtained was below 0.05.

3.5.4 Multicollinearity

When two independent variables are linearly connected, this is a common occurrence in time series data. Its existence causes the variance of parameter estimations to inflate, resulting in inaccurate magnitude and sign estimates for the coefficients and

signs. This could lead to erroneous findings. To test for multicollinearity, the researchers employed VIF values for all of the variables.

3.5.5 Autocorrelation

Autocorrelation relates to a circumstance in which the erroneous phrase is linked to the one before it. Its presence has no effect on the estimates' unbiasedness, but it does lead to erroneous conclusions due to incorrect hypothesis testing. To see if there was any autocorrelation, the researchers used the Breusch Godfrey LM test. The residuals of the empirical model are not auto correlated if the p-values for the Chi-square statistic are below 0.05

3.6 Data Analysis

Data was analyzed via SPSS version 24. The outcome was reported by quantifying the data by use table and graphs. Descriptive statistics being utilized to summarize the data obtained from the companies. In reporting the data, which was in tabulated form, frequencies, central tendency measures, percentages, as well as dispersion were used. Coefficient of determination, ANOVA, multiple regressions and Pearson correlation were also applied.

3.6.1 Analytical Model

The following equation was applicable:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y = Financial performance as given by net income to total assets ratio.

β_0 = the slope of the regression equation's y intercept.

$\beta_1 \dots \beta_4$ = coefficients of regression

X_1 = Capital structure calculated by dividing total debt by total assets

X_2 = Liquidity calculated by dividing current assets by current liabilities

X_3 = Firm size as given by logarithmic expression of total assets

X_4 = Management efficiency calculated as total revenue to total assets ratio

ε =error term

3.6.2 Tests of Significance

Parametric tests were used to establish the general model's relevance as well as the significance of specific coefficients. The study used the coefficient of determination (R^2). The researcher also calculated F- and t-statistics at a 95% confidence level.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter set out to examine the data gathered in so as establish the effect of capital structure on ROA of listed non-financial companies. The discoveries were represented in tables using regression analysis, correlation and descriptive statistics, as demonstrated in the following sections.

4.2 Descriptive Analysis

The standard deviation, average as well as maximum of the variables, as well as minimum are provided in this study. The outcome for the chosen research variables are demonstrated in Table 4.1. For all of the non-financial companies listed on the NSE whose data was available for the research, SPSS was used to examine the variables across a five-year period (2016 to 2020). The values of the variables of the study are given in the following table.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	210	-.5700	.3900	.040666	.1218198
Capital structure	210	.025	1.419	.48380	.248798
Liquidity	210	.3431	10.0893	2.210831	1.5149257
Firm size	210	7.654	11.577	9.72299	.903608
Management efficiency	210	.343	11.648	2.13803	1.859024
Valid N (listwise)	210				

Source: Research Findings (2021)

4.3 Diagnostic Tests

Diagnostic tests were used to evaluate the model assumptions and to see whether there were any data that had a big, unfavorable impact on the analysis. The researchers used stationarity/unit root tests, cointegration tests, normality tests, multicollinearity tests, and autocorrelation tests in their research.

4.3.1 Stationarity Test

The researchers used a stationarity test to determine the presence of a unit root Augmented Dickey-Fuller (ADF) tests. The findings are as shown in Table 4.2.

Table 4.2: Stationarity Test

	Critical value at 95%	DFT statistic	P-value
ROA	-2.661	-3.170	0.000
Capital structure	-2.661	-3.236	0.000
Liquidity	-2.661	-4.647	0.000
Firm size	-2.661	-3.654	0.000
Management efficiency	-2.661	-4.725	0.000

Source: Research Findings (2021)

From the conclusions, the p-values for all the variables were less than 0.05 and the DFT statistic were more negative than their corresponding critical values. This is an indication that null hypothesis that there is a unit root was rejected and study concluded that the variables did not have unit roots.

4.3.2 Co-integration Test

Co-integration test was conducted to determine whether the variables exhibit a long run or short run relationship. The results are as shown in Table 4.3

Table 4.3: Co-integration Test Results

	Eigen Value	Trace Statistic	Critical value at 95%	P-value
--	--------------------	------------------------	------------------------------	----------------

Capital structure	0.123	23.13	26.03	0.000
Liquidity	0.083	61.02	62.07	0.000
Firm size	0.301	20.01	26.79	0.000
Management efficiency	0.189	27.22	28.76	0.000

Source: Research Findings (2021)

From the conclusions, the study shows that all the variables had their p values less than 0.05 and hence the study concluded that variables exhibit long-run or short run relationship.

4.3.3 Normality Test

Data normality was tested using Jarque-Bera and was established for all variables.

The findings are shown in Table 4.4.

Table 4.4: Normality Test Results

	Jarque-Bera Coefficient	P-value
ROA	2.587	0.100
Capital structure	5.304	0.202
Liquidity	1.763	0.315
Firm size	2.153	0.227
Management efficiency	3.145	0.201

Source: Research Findings (2021)

From the conclusions, the p-values for capital structure, liquidity, firm size, ROA and management quality were greater than 0.05. Thus, the research resolved the data was deemed to be normally distributed.

4.3.4 Multicollinearity

Collinearity Statistics was used to see if the independent variables were sufficiently correlated to establish a significant causal correlation. The results for multicollinearity test were presented in Table 4.5.

Table 4.5: Collinearity Statistics

	Collinearity Statistics	
	Tolerance	VIF
Capital structure	.166	6.134
Liquidity	.103	8.998
Firm size	.138	7.217
Management efficiency	.101	8.834

Source: Research Findings (2021)

Based on the coefficients output, capital structure had a VIF value of 6.134, liquidity had a VIF value of 8.998, firm size had a VIF value of 7.217 while management efficiency had a VIF value of 8.823. The VIF values for all the variables were less than 10 implying that there were no Multicollinearity symptoms.

4.3.5 Autocorrelation

Autocorrelation is a measure of how similar one time series was when compared to its lagged value across successive timings. The measure of this test was done using the Wooldridge test. The findings are shown in Table 4.6.

Table 4.6: Autocorrelation Results

Wooldridge test for autocorrelation in panel data

H0: no first-order autocorrelation

$$F(1, 210) = 0.376$$

$$\text{Prob} > F = 0.5541$$

Source: Research Findings (2021)

From the results of Table 4.6, the null hypothesis of no serial correlation is not rejected given that the p-value is significant (p-value = 0.5541).

4.4 Correlation Analysis

To identify the connection between variables, correlation analysis is employed. The Pearson correlation was utilized to investigate the connection between non-financial

sector performance and variables (capital structure, liquidity, firm size, and managerial efficiency).

Table 4.7: Correlation Analysis

		ROA	Capital structure	Liquidity	Firm size	Management efficiency
ROA	Pearson Correlation	1				
	Sig. (2-tailed)					
Capital structure	Pearson Correlation	-.477**	1			
	Sig. (2-tailed)	.000				
Liquidity	Pearson Correlation	.097	-.005	1		
	Sig. (2-tailed)	.161	.939			
Firm size	Pearson Correlation	.133	.196**	.028	1	
	Sig. (2-tailed)	.054	.004	.689		
Management efficiency	Pearson Correlation	.028	.076	.205**	.000	1
	Sig. (2-tailed)	.689	.271	.003	.995	

** . Correlation is significant at the 0.01 level (2-tailed).

b. Listwise N=210

Source: Research Findings (2021)

The correlation results reveal that capital structure has a negative and significant association with ROA ($r = -.477$, $p = .000$). Liquidity, size and management efficiency all showed positive but not significant relationship with non-financial company financial success ($r = .097$, $p = .161$; $r = .133$, $p = .054$; $r = .028$, $p = .689$), according to the findings.

4.5 Regression Analysis

Capital structure, liquidity, firm size, and managerial efficiency were the variables upon which performance was modeled. The significance level for the analysis was set at 5%. The regression result was contrasted to the crucial value from the F – table. The results are listed below.

Table 4.8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.542 ^a	.294	.280	.1033864

a. Predictors: (Constant), Management efficiency, Firm size, Liquidity, Capital structure

Source: Research Findings (2021)

The R square depicts the variables of the response variable because of the predictor variables changes. R square was 0.294, showing that differing capital structure, liquidity, size and managerial effectiveness represent 29.4% of the variability in non-financial companies' financial performance. 70.6% of the financial performance variation may be ascribed to factors outside the model. Furthermore, as demonstrated by a 0.542 correlation coefficient(R), the independent factors had a high link with financial performance.

Table 4.9: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.910	4	.228	21.293	.000 ^b
	Residual	2.191	205	.011		
	Total	3.102	209			

a. Dependent Variable: ROA
b. Predictors: (Constant), Management efficiency, Firm size, Liquidity, Capital structure

Source: Research Findings (2021)

The significance level is set at 0.000, which is much below $p=0.05$. This means that the model was satisfactory to assess the capital structure, liquidity, firm size and managerial efficiencies of NSE-listed businesses in non-financial sector.

The R-square indicated the way the variables were connected. The significance of the link between responder and predictor factors was shown by the p-value of the sig.

column. The confidence interval of 95% indicates a p-value of less than 0.05. As a consequence, a p-value above 0.05 indicates that the predictor and response variable are unrelated. The results are listed below.

Table 4.10: Model Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.133	.078		-4.704	.000
1 Capital structure	-.258	.029	-.527	-8.780	.000
Liquidity	.032	.008	.239	3.996	.000
Firm size	.002	.004	.036	.598	.551
Management efficiency	.019	.015	.214	3.897	.000

a. Dependent Variable: ROA

Source: Research Findings (2020)

All other factors, except for company size, have generated significant positive findings (high t-value, $p < 0.05$). Because a p value greater than 0.05 is displayed, the business size generated a positive but modest result.

The following equation was created:

$$Y = -0.133 - 0.258X_1 + 0.032X_2 + 0.019X_3$$

Where,

Y = Financial performance

X₁ = Capital structure

X₂ = Liquidity

X₃ = Management efficiency

The constant = -0.133 in the model indicates that performance would be -0.133 if the variables (capital structure, liquidity, company size, as well as management efficiency) were all zero. While firm size was insignificant, a unit rise in capital structure resulted in a 0.258 decline in performance, but a unit rise in liquidity or

managerial efficiency resulted in 0.032 and 0.019 increases in financial performance, respectively.

4.7 Discussion of Research Findings

The research examined how capital structure impacts NSE non-financial firms' performance. The independent variable was the capital structure operationalized as the ratio of total debt to total assets. The control variables were liquidity measured by current ratio, firm size as natural log of total assets and management efficiency measured by total sales to the overall assets. ROA was used to measure financial performance which was the response variable.

The correlation coefficient of Pearson showed that capital structure has a significant negative association with performance measured by ROA. NSE Non-financial businesses' performance showed a positive but not substantial connection to liquidity. The research too exhibited that the correlation between firm size and managerial efficiency with the success of NSE non-financial companies has been positive but not substantial.

The result shows that 29.4% of changes in the response variable according to R^2 , which implies other factors other than the model explain 70.6% of performance changes. The predictor variables of capital structure, liquidity, size of a business and efficiency explained 29.4% of changes in ROA. With an F-value of 21.293, the model was significant at 95% confidence interval. This shows that the connections between the variables were represented by a sufficient model.

The findings are consistent with Mwaura (2017) who carried out a similar study on NSE listed firms covering the period 2011-2016. The study population was 65 firms out of which 36 formed the study sample. The study applied secondary data acquired

from the NSE Handbooks and published annual financial reports. The collected data was organized and analysis performed via Regression Analysis Model and SPSS. The study findings showed that as debt ratio increases, the return on equity decreases (inverse relationship) hence concluding on a negative association between external long term borrowings and returns on investment

The study also concurs with Thu-Trang (2019) who put his context in an emerging economy, Vietnam. This study was longitudinal on 102 firms listed at the Ho Chi Minh Exchange. With the measure of performance being ROA, and capital structure utilizing total debt to total assets, long-term debt to total assets and short-term debts to total assets. The paper revealed a significant correlation between capital structure and firm performance. An increase in the use of debt was found to decrease firm performance. Firms should thus be cautious when deciding to use debt.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The facts, conclusions, as well as limitations discovered during the research are summarized in this chapter. It also makes policy recommendations that will help policymakers raise the expectations of publicly traded non-financial companies in order to attain better results. The findings of the research too include future research suggestions.

5.2 Summary of Findings

The research's goal was to see how NSE's financial performance is affected by capital structure. Capital structure, liquidity, business size, and managerial efficiency were among the variables studied. This was accomplished using a descriptive cross-section design. SPSS has been used to analyze secondary CMA data. Annual data for 42 non-financial corporations has been obtained during a 5-year period from their annual reports.

The correlation coefficient of Pearson showed that capital structure has a significant negative association with performance measured by ROA. NSE Non-financial businesses' performance showed a positive but not substantial connection to liquidity. The research too depicted that the correlation between firm size and managerial efficiency with the success of NSE non-financial companies has been positive but not substantial.

As depicted by 0.294 R square, indicating that differences in capital structure, liquidity, business size, and management efficiency account for 29.4 % of the

variance in NSE listed non-financial enterprises performance. 70.6% of financial performance variation is attributable to variables outside the model. The results showed that the predictor parameters selected were significantly linked with the business results of non-financial companies ($R=0.542$). The F value was calculated as 5% above the critical value whereas the p value was 0.000 and showed that the model included data on the effects of the four independent variables on the financial performance was ideal.

The regression outcomes suggest that performance would be -0.133 if the variables (capital structure, liquidity, company size, as well as management efficiency) were all zero. While firm size was insignificant, a unit rise in capital structure resulted in a 0.258 decline in performance, but a unit rise in liquidity or managerial efficiency resulted in 0.032 and 0.019 increases in financial performance, respectively.

5.3 Conclusion

The financial performance of publicly traded non-financial businesses are affected significantly by capital structure. The conclusions designate that a one-unit increase in that variable has a substantial negative effect on non-financial business performance. Company liquidity has a strong positive performance connection and therefore greatly improves liquidity performance. The survey also showed a statistically significant impact on management efficiency on financial performance and suggested that management efficiency is significantly affecting the performance of the companies examined. Furthermore, business size has a favorable but modest financial impact, meaning that corporate size isn't a big predictor of financial performance.

The results indicate that the selected factors, such as capital structure, liquidity, size, and managerial efficiency, significantly affected businesses' success. These factors

influence significantly on non-financial companies' financial performance, since ANOVA's p value is below 0.05. The finding that the chosen variables account for 29.4% of variance in performance indicates that other non-model factors account for 70.6% of variance in non-financial companies' financial performance.

This study concurs with Ongombe and Mungai's (2018) results on the effect of capital structures on the business results of sugar milling companies in Kisumu County. The research's target population was all three sugar producing companies in Kisumu County. Secondary data during 2011-2015 have been used and taken from disclosed financials. Simple and multiple regression analysis together with correlation analyzed the data quantitatively so as to establish the level of influence of each of the autonomous variables. Tables and accounts have been used to display the data. The conclusions were that debt ratio was related negatively and insignificant to financial performance while the debt-to-equity ratios were significant and harmful to the financial output of sugar production companies in Kisumu County.

This study also agrees with Doan (2020) who did an investigation on how capital structure impacts firm performance in Vietnam. The target population was firms quoted at the Ho Chi Minh Stock Exchange and a sample of 102 firms non-financial firms were sampled. The study period spanned from 2008 to 2018. To overcome the drawbacks of the model so as to ensure reliability and reliability, generalized method of moment is used. To measure firm performance ROA was used. Additionally financing leverage was measured using three measures: short-term debt to total assets, long-term debt to total assets and total debt to total assets. The control variables comprise of inflation rate, economic growth and firm size. The study findings

established that capital structure has a relationship with firm performance. The results were that firm performance declined as more debt was consumed.

5.4 Recommendations

The study results revealed that capital structure has a negative impact on financial performance. Policy reforms include: non-financial companies listed in NSE shall assess fiscal advantages and bankruptcy costs connected with loan funding. Levels of debt should be kept at appropriate levels because a high debt level has been shown to decrease financial performance. This will assist in achieving the objective of enhancing shareholder value.

Financial performance and liquidity were found to have a positive relationship in the research. The suggestion is that a detailed examination of the liquidity condition of publicly traded non-financial firms be performed to ensure that the firms are functioning at adequate levels of liquidity, consequently boosting financial performance. The rationale for this is that liquidity is extremely vital since it has an impact on how a company operates.

The NSE's non-financial operations performed much better as a result of improved management efficiency. The proposal is that non-financial companies establish optimal personnel management methods to ensure that skilled and devoted employees be attracted and retained, since this would help improve financial performance. Talent management methods such as staff planning, recruiting, learning and development should be given special consideration as should employee perks and payments.

5.5 Limitations of the Study

The research looked at some of the elements thought to affect the NSE-listed non-financial companies' performance. The research focused on four explanatory

variables in particular. Nevertheless, additional factors, some of which are internal, like the firm's age and corporate governance, though others which lack management's regulation, like rate of exchange, economic growth, balance of trade, as well as rate of unemployment, are influential in determining financial performance of companies.

The research used quantitative secondary data. The research also overlooked qualitative data that may explain additional variables influencing the connection between capital structure and non-financial company performance. Qualitative techniques like focus groups, open surveys and interviews may help to provide more definitive results.

The research focused on a span of 5 years (2016 to 2020). It is not clear whether the outcomes will last longer. It is also uncertain if same results can be expected beyond 2020. A multivariate linear regression model for data analysis was used. The investigator cannot correctly extrapolate results due to the model's shortcomings, such as misleading conclusions from a change in variable financial performance. When data is added into the model, conflicting outcomes may occur.

5.6 Suggestions for Further Research

The research uses secondary data to examine at the impact of the capital structure on NSE non-financial firms' performance. In order to complement this research, same survey on the basis of primary data obtained through thorough surveys as well as interviews on all 42 NSE listed non-financial corporations might suffice.

Further research on variables such as growth prospects, industrial practices, business age, political stability, and other macroeconomic variables is required since the study did not cover all of the elements that affect the financial performance of NSE non-

financial companies. Policymakers may use a tool that evaluates the influence of different factors on performance to help them make decisions.

The research was restricted to NSE-listed non-financial businesses. Other corporations operational in Kenya should be investigated further, according to the study's recommendations. Future research should look into how capital structure affects characteristics other than financial performance, such as business value, operational efficiency, and dividend payment, to name a few.

The focus of this research was drawn to the last five years. Future studies may span a lengthy period of time, such as thirty or twenty years, and may have a major effect on this study by confirming or refuting its findings. A longer research has the benefit of allowing the researcher to catch the effects of business cycles like booms as well as recessions.

Lastly, this research relied on model of multiple linear regression, that has its own set of drawbacks, including the possibility of erroneous and misleading conclusions due to changes in variable financial performance. To explore the many connections to financial success, future research should use alternative models, such as the Vector Error Correction Model.

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APPENDICES

Appendix I: Non-Financial Firms Listed at the NSE

	COMPANY	SECTOR	YEAR OF LISTING
	<u>Deacons (East Africa)</u>	Consumer Services	2016
2.	<u>Nairobi Business Ventures</u>	Consumer Services	2016
3.	<u>Atlas African Industries</u>	Industrials	2014
4.	<u>Flame Tree Group Holdings</u>	Basic Materials	2014
5.	<u>Kurwitu Ventures</u>	Consumer services	2014
6.	<u>Umeme</u>	Utilities	2012
7.	<u>TransCentury</u>	Industrials	2011
8.	<u>Safaricom</u>	Telecommunications	2008
9.	<u>Eveready East Africa</u>	Consumer Goods	2006
10.	<u>KenGen Company</u>	Utilities	2006
11.	<u>WPP Scangroup</u>	Consumer Services	2006
12.	<u>Mumias Sugar Co</u>	Consumer Goods	2001
13.	<u>ARM Cement</u>	Industrials	1997
14.	<u>TPS Eastern Africa</u>	Consumer Services	1997
15.	<u>Kenya Airways</u>	Consumer Services	1996
16.	<u>Sameer Africa</u>	Consumer Goods	1994
17.	<u>Longhorn Publishers</u>	Consumer Services	1993
18.	<u>Crown Paints Kenya</u>	Basic Materials	1992
19.	<u>Uchumi Supermarkets</u>	Consumer Services	1992
20.	<u>Total Kenya</u>	Oil & Gas	1988
21.	<u>Express Kenya</u>	Consumer Services	1978
22.	<u>Olympia Capital Holdings</u>	Industrials	1974
23.	<u>East African Cables</u>	Industrials	1973
24.	<u>Nation Media Group</u>	Consumer Services	1973
25.	<u>Carbacid Investments</u>	Basic Materials	1972
26.	<u>Eaagads</u>	Consumer Goods	1972
27.	<u>East African Breweries</u>	Consumer Goods	1972
28.	<u>East African Portland Cement</u>	Industrials	1972
29.	<u>Kapchorua Tea Kenya</u>	Consumer Goods	1972
30.	<u>Kenya Power & Lighting</u>	Utilities	1972
31.	<u>Williamson Tea Kenya</u>	Consumer Goods	1972
32.	<u>Unga Group</u>	Consumer Goods	1971
33.	<u>Bamburi Cement</u>	Industrials	1970
34.	<u>B O C Kenya</u>	Basic Materials	1969
35.	<u>BAT Kenya</u>	Consumer Goods	1969
36.	<u>Limuru Tea</u>	Consumer Goods	1967

37.	<u>Sasini</u>	Consumer Goods	1965
38.	<u>KenolKobil</u>	Oil & Gas	1959
39.	<u>Kenya Orchards</u>	Consumer Goods	1959
40.	<u>Standard Group</u>	Consumer Services	1954
41.	<u>Kakuzi</u>	Consumer Goods	1951
42.	<u>Car & General (K)</u>	Consumer Services	1940

Source: NSE (2020)

Appendix II: Data Collection Instrument

Company ID	Year	ROA	Capital structure	Liquidity	Firm size	Management efficiency
1	2016	-0.1600	0.513	3.9703	10.630	1.766
1	2017	-0.0600	0.456	3.9512	10.708	2.909
1	2018	0.1500	0.676	3.9318	10.715	5.958
1	2019	0.0400	0.745	3.9120	10.567	11.648
1	2020	0.0500	0.723	3.8918	10.473	7.503
2	2016	0.1400	0.274	3.9120	10.660	2.123
2	2017	0.1500	0.325	3.8918	10.528	3.237
2	2018	0.1200	0.289	3.8712	10.622	1.082
2	2019	0.0900	0.295	3.8501	10.603	2.279
2	2020	0.1100	0.275	3.8286	10.634	1.303
3	2016	0.0100	0.643	4.3944	9.973	1.594
3	2017	0.0200	0.666	4.3820	9.987	1.438
3	2018	0.0200	0.664	4.3694	9.954	1.013
3	2019	0.0400	0.653	4.3567	9.911	0.911
3	2020	0.0600	0.637	4.3438	9.839	2.355
4	2016	0.1300	0.116	3.1781	9.519	3.047
4	2017	0.1200	0.132	3.1355	9.489	3.001
4	2018	0.1300	0.166	3.0910	9.473	2.807
4	2019	0.1700	0.147	3.0445	9.404	2.973
4	2020	0.2200	0.127	2.9957	9.343	2.834
5	2016	0.0400	0.701	2.0794	9.769	3.249
5	2017	0.0500	0.691	1.9459	9.704	6.252
5	2018	0.0100	0.702	1.7918	9.657	2.076
5	2019	0.0100	0.650	1.6094	9.586	2.051
5	2020	0.0700	0.538	1.3863	9.469	2.674
6	2016	-0.1000	0.733	3.5835	9.847	1.940
6	2017	-0.0800	0.661	3.5553	9.878	1.022
6	2018	0.0200	0.595	3.5264	9.923	0.721
6	2019	0.3900	0.608	3.4965	9.897	0.699
6	2020	0.0600	0.550	3.4657	9.833	0.803
7	2016	-0.0400	0.383	3.9703	10.437	1.052
7	2017	0.1500	0.355	3.9512	10.445	2.357
7	2018	0.3100	0.403	3.9318	10.364	2.297
7	2019	-0.0200	0.573	3.9120	10.196	2.681
7	2020	0.1100	0.561	3.8918	10.208	2.348
8	2016	0.3500	0.289	3.9120	8.888	2.620
8	2017	-0.1800	0.551	3.8918	9.035	1.316
8	2018	0.3900	0.431	3.8712	9.179	1.196
8	2019	-0.1900	0.765	3.8501	8.969	1.174

Company ID	Year	ROA	Capital structure	Liquidity	Firm size	Management efficiency
8	2020	0.0500	0.580	3.8286	8.973	1.206
9	2016	0.1000	0.248	4.3944	9.759	1.228
9	2017	0.1100	0.241	4.3820	9.705	1.056
9	2018	0.1200	0.358	4.3694	9.481	1.096
9	2019	0.0400	0.228	4.3567	9.586	1.112
9	2020	0.0500	0.221	4.3438	9.570	1.160
10	2016	0.0200	0.514	3.1781	11.577	1.123
10	2017	0.0200	0.530	3.1355	11.565	4.511
10	2018	0.1900	0.587	3.0910	11.535	6.296
10	2019	0.0200	0.693	3.0445	11.398	10.089
10	2020	0.0300	0.607	2.9957	11.276	4.258
11	2016	0.0900	0.535	2.0794	10.382	8.843
11	2017	0.0900	0.592	1.9459	10.384	1.107
11	2018	0.1000	0.508	1.7918	10.240	1.146
11	2019	0.0400	0.693	1.6094	10.379	1.382
11	2020	0.0200	0.763	1.3863	10.449	1.536
12	2016	0.0200	0.795	2.3571	11.534	1.464
12	2017	0.0200	0.785	2.2968	11.474	1.283
12	2018	0.0300	0.697	2.6813	11.440	1.168
12	2019	0.0400	0.668	2.3480	11.344	1.305
12	2020	0.0300	0.683	2.6204	11.248	1.197
13	2016	-0.0600	1.307	1.3164	11.165	1.161
13	2017	-0.1900	1.229	1.1960	11.192	1.585
13	2018	-0.1900	1.033	1.1739	11.260	0.946
13	2019	-0.0200	0.810	1.2056	11.172	1.085
13	2020	-0.0400	0.746	1.2276	11.089	1.024
14	2016	0.3000	0.156	1.0562	11.209	1.469
14	2017	0.2400	0.174	1.0962	11.202	0.984
14	2018	0.2000	0.336	1.1120	11.196	1.334
14	2019	0.1700	0.322	1.1601	11.129	1.540
14	2020	0.1400	0.377	1.1233	11.110	1.259
15	2016	0.0000	0.393	4.5106	9.473	1.115
15	2017	-0.2000	0.444	6.2963	9.517	4.144
15	2018	-0.0100	0.384	10.0893	9.574	6.657
15	2019	-0.0200	0.328	4.2579	9.586	7.954
15	2020	0.1200	0.270	8.8431	9.564	8.475
16	2016	0.0200	0.142	1.1065	10.120	3.345
16	2017	0.0300	0.104	1.1464	10.226	0.951
16	2018	0.1300	0.090	1.3815	10.205	1.097
16	2019	0.3800	0.188	1.5359	10.174	1.422

Company ID	Year	ROA	Capital structure	Liquidity	Firm size	Management efficiency
16	2020	0.0100	0.295	1.4639	9.957	1.486
17	2016	-0.0500	0.582	1.2832	9.649	1.736
17	2017	0.0500	0.529	1.1679	9.644	1.237
17	2018	-0.0700	0.569	1.3048	9.639	0.950
17	2019	0.0500	0.462	1.1971	9.613	0.935
17	2020	0.0500	0.507	1.1606	9.619	0.968
18	2016	0.0700	0.437	1.5853	10.580	1.224
18	2017	0.0600	0.465	0.9464	10.559	1.643
18	2018	0.0500	0.486	1.0851	10.534	1.032
18	2019	0.0400	0.495	1.0237	10.512	0.923
18	2020	0.0300	0.615	1.4691	10.602	0.897
19	2016	-0.2100	1.006	0.9836	10.273	1.157
19	2017	-0.0500	0.797	1.3339	10.277	0.502
19	2018	-0.0500	0.966	1.5404	10.277	0.465
19	2019	-0.0800	0.366	1.2591	10.339	0.563
19	2020	0.0300	0.446	1.1154	10.377	1.400
20	2016	-0.5700	1.419	4.1442	9.699	0.624
20	2017	-0.5300	0.867	7.9538	9.807	0.740
20	2018	0.0800	0.520	8.4745	9.838	0.693
20	2019	0.0600	0.475	3.3451	9.746	0.563
20	2020	0.0000	0.466	0.9506	10.011	0.636
21	2016	0.0600	0.381	1.0966	9.964	2.205
21	2017	0.0700	0.383	1.4218	9.938	2.524
21	2018	0.0600	0.394	1.4858	9.905	3.374
21	2019	0.0400	0.471	1.7358	9.909	2.833
21	2020	0.1200	0.279	1.2374	10.054	3.020
22	2016	0.1300	0.285	0.9502	10.085	4.402
22	2017	0.1600	0.295	0.9346	10.104	2.328
22	2018	0.2000	0.266	0.9684	10.077	1.771
22	2019	0.2300	0.280	1.2242	10.059	1.895
22	2020	0.0200	0.277	1.6434	9.348	2.131
23	2016	0.0600	0.240	1.0320	9.347	0.955
23	2017	0.0600	0.261	0.9226	9.366	1.219
23	2018	0.1000	0.240	0.8973	9.362	1.156
23	2019	0.0800	0.216	1.1574	9.420	1.116
23	2020	0.1200	0.820	0.5021	10.824	1.078
24	2016	0.1600	0.888	0.4648	10.791	1.524
24	2017	0.1400	0.801	0.5627	10.826	1.488
24	2018	0.1100	0.855	1.4005	10.798	1.277
24	2019	0.1100	0.868	1.0634	10.761	1.300

Company ID	Year	ROA	Capital structure	Liquidity	Firm size	Management efficiency
24	2020	0.1700	0.078	0.6245	8.965	1.100
25	2016	0.0500	0.091	0.7402	8.881	0.630
25	2017	0.0100	0.148	0.6930	8.633	1.595
25	2018	-0.0900	0.191	0.5634	8.649	1.487
25	2019	0.1000	0.239	0.6361	9.978	1.285
25	2020	-0.0300	0.265	2.2050	9.922	1.410
26	2016	0.0500	0.221	2.5238	9.951	0.343
26	2017	0.0100	0.229	3.3740	9.932	0.672
26	2018	0.0900	0.253	2.8332	9.931	2.973
26	2019	-0.0300	0.303	3.0200	9.308	2.834
26	2020	0.0500	0.294	4.4016	9.331	3.249
27	2016	-0.0100	0.280	2.3280	9.297	6.252
27	2017	0.0700	0.284	1.7710	9.285	2.076
27	2018	0.0900	0.382	1.8952	9.318	2.051
27	2019	-0.0700	0.283	2.1309	8.418	2.674
27	2020	-0.0800	0.271	0.9554	8.451	2.828
28	2016	0.0100	0.267	1.2192	8.497	2.910
28	2017	0.0000	0.236	1.1561	8.530	3.463
28	2018	0.0800	0.241	1.1158	8.535	3.601
28	2019	-0.0700	1.139	1.0780	8.574	4.359
28	2020	-0.2500	0.939	1.5236	8.579	1.766
29	2016	-0.1400	0.728	1.4882	8.645	2.909
29	2017	-0.1600	0.673	1.2774	8.679	5.958
29	2018	0.0000	0.587	1.2997	8.682	11.648
29	2019	0.0100	0.476	1.1003	10.243	7.503
29	2020	0.0000	0.437	0.6298	10.230	2.123
30	2016	-0.0300	0.388	1.5950	10.199	3.237
30	2017	0.0100	0.347	1.4871	10.202	1.082
30	2018	0.0300	0.346	1.2846	10.208	2.279
30	2019	0.0400	0.348	1.4099	10.139	1.303
30	2020	0.0300	0.347	0.3431	10.130	1.594
31	2016	0.0200	0.310	0.6717	10.096	1.438
31	2017	0.0400	0.357	0.7048	10.123	1.013
31	2018	0.0600	0.369	1.0983	10.105	0.911
31	2019	-0.2300	0.683	1.0861	8.157	2.355
31	2020	0.0300	0.679	2.3685	8.191	3.047
32	2016	0.0300	0.594	2.2713	8.048	3.001
32	2017	0.1000	0.763	1.8378	7.900	2.807
32	2018	0.0300	0.754	2.3583	7.654	2.973
32	2019	-0.0400	1.087	2.5221	9.651	2.834

Company ID	Year	ROA	Capital structure	Liquidity	Firm size	Management efficiency
32	2020	-0.0400	1.053	1.3097	9.594	3.249
33	2016	-0.1000	1.011	1.1747	9.587	6.252
33	2017	0.0000	0.906	1.1699	9.570	2.076
33	2018	0.0300	0.889	1.1666	9.486	2.051
33	2019	-0.0800	0.530	1.1380	8.147	2.674
33	2020	-0.0300	0.526	0.4479	8.708	2.271
34	2016	0.0000	0.537	1.0423	8.781	1.838
34	2017	0.0000	0.452	1.0590	8.712	2.358
34	2018	-0.1100	0.403	1.1121	8.109	2.522
34	2019	0.1000	0.046	1.1251	9.324	1.310
34	2020	0.0900	0.075	1.0611	9.304	1.175
35	2016	0.1600	0.075	1.1587	9.283	1.170
35	2017	0.1900	0.084	1.1441	9.227	1.167
35	2018	0.2300	0.364	1.1447	9.060	1.138
35	2019	0.1900	0.560	1.0939	10.251	0.448
35	2020	0.2600	0.524	1.0332	10.267	1.042
36	2016	0.2700	0.526	1.2705	10.271	1.059
36	2017	0.2300	0.555	1.2776	10.261	1.112
36	2018	0.2200	0.025	1.1715	10.230	1.125
36	2019	0.0600	0.718	1.1658	10.428	1.159
36	2020	-0.2300	0.710	1.5334	10.310	1.144
37	2016	-0.1200	0.636	1.6234	10.372	1.145
37	2017	-0.0500	0.567	1.6385	10.436	1.094
37	2018	0.0600	0.491	1.6048	9.269	1.033
37	2019	0.0500	0.492	1.5050	9.271	1.271
37	2020	0.0900	0.448	1.2653	8.838	1.278
38	2016	0.1300	0.423	1.2875	8.877	1.172
38	2017	0.1700	0.437	1.2781	8.836	1.166
38	2018	-0.1200	0.486	1.2225	9.358	1.558
38	2019	0.0400	0.392	1.1691	9.396	1.623
38	2020	0.0300	0.280	1.1254	9.293	1.638
39	2016	-0.0400	0.530	1.0996	8.741	1.605
39	2017	0.0498	0.468	1.0417	8.267	1.505
39	2018	0.0389	0.450	1.2396	8.316	1.265
39	2019	0.0387	0.442	2.2624	8.354	1.287
39	2020	0.0360	0.341	2.9326	8.382	1.278
40	2016	0.0284	0.283	3.5336	8.414	1.222
40	2017	0.0498	0.400	2.5000	8.267	1.047
40	2018	0.0389	0.318	3.1447	8.316	1.169
40	2019	0.0387	0.399	2.5063	8.354	1.125

Company ID	Year	ROA	Capital structure	Liquidity	Firm size	Management efficiency
40	2020	0.0360	0.400	2.5000	8.382	1.100
41	2016	0.0284	0.335	2.9851	8.414	1.042
41	2017	0.0449	0.326	3.0675	8.291	1.240
41	2018	0.0446	0.338	2.9586	8.343	1.198
41	2019	0.0471	0.376	2.6596	8.347	1.159
41	2020	0.0278	0.337	2.9674	8.369	1.148
42	2016	0.0374	0.460	2.1739	8.399	1.081
42	2017	0.0417	0.679	1.4728	8.035	2.095
42	2018	0.0414	0.414	2.4155	8.083	2.365
42	2019	0.0427	0.737	1.3569	8.164	2.520
42	2020	0.0386	0.546	1.8315	8.219	2.253