

**EFFECTS OF CAPITAL STRUCTURE ON THE FINANCIAL
PERFORMANCE OF FIRMS LISTED AT THE NAIROBI
SECURITIES EXCHANGE**

BY

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DECLARATION

I declare that this research project is my original work and has never been submitted elsewhere for award of a degree or diploma at the University of Nairobi or any other educational institution.

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DEDICATION

I dedicate this research project to my family members and those who cherish knowledge acquisition.

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LIST OF THE ABBREVIATIONS

ANOVA	ANALYSIS OF VARIANCE
CMA	CAPITAL MARKET AUTHORITY
EBIT	EARNING BEFORE INTEREST AND TAXES
GDP	GROSS DOMESTIC PRODUCT
NASI	NSE ALL SHARE INDEX
NSE	NAIROBI STOCK EXCHANGE
ROA	RETURN ON CAPITAL
ROE	RETURN ON EQUITY
SPSS	STATISTICAL PACKAGE FOR SOCIAL SCIENCE

ABSTRACT

The choice whether equity or debt financing has led to never-ending search for the best capital structure. Numerous research studies indicates that a firm with high degree of financial leverage seem to have an optimal capital structure and thus it leads to better financial performance while others such as seminar paper of the Modigliani-Miller argues that it has no influence on the firms value. The significance of these financial issues has motivated numerous researchers to establish the effect of the capital structure composition on the firm financial performance of companies quoted at NSE with no conclusion. The purpose of this research study was to ascertain the effects of capital structure on the performance of quoted at NSE. The firm financial performance was measured in terms of asset returns while capital structure was measured using debt ratio. The research period was between 2011 to 2015. During this research period, numerous companies listed at NSE had embarked on massive debt acquisition to finance their development projects. However, some companies such as Uchumi and Kenya airways reported huge loss which triggered the need to examine the effect of such changes in the capital structure composition have on the financial performance. This presented a fascinating period of study considering the ups and downs of the business cycle. The study population constituted of all the 47 non-financial firms listed at NSE. Secondary data utilized was obtained from the audited financial statements obtained from the company website and NSE Handbook covering the period from 2011 to 2015. Correlation and regression analysis facilitated the statistical analysis with aid of Statistical Package for Social sciences (SPSS). The research findings obtained showed that capital structure has an inverse influence on the financial performance of firms listed at NSE. The findings pointed out that, financial performance decreases with the increase in the debt ratio in the capital structure, which supports the need for capital injection instead of borrowing because debt financing results in costs such as interest rates which exceed the benefits of debt financing. The research study recommended that firms should decrease the amount of the financial leverage in their capital structure in order to enhance the financial performance and create huge value to its shareholders.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Whenever a Corporation requires funds to support their operations and other capital expenditures, the financial decisions to trade-off debt and equity (capital structure) should be put into consideration. The capital structure describes the way the firm raises finances for its operations by use of debt capital or equity capital or an equal blend of both debt and equity capital (Myers, 2001). In one manner or another, business activities must be funded. Without funds to support working capital requirement and fixed assets, business might not exist. Almost in every aspects of fixed asset investment decision, capital structure decision is very important one because it affects the profitability of the company. Proper attention and care require should then be given consideration while making the decision of capital structure in order to enhance firms performance and maximize shareholders wealth (Mwangi *et al*, 2014).

Capital structure theories and their relationship with firms profitability and firms value have been a puzzling issue since the seminar paper of Modigliani and Miller (1958) where he stated that, in absence of corporate taxes, information asymmetry, bankruptcy cost, transaction costs and in an efficient market, the value of the firm is immaterial to the financing decision adopted (Jermias, 2008). Debt capital can decrease the tax paid, so the optimal capital structure of company should be totally be made up of debt capital. Since then, numerous theories have come up to explain capital of a firm, which includes the Pecking order theory, the Trade-off theory and the theory of agency cost. The decision about where source of capital comes from is vital and affects competitiveness with other peers in the same industry. Therefore, company should choose the right financial mix that maximizes the financial performance (Abor, 2007).

The issuance of debt finance through the capital market in Kenya is becoming more and more common. Listed companies at NSE are accumulating massive debts in their capital structure as a way of raising fresh finance to funds operations and execute development projects through capital market (Anyanzwa, 2015). For instance, centum investment Ltd and regional beer maker East African Breweries Ltd (EABL) have established the foundation for debt financing by borrowing millions of dollars from the debt market. Several firms use debt to leverage on their capital in order to enhance profit levels. However, ability of debt finance to improve performance or enhance profits varies from one firm to another depending on prevailing economic conditions (Maher & Andersson, 1999). Companies like Housing Finance Ltd issued medium-term notes of \$220 million that CMA accepted in November 2013 while Shelter Afrique issued medium-term notes of \$88 million for habitat and housing in Africa and was accepted in August 2013 (Anyanzwa, 2015). It is evident that listed firms are increasing debt capital in their capital structure and the need to investigate whether debt financing has an effect on the performance motivated this study. Moreover, lack of unified theory, which explains the effects composition of capital structure have on the financial performance, motivated this research study.

1.1.1 Capital Structure

Capital structure has been described as a mixture of equity finance and debt finance and is usually regarded as the one of the most significant financial variable because it is linked to the capacity of the company to meet the requirements of all its stakeholders such as employees, community, shareholders, among others (Jensen, 1986). Equity finance refers to the finance contributed by the business owners and this is the most risk bearing form of finance. The shareholders are entitled share of the company profit usually referred to as dividend in accordance to the number of shares held. However, it is not

compulsory to make dividend payment every time since the company can hold some part of the profits for supporting future expansion of its business operations. The shareholders also share business risks and they are last to obtain benefit in case a company is liquidated after settlement of all debt (Brockington, 1990).

Debt finance is created by borrowing from the external financing sources like financial banks or issuing bonds. The financier does not control the operations of the firm but instead, he is paid a fixed annual return as compensation for the use of his funds. On the other hand, the borrower (firm) is legally obligated to repay the principal amount plus the accrued interest regardless of whether the firm makes the profit or not. The inability to meet such financial commitments can lead to loss of the collateralized asset, the collapse of the business or even bankruptcy (Bichsel & Blum, 2005). Debt finance has both the advantages and disadvantages in the growth of companies and expansion of the economy. Debt finance results to benefits such as tax shield and the diminution of free cash flow problems by enhancing managerial behavior while the expenses of debt financing include agency expenses and bankruptcy cost which results from the conflicts between shareholders and debt holders (Fama & French, 2002). Managers therefore, should try to balance these costs and benefits of debt when making debt capital decisions in order to improve performance (Kraus & Litzenberger, 1973). Capital structure is measured using debt ratios. The debt ratios make comparison of the total debt with the total assets owned by the company. A low ratio indicates that a company depends less on debt while a high percentage indicates that a firm rely more on debt finance.

1.1.2 Firm Financial Performance

Financial performance has been defined as a measure of how well a firm uses its available resources in the generation of revenues. It provides a guideline that gives a way

for future decisions relating to business developments, assets acquisitions and managerial control (Tehrani & Rahnama, 2006). It reflects what has been achieved by the management in monetary terms over a specific duration and can be utilized in making comparison of like firms in the one industry. According to Onger (2014), financial performance provides an avenue for the evaluation of business activities in objective monetary terms. It shows how better a shareholder is at the end of an accounting period than he was at the beginning and this can be ascertained by utilizing financial ratios derived from financial statements or using data on market share prices. The main objective of the firm is to maximize the wealth of the shareholders and therefore performance measurement helps to evaluate how richer the shareholder becomes as a result of the investment decisions over a given period (Berger & Patti, 2002).

The financial performance is measured using many different absolute and relative indicators such revenues, expenses, the net income levels, earnings before interest and tax (EBIT), return on asset, return on equity. However, most frequently used accounting-based measures of performance include ROE and ROA (Reese & Cool, 1978). ROE measures return on the shareholders capital and is computed by dividing Net profit after Taxes by Total Equity capital. It also shows the profitability level of a company in relation to the total sum of the shareholders capital invested. On the other hand, ROA indicates the return on all assets of the company and is frequently used by firms as an overall index of financial performance. It is computed by dividing Net Income after Taxes divided by Total Assets (Khravish, 2011). As a result, ROA will be applied in measuring financial performance of listed companies.

1.1.3 Capital Structure and Firm Financial Performance

The effect of capital structure on the financial performance of firms is essential and regularly discussed matter in managerial finance. However, this role remains a debatable topic, which has attracted the attention of many researchers since the study of Modigliani and Miller 1958, where he stated that firm value is independent of the financing choice adopted. Therefore, the real assets but not the financing mode determines firm's value. Indeed, scholarly researchers attempts to analyze capital structure and ascertain whether an optimal capital structure exists or it does not. Optimal capital structure refers to the level, which minimizes the cost of capital for the company and maximizes the performance of the firm. According to prior studies, capital structure has an effect on the cost of capital, which ultimately influences financial performance of the firm and share prices (Miller, 1977). The use of debt finance offers an opportunity to the firm to increase the scale of its operations and consequently increase its performance over time. However, debt finance has such effects on performance, if the return on the assets is greater than the cost of debt (Watkins, 2002).

According to Jensen & Meckling (1984), debt has an influence on the quality of the investment opportunities that are undertaken by the management by forcing managers to invest in the projects, which add value to the shareholders. This in return minimizes agency and other related costs hence enhancing financial performance of the firms. The effect of the capital structure on the firm's financial performance has for long time been investigated by different researchers and seen to have an effect on the financial performance of firms. For instance, Eldomiaty & Azim (2008) carried out a research on the effects of capital structure on the firm's financial performance and established that capital structure is positively related to the financial performance of the firms. Hadlock & James (2002) also support the argument. To the contrary, Fama & French (2008)

established that capital structure is negatively related to the firm financial performance. The contradicting findings on the effect of capital structure on the firm financial performance can be attributed to several factors, which include different companies, different countries, different sectors, different periods, different measures of profitability, different debt ratios and different methodologies in establishing the correlation between capital structure and firm performance (Muchugia, 2013).

1.1.4 Firms Listed at Nairobi Securities Exchange

The Nairobi security exchange is a public market for trading securities of public listed firms in Kenya. In 1954, it was started as a voluntary association of brokers under society act and it was responsible for development of security market and regulation of trading activities. NSE has undergone numerous changes since its commencement, which includes enactment of trading rules, Central depository system, automation of the market and demutualization from mutual company-to-company ltd by shares (NSE, 2016). It is the fourth biggest stock exchange in terms of number of share traded and fifth in terms of market capitalization as a percentage of GDP (Iraya & Musyoki, 2013).

NSE is currently licensed, monitored and supervised by the Capital Markets Authority (CMA) which, is the security market regulatory body in Kenya. The capital market authority has a responsibility of ensuring good corporate governance practices among listed companies and development of efficient market (NSE, 2016). Currently, the 64 listed companies in the Nairobi securities exchange are distributed among various industries such as, growth market enterprise segment, manufacturing & allied, Agricultural, Telecommunication & Technology, Insurance, Banking, Construction and allied, Commercial & services, Petroleum & energy, Investment, Investment services & Automobile and accessories. Since 1964, NSE 20-share has always been used by the

Nairobi stock exchange in measuring the performance of 20 blue- chip companies. However, in 2008, Nairobi stock exchange changed its performance measure to NSE all share index (NASI) which measures the general market performance incorporating all traded shares of each day (NSE, 2016).

Listed companies at the Nairobi Security Exchange are gradually increasing debt financing on their capital structure as they look for more capital to fund business operations and put into practice determined development projects. The reports from the capital market authority (CMA) indicate that a sum of 988 million was raised by the companies listed in the Nairobi stock exchange between 2004 and 2014 through right issue (Anyanzwa, 2015). Large listed firms seem to raise the debt to equity ratios while for the small firms they fell (Wagacha, 2001). The decision whether to take debt finance or equity financing has remained within the confines of boards of directors but financial analysts have argued in support and considers debt finance as appropriate for increasing firm value provided they are acquired at appropriate market rate and proceeds utilized in a good way (Anyanzwa, 2015). This study seeks to find out the whether such debt financing has any effect on the performance of the companies listed at NSE. Banks and Insurance companies will be excluded from the analysis because they are highly controlled on matters relating to liquidity and minimum capital base by the central bank of Kenya and the Insurance regulatory authority respectively.

1.2 Research Problem

Capital structure plays an important role in firms financial performance provided it is utilized efficiently and in an effective manner at its optimal level. However, the question of what constitute an optimal capital structure remains unanswered and the most controversial issue in the finance circles (Kajola, 2010). There is no agreement on the

nature of effects of capital structure on the profitability from both the theoretical and different empirical studies. The information asymmetry proposition of Myers & Majluf (1984) proposes a negative correlation because companies regardless of their market position would rely on the retained earnings for expansion instead of costly external finance. On the other hand, MM's tax/ interest shield proposition predicts a positive relationship since at higher income level, corporation would want to utilize more debt finance in their capital structure in order to shield their profits from taxation. Jensen & Meckling (1986) also support that view and consider debt as disciplining tool that forces managers to invest in projects, which add value to shareholders hence enhancing firm's performance. These conflicting theories created the need for further studies, which motivated this research.

Numerous companies listed in the NSE have embarked on massive use of debt in their capital structure with expectation of improving their financial performance. Debt finance offers an opportunity for the firm increase its performance by facilitating acquisition of the productive assets (Anyanzwa, 2015). Financial analyst have argued in the support of debt use and considers debt finance as good in enhancing firms performance provided its acquired at the favorable rate and its proceeds utilized in a good way. However, in the recent past companies with huge debts in their capital structure such as Kenya Airways, Home Africa, Uchumi Supermarkets, ARM cement, Mumias Sugar Company and Transcentury have reported huge losses and found themselves in serious debt crises owing creditors more than their net worth (Juma, 2016). These developments coupled with the lack of universal theory triggered the need for further research to look into the effects of composition of capital on the firm financial performance, which motivated this research study.

Moreover, many studies have for long been conducted globally and locally on the capital structure decisions. Abor (2005) did a research study on the effects of firms capital structure on the profitability of companies quoted on the Ghana Stock Exchange and he established that both short-term liabilities and long-term debt obligations have a significant positive relationship with firm profitability. Saeedi & Mahmoodi (2011) did the study on the effects of capital structure on performance of firms in the Tehran Stock Exchange and concluded that capital structure has no effects on the performance of firms. Baum *et al.* (2007) assessed the impact debt on the profitability of American industrial companies. The study used firm size to analyze the behavior of the French firms and concluded that debt capital has no effect on the firm's financial performance regardless of firm sizes. Zeltun & Tian (2007) did a study on the effects of capital structure on the firm financial performance and concluded that there is a negative correlation among capital structure and firm's financial performance.

Locally, Chepkemoi (2013) did a research study on the effect of capital structure on firm financial performance of SMEs and indicated that capital structure is negatively related with the profitability of the firm although it has positive effect on growth of sales. Karanja, (2014) assessed the effect of capital structure on the profitability of the SMEs in dairy in Kiambu and determined that capital structure is negatively related with firm financial performance of SMEs. Kuria (2013) carried a research study on effect of capital structure on the profitability of commercial banks listed in the Nairobi security exchange and concluded that capital structure is positively correlated with the firm financial performance though the relationship was not statistically significant. Mwangi (2010) did a research study on the effect of capital structure on the profitability of companies quoted at the NSE and discovered that, firm financial leverage has a significant negative effect on the profitability. The review of prior studies in Kenyan context on this topic have

produced mixed and conflicting results, which justifies the need for further studies. This research study therefore, seeks to contribute to the existing literature by addressing the following question: what is the effect of capital structure on the financial performance of firms quoted at the Nairobi Security Exchange?

1.3 Research Objective

To examine the effect of capital structure on financial performance of companies quoted at the Nairobi Security Exchange.

1.4 Value of the Study

To the firm's shareholders and management, this study will enlighten them on the effect of capital structure on their firm's value thus help them make informed financing decisions about debt capital that would enhance their firm's financial performance. It will also provide corporate financial managers with information that will help them establish a financing policy on how the firm should finance their assets to maximize its value.

To the government and other regulators and policy makers, the findings of this study will be useful in regard to advising and formulation of policies and guidelines that would not just govern the firms but also enhance their performance which in turn will improve the performance of the economy. The study will also assist company policy makers in determining the optimal capital structure to maintain in their capital structure in order to maximize the company value by minimizing financing costs

To the investors and other financiers, the study seeks to enlighten them on how capital structure affect the financial performance of firms thus help them make informed investment and lending decisions that will ensure they get a return on their investment. To academicians and future researchers, the study will form a basis for future research by providing additional information on this particular topic.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section contains the review of the literature that informs the study on the effects of capital structure on the financial performance. Theoretical and empirical literature is also reviewed to provide new knowledge. This will be followed by the literature summary.

2.2 Theoretical Review

This section covers theories that help explain the effect of capital structure on financial performance of the firm. These theories includes; the Pecking Order Theory, Trade-Off Theory, Agency theory and the Market Timing theory.

2.2.1 Pecking Order Theory

Myers & Majluf (1984) came up with this theory. According to this theory, there is no predefined optimal capital structure but instead asserts that, firms displays different preference for utilizing internal funds or retained earnings over external capital. It is the one of the most significant theories of company leverage and goes against the firm's idea of having distinctive combination of equity and debt finance, which minimizes the corporation costs of funds. It suggests that the firm should follow a well-specified order of priority with respect to financing sources to minimize its information asymmetry costs, first choosing retained earnings, then debt and finally raising equity as a last option. It advocates for retained earnings to be used first in funding long-term projects and when they are exhausted or not available, then debt is issued; and when it is insufficient or not available, equity is issued. The theory argues that, as firms becomes more profitable, the lesser they seeks external funds

since they would have enough internal funds to support their investment projects (Myers, 1984).

The explanation of the pecking order stems from the existence of the information asymmetry where managers are assumed to know more about their company risk, prospects and project value than external investors including capital markets. According to Myers & Majluf (1984), investors place low value on the company stock because of the inability of managers to convey information on the company prospects including the new investment opportunities identified. This in turn makes managers who are believed to be at the core of company information to finance their project using readily available retained earnings. If the retained earnings are insufficient, managers will choose debt capital in preference to issuing equity shares since they are undervalued in the capital markets. The asymmetric information effect therefore favors use of debt over equity and shows management confidence that the newly identified investment opportunity is profitable and the current share price is underpriced (Myers & Majluf, 1984).

2.2.2 Trade-Off Theory

This theory was proposed by Myers (1984). The theory holds that, there exists an optimal capital structure for every firm, which can be determined by balancing the costs and benefits of equity. As a result, a firm decides on how much debt capital and how much equity capital to include in their capital structure by balancing on the costs and benefits of each source. Debt capital results to benefits such as tax shield though high debt levels in the capital structure can result to bankruptcy and agency expenses. Agency expenses result from divergence of interest among the different firm stakeholders and because information asymmetry (Jensen & Meckling, 1976).

Thus, including cost of agency into the trade-off theory signifies that a corporation ascertains its optimal financial structure by balancing the benefit of debt (the tax advantage of debt) against expenses of excessive debt (financial distress) and the resultant equity agency expenses against debt agency costs. The theory further asserts that, as a firm increases debt in their capital structure, the marginal cost associated with debt increases while the marginal benefits associated with debt decrease until an optimal point is reached. Beyond that point, the marginal costs of debt exceed the marginal benefits resulting in reduced firm value. In this regard, the firm should set an optimal financial structure in order to enhance its performance.

According to Myers (1984), firms with more tangible assets should have high debt ratios while firms with more intangible assets should depend more on equity capital because they are subject to loss of value in case of liquidation. Under this theory, firms should evaluate the various costs and benefits of each debt level and determine an optimal debt structure that balances the incremental costs and incremental benefits (debt tax shields against costs of bankruptcy). This further explains why firms are partly financed by equity and also partly financed by debt in their capital structure.

2.2.3 Market Timing Theory

The theory was developed by Baker & Wurgler (2002). The theory views firms' capital structure as an outcome of the frequent attempts to time the equity market, whereby companies issue equity shares to create finance when the market prices are high when compared to their book value or historic market prices and then buy back these shares when market prices are low for the firm. According to this theory, a specified optimal capital structure does not exist and the various attempts by financial managers to time the equity market over time accumulate into a capital structure

outcome. Consequently, changes in share prices affect company capital structures. Therefore, capital structure comes because of the market timing of when to issue debt or equity depending on the performance of the market (Boudry, Kallberg & Liu 2010). The theory further assert that financial managers should consider which source of finance is cheapest at any time through evaluation of the equity costs relative to the cost of other means of raising funds. As a result, financing structure of the firm is because of the different visit made to the market and the prevailing market conditions (Graham & Harvey, 2001).

The theory assert that timing of equity market has an effects on financing structure and describes low leverage firms as those firms which seek funds when the market prizes are high while the high leverage firms as those which seek funds when the market prizes are low. The theory was developed with the intentions of enabling financial managers to take advantage of the short-term fluctuation in the cost of equity finance relative to other forms of capital. This theory supports the idea that companies choose equity finance when the relative equity cost is low, and choose debt finance when the relative equity cost is high. This change in share price affects capital structure and explains why firms at the same moment in time, firms have distinct proportion of debt and equity in their financing structure. Equity should be issued when relative cost is low while debt should be chosen when equity cost is high (Kwast & Rose, 1982). Firms therefore chooses the form of financing which at the moment in time seem to be more valued by the financial markets by paying attention to the market conditions. The financing structure adopted by the firm at any given time can be described as an outcome of the repeated trials to time equity market (Baker & Wurgler, 2002).

2.2.4 Agency Theory

This theory relates to the relationship that exists among the shareholders as the principal and the company agent (company's managers). An agency association comes into existence when one or many persons, referred to as principals, employ one or many other persons, known as agents, to carry out some service and then give them authority to make decision on his behalf. Jensen & Meckling (1976) suggests that, the best capital structure can be attained by minimizing agency costs which emanates from the conflicting managerial interests with those of debt holders and company owners. They argue that managerial ownership in the company ought to be increased to align managerial interests with the interests of the shareholders or employ debt use to limit managers' opportunistic behavior by reducing free cash flows. Jensen (1986) demonstrated the agency problem, which is linked with free-cash flows. He pointed out that the problem of free cash flow can be in one way or another be managed by increasing managerial stake in the company or by increasing debt use in the corporation capital structure, therefore limiting the sum of "free" cash that is at the disposal of managers. Thus, corporations which mostly seeks debt finances gives managers less discretionary power over how they can use free cash flows than those financed by equity, and as a results, debt finance acts as a control tool, in which the lenders and the company owners becomes the principals in the structure of corporate governance.

Debt finance forces corporate managers to be controlled by the public capital. If investors have negative opinion about the competence of management, they will require high payment of interests on the amount lend to the company or they will put on restrictive debt covenants to limit management degree of freedom. Debt finance outstanding restricts management's ability to lower the value of company through

incompetence dealings. They argue further that corporations with high debt levels can provide benefits in the vibrant sense that companies with debt levels can respond very quickly to development of adverse performance than firms with minimal debt level. The choice to have high debt levels during regular business operations appears to stimulate the company to take action operationally and financially after an adversity within little period of time, helping to avoid extended periods of losses without a response. Debt capital existence in financial structure can thus assist to protect the value of company going concern (Jensen, 1986).

2.3 Determinants of Financial Performance

Profit is one of the chief goals of business organization. The ability to earn profit is a good measure of the performance and distinguishes performing business organization from non-performing entities. Most business activities and corporate strategies are performed and designed to achieve this grand objective. Performance of the organization is affected by many factors which are broadly classified as micro factors and macro factors. Micro factors are firms specific and affects individual firm while macro factors affects all the firms and sectors.

2.3.1 Firm's Capital Structure

Capital structure describes how an organization raises the finances to support their operations. It comprises of the mix of debt and equity and the decision to choose either source of funds is based on weighing the resultant cost associated with them because they have an implication on performance of a firm. Debt results to tax and monitoring benefits. However, use of excessive debt exposes a firm to bankruptcy risks and reduces the value of the firm. The appropriate use of the optimal capital structure in the financing acquisition of assets is important in maximization of the

return to all stakeholders and enhances the ability of the firm to compete by minimizing the cost of the capital (Su & Vo, 2010).

Capital structure of the firm is an important managerial decision because it influences the shareholders risks and returns (Mwangi *et al*, 2014). Financial managers should always make an effort to build up an optimal capital structure that would be advantageous to the equity shareholders in specific and also to other stakeholders such as creditors, employees, customers and the society at large. Corporations therefore, have a chance to adjust their cost of capital and the market value by changing the firm's capital structure (Abor, 2007).

2.3.2 Tangibility of Fixed Assets

Asset tangibility refers to the ratio of fixed assets to the total firm's assets. The fixed assets play a vital role in determining firms debt level, turnover and finally firms profitability. Fixed assets of the firm have bigger economic value than intangible asset, which tend to lose value quickly in case of bankruptcy and have minimal informational asymmetries. The tangible assets are usually used as guarantee and collateral for firm's creditors in case a firm requires external financing. Therefore, companies with high amount of tangible assets are expected to have high debt level in the capital structure than a firm with fewer tangible assets. These external finances in turn lead to high turnover and enhance the firm's performance if efficiently utilized (Rajan, & Zingales, 1995).

The tangible assets of the company comprises of all assets owned by the company that have continuing physical existence and are purposely acquired for operational use. These assets are not meant for sale to the customers and include land, buildings,

plant and machinery, equipments and other fixed assets. The tangible assets are very important to the firm and enables corporate managers to evaluate the asset position of the firm without using the obsolete values of intangible assets. Lenders demand these assets as collaterals and consider them as explicit promise for debt payment. The theory of agency argues that these collateralized assets acts as monitoring devices for manager's behavior and hinders the transfer of the wealth from the debt holders to the shareholders. Therefore, debt level in the capital structure is expected to have a positive correlation with the assets tangibility (Niu, 2008).

2.3.3 Firm Liquidity Level

Liquidity refers to the extent by which company meets its immediate obligations in full and in a timely way. Excessive liquidity lead to building up of idle resources that does not create any profits for the firm while low levels of liquidity on the other hand, lead to damage of company goodwill, reduce credit standings and it can also lead to compulsory liquidation of company's assets. It cannot be doubted that every firm desires to maximize profitability by maintaining appropriate level of liquidity. However, magnifying profits at the expense of liquidity can cause serious trouble to the company, which can lead to financial insolvency as well. As a result, firm should properly manage their liquidity in order to maximize their profitability (Vieira, 2010).

Assets are said to be liquid if such assets can be swiftly be changed into cash. Whether a firm has or is coming up with readily available capital base to facilitate its operation, is a critical performance concern in relation to the firm's liquidity. Liquidity of the firm is measured using liquidity ratios such as cash ratios, current ratios, quick ratios and the changes in the working capital of the firm (Brealey *et al*, 2001). The capability of the firm to pay its maturing obligations on a timely way is of

vital importance and is closely related to firm's performance and existence. The inability of the firm to maintain sufficient liquidity level can make the company insolvent and jeopardize its operations (Gitman, 2003).

2.4 Empirical Review

Abor (2005) did a study investigating the connection between profitability and the capital structure for firms quoted in Ghana Stock Exchange for the period starting 1998-2002. He concluded that short-term debt has a positive relationship with profitability because of low interest rates. He also established that positive relationship exist between total debt and profitability because total debt comprises largely of short-term financing. However, long-term financing was found to have negative relationship with the performance because they are more expensive in the capital market.

Adekunle (2009) did a research study on the impact of financial structure on the firm's profitability in Nigeria for the period 2001-2007. He sampled 30 non-financial companies quoted in Nigerian stock exchange and collected secondary data from company's financial statements. The study used debt ratios as the independent variables and ROA and ROE as the dependent variable. The study employed ordinary least square estimation approach and established that debt ratio has a significant negative relationship with the performance of the firms.

Onaolapo & Kajola (2010) did a research on the effects of capital structure on the profitability of firms quoted on Nigeria Stock Exchange. The research used a sample of thirty non-financial firms for the period 2001-2007. The findings indicated that a negative effect exist between capital structure and firm level of profitability. The study used (ROE and ROA) of these companies. Rajan & Zingales (1995)

investigated the capital structure determinant of common corporations in seven big countries in the world such as Japan, America, Germany, Italy, France, Canada and Britain for the period 1987-1991. The research study used a sample of 4557 drawn from the seven countries and the study results indicated that leverage has a negative correlation with the firm profitability. However, the study showed a positive correlation of leverage with the size of the firm and tangible assets value.

Langat et al. (2014) assessed the effect of debt financing on the profitability the Tea Development Authority processing factories in Kenya. The study used ROE and ROA to measure firm performance. The study found both long-term debt and total debt have a positive effects on firm's performance at 1% and 5% respectively. Short-term debt on the other hand was found to have a negative relationship with the firm profitability. The study then concluded that sourcing finances through short-term debts by tea processing factories does not lead to profitability.

Pouraghajan and Malekian (2012) who did a research study to establish the effects of capital structure on financial performance of firms listed in the Tehran Stock Exchange in Iran. The results indicated that there is a negative correlation between debt finance and profitability of companies.

Muchugia (2013) examined the effects of debt financing on the firm performance of commercial banks in Kenya. The study employed a quantitative research design and multiple regression analysis. He used return on equity as the dependent variable while total debt, long term debt, firm size and short term liabilities as independent variables. The research study concluded that short-term financing has a positive relationship with the profitability of the firm. However, study also established that long-term liabilities have a negative on the firm's profitability.

Masiega *et al* (2013) did a study investigating the effects of capital structure on the financial performance of listed companies at NSE. 30 listed companies at NSE were sampled and data collected for period of five years starting from 2007 to 2011. The study concluded that there is a significant positive correlation between long-term debt and total company assets. The long-term debt has a positive effect on the financial performance although the nature of the effects was weak and insignificant.

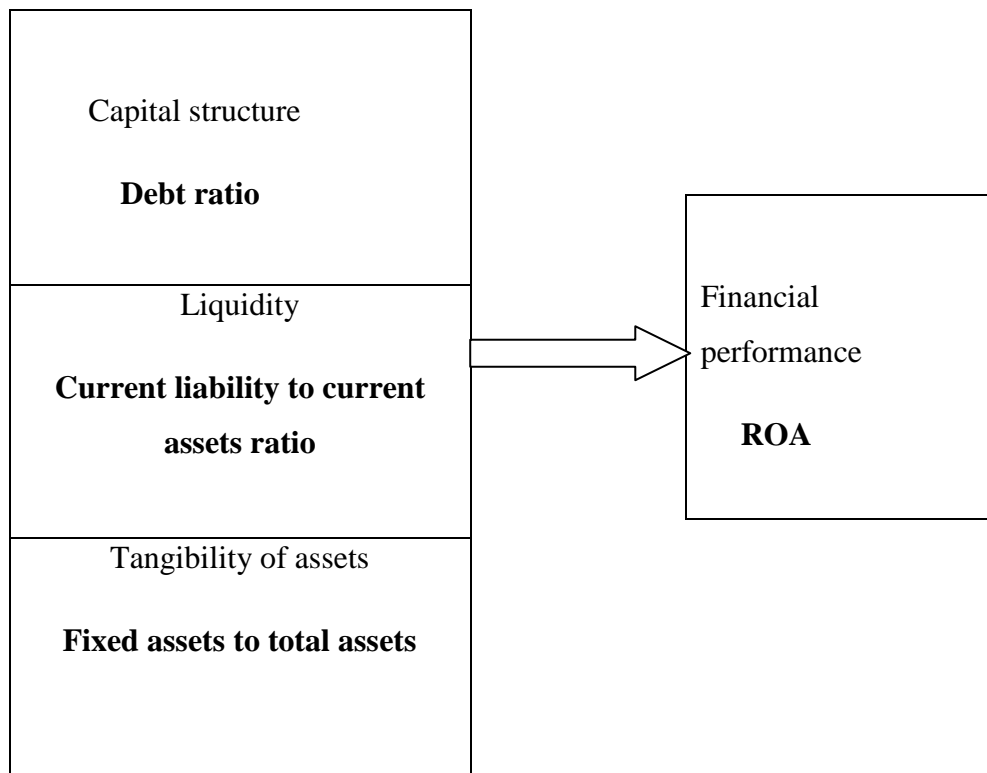
Kaumbuthu (2011) did a research study to determine the effects of capital structure on financial performance of allied and industrial sectors in the NSE for period starting from 2004-2008. Financial performance was measured using ROE while capital structure was measured by ratio of debt to equity. Regression analysis was used and concluded that a negative correlation exist between capital structure and the financial performance.

Chepkemoi (2013) did a research study on the effect of capital structure on financial performance of SMEs. The study was comprised of 295 SMEs located at Nakuru town and employed multiple regression approach and descriptive statistics for analysis. The results indicated that capital structure has a negative effect on profitability of the firm although it has a positive effect on growth of sales.

2.5 Conceptual Framework

The conceptual framework shows the relationship between the independent and the dependent variables. It shows how capital structure interacts with other variables to determine the financial performance of the firm.

Figure 2.1 Conceptual Framework



Independent variables

Dependent variable

2.6 Summary of Literature Review

The research study seeks to contribute to empirical literature by providing evidence regarding the effects of capital structure on the financial performance of companies listed at the NSE. The literature reviewed four theories which attempt to give explanation of the effects of capital structure on the performance, namely: Pecking Order Theory, Trade-off theory, Agency cost theory and Market Timing. The outcome of the theoretical review indicates contradicting and mixed results, which justifies the need for further studies. According to the Pecking order theory, companies choose to fund the new assets with retained earnings first and raise debt capital only when the former is not enough hence, a negative relationship exists as

retained earnings rely on the level of the profitability. MM's tax/ interest shield proposition predicts a positive relationship since at higher income level, corporation would want to use more debt in their capital structure in order to shield their profits from taxation. Jensen & Meckling (1986) also support that view and consider debt as disciplining tool that forces managers to invest in projects, which add value to shareholders hence enhancing firm's performance.

Several empirical studies conducted on the effects of capital structure on the financial performance of the firms also indicate mixed and contradicting results. For instance Adekunle (2009), Onaolapo & Kajola (2010), Pouraghajan & Malekian (2012), Kaumbuthu (2011) supports a negative correlation between the capital structure and financial performance while Chepkemoi (2013), Masiega *et al* (2013), Kuria, (2013) argues that capital structure has a positive effect on the financial performance of companies. The disagreement in both theoretical and different empirical research justifies the need for further studies, which motivated this study. This research study therefore, seeks to contribute to the existing literature by providing evidence on the effects of capital structure on the financial performance of listed firms at NSE.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section covers the research methodology that was used in this research study. Research methodology provides a brief description of all the steps and procedures that are used in completing a study. The chapter discusses the research design, study population, data collection, data analysis, analytical model and test of significance.

3.2 Research Design

According to Ghauri and Gronhaug (2005), research design involves establishing a plan or a specified framework for collecting data for the study and its subsequent analysis, which contains the research approach and the priorities of the great interest to the researcher. It is an important program and directs the researcher in the process of gathering, analyzing and deriving meaning from the data. This research study will employ descriptive research design in order to establish the effects of capital structure on financial performance. Descriptive research design is a powerful type of quantitative analysis (Kothari, 2004). The descriptive design is chosen because it enables the researcher describe research area, establish the relationship and explain the data collected in order to examine the similarities and differences with our frame of reference within a specific period of time. The aim of this research project is to determine the associative relationship between debt capital as the predictor variable and the financial performance as the dependent variable. Therefore, descriptive research approach is well-suited design for this study.

3.3 Study Population

The population under this study was comprised of forty seven non-financial listed firms quoted in the Nairobi security exchange. The financial firms were excluded

from the analysis since their operations are regulated by the financial regulators such as the central bank of Kenya and insurance regulatory authority concerning the amount of capital and liquidity they should maintain. Since the target population of this study is small, the study was a census where all the members of the population were considered. NSE register marked the population frame.

3.4 Data Collection

The study employed secondary data. The data for all the research variables as captured in the study model was collected from audited financial statements obtained from the company website and NSE Handbook covering the period from 2011 to 2015. Data will be extracted from the statement of comprehensive income and financial position. Data was collected on the key variables including short-term debt, fixed assets, total assets, net profit after tax, total debt and current assets.

3.5 Data Analysis

Data analysis refers to the application of statistical techniques in seeking answers to research questions through evaluation and subsequent interpretation of collected data (Shamoo & Resnik, 2003). The collected data was then sorted, edited and verified for accuracy in preparation for analysis. Statistical Package for Social Sciences software and Microsoft's Excel was used to analyze quantitative secondary data using descriptive statistics to show measures of tendencies such as means, tables, percentages and standard deviations. Correlation analysis and regression analysis was also be used to establish the relationship between debt capital and the performance. Also, ANOVA analysis and the t-test will also be performed to establish the relationship that exists between the variables of the study.

The study findings were presented in the form of tables and graphs to indicate the trend of the variables over the study period. ROA was used in measuring performance while the capital structure was measured using debt ratios. Debt ratio shows the size of the debt in accordance to total assets owned. Firm's liquidity was measured using ratio of current liabilities to current assets while the assets tangibility was measured using fixed assets owned to total assets ratio. To ascertain the effects of capital structure on the financial performance of non-financial firms quoted at NSE, regression analysis was conducted using the following analytical model.

$$Y = a + B_1X_1 + B_2X_2 + B_3X_3 + \varepsilon$$

Where:

Y = Financial performance measured by **ROA**

a defines the value of performance without the inclusion of the independent variables

X₁ to **X₃** represent the independent variables of the study.

X₁ = Debt ratio (Total debt to total capital ratio)

X₂ = Liquidity (Current assets to current liabilities)

X₃ = Tangibility of assets (Fixed assets to total assets)

ε = Stochastic error term

B₁ to **B₃** Shows the coefficients of the model and defines the amount by which dependent variable (Y) is changed for a unit change in the value of independent variable (X).

3.5.1 Test of Significances

To test the statistical significance of the regression analysis between capital structure and financial performance, all statistical calculations was done at 95% confidence interval with a p-value of 0.05 or less being considered sufficient for a statistically significant correlation. The goodness of fitness of the regression model was tested using Analysis of Variance (ANOVA). F critical value and a p-value of 0.05 or less will be used as indicators of the regression model's reliability.

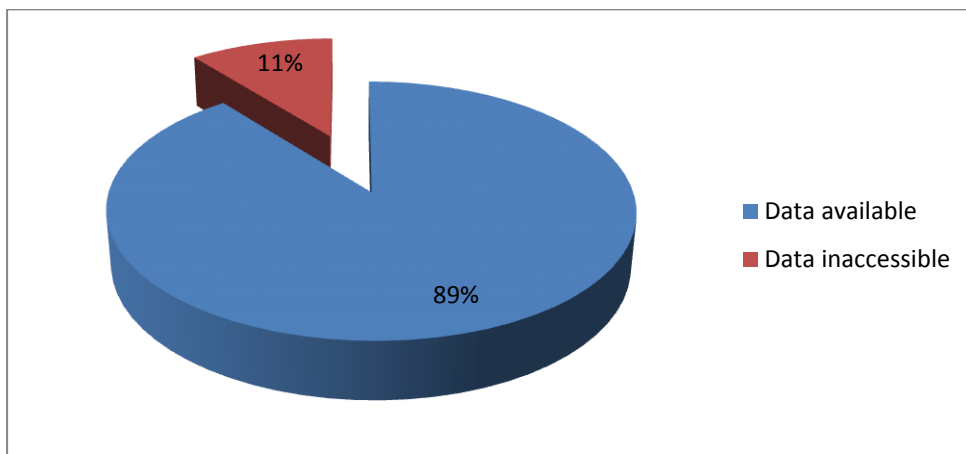
CHAPTER FOUR: DATA ANALYSIS AND RESEARCH

FINDINGS

4.1 Introduction

This chapter outlines the data analysis and the research findings. Data was obtained from the audited financial statements collected from NSE Handbooks and company website for a period of five years starting from 2011 to 2015. Out of the total population of 47 non-financial companies quoted at the Nairobi Securities Exchange, secondary data for the 42 firms was gotten representing 89% response rate which was viewed reasonable for the subsequent statistical analysis. The secondary data was subsequently analyzed by aid of regression analysis. The rate of response is shown in the Figure 4.1 below.

Figure 4.1 Response rate



4.2 Descriptive Statistics

This section outlines the descriptive statistics of the research project. The descriptive statistics covers the mean, minimum, maximum and the standard deviation. Descriptive statistics shown in table below covers all the non-financial firms from 2011 to 2015. From table 4.2.0, return on assets (ROA) ranges from -0.1572 to 0.2520

with a mean of 0.0637 and a standard deviation of 0.0969, Debt ratio ranges from 0.0123 to 6.7994 with a mean value of 1.9486 and a standard deviation of 1.5742. Liquidity ranges from 0.1498 to 1.2359 with an average value of 0.6150 and a standard deviation of 0.2252, Asset tangibility ranges from 0.0014 to 1.2260 with an average value of 0.4914 and a standard deviation of 0.2692.

Table 4.1 Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ROA (%)	42	-0.1572	0.2520	0.0637	0.0969
Debt ratio (%)	42	0.0123	6.7994	1.9486	1.5742
Liquidity (%)	42	0.1498	1.2359	0.6150	0.2252
Tangibility (%)	42	0.0014	1.2260	0.4914	0.2692

Source: Research Findings, (2016)

4.3 Inferential Statistics

Inferential statistics attempts to make conclusions, which goes beyond the current data and in this particular research study, three inferential statistics namely: correlation analysis, the regression analysis and the analysis of variance was employed in facilitating data analysis in order to meet study objectives.

4.3.1 Correlation Analysis

Correlation analysis refers to extent to which research variables are related. Correlation analysis was employed to establish the strength of the relationship which exists among dependent and independent variables whereby debt ratio, liquidity and the asset tangibility were utilized as independent variables while the asset returns was used as the dependent variable. Pearson correlation varies from -1.00 to +1.00 with positive values indicating positive relations while negative values suggest negative relations among study variables.

Table 4.2 Correlation matrix

Variable	ROA	Debt Ratio	Liquidity	Tangibility
ROA	1			
Debt Ratio	-0.436	1		
Liquidity	0.521	-0.460	1	
Tangibility	-0.051	-0.199	0.175	1

Source: Research Findings

All the research study variables are perfectly correlated with themselves as revealed by the correlation coefficient of positive one (1). Firm financial performance as measured by ROA has a negative correlation with leverage as measured by debt ratio ($R=-0.436$). Liquidity has a positive correlation with firm financial performance ($R=0.521$), Asset tangibility has a positive correlation with the firm financial performance ($R=-0.051$).

4.3.2 Regression Analysis

The regression analysis among dependent and the independent was carried out whereby debt ratio, liquidity and the asset tangibility were the independent variables

whereas return on asset was the dependent variable. Table 4.5 below indicates that the r-squared for the study model was 0.352, which shows that the independent study variables can be applied in explaining about 35% of the total variations in the financial performance of non-financial firms quoted at NSE.

Table 4.3 Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.593 ^a	.352	.301	.08105
a. Predictors: (Constant), Tangibility, Liquidity, Debt Ratio				
b. Dependent Variable: ROA				

Source: Research Findings, (2016)

The coefficient of determination was denoted by the adjusted r-squared which provides explanations to the total variations in the dependent variables due to the changes in the value of the dependent variables. The results in table 4.3 shown above shows that, the r-squared value was 0.352, which indicate that nearly 35% of the total variations in the financial performance among firms listed at NSE can be attributed to the changes in the value of the independent variables (Debt ratio, Liquidity and the asset tangibility) captured by the study model and at confidence level of 95%. The R coefficient of the correlation that shows the relationship that exist among the research variables was 0.593 which implies a strong positive correlation exist among the study variables as captured by the study variables.

4.3.3 Analysis of Variance

Table 4.4 Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.136	3	.045	6.876	.001 ^b
	Residual	.250	38	.007		
	Total	.385	41			
a. Dependent Variable: ROA						
b. Predictors: (Constant), Tangibility, Liquidity, Debt Ratio						

Source: Research Findings, (2016)

The research study determined that all the variables were significant at their significance level which was lower than 0.05. The predictor variables were regressed against the financial performance of firms listed at NSE. The findings indicate that the research model had an f-ratio of 6.876, which was statistically significant at 0.1% confidence level. This finding shows that the study model is significant and can be applied for the purposes of making predictions at 5% level of significance. Debt ratio and the asset tangibility had a negative correlation while the firm liquidity level had a positive correlation with the firm financial performance.

Table 4.5 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.109	.054		2.013	.005
Debt Ratio	-0.100	.053	-.277	-1.865	.007
Liquidity	0.026	.009	.426	2.881	.006
Tangibility	-0.078	.058	-.181	-1.350	.018

Source: Research Findings, (2016)

The findings in the table 4.5 above show the statistical significant test of the predictor variables in the study model. It shows the estimation of the independent variables, standard error and the t-ratios. According to the regression model shown above, the financial performance of firms quoted at NSE is 0.109 provided all the other independent variables are held constant at zero value. A unit increase in the debt ratio in the firm capital structure will result to a -0.1 decrease in the financial performance of the firms quoted at NSE, Similarly a unit change in the firms level of liquidity will lead to 0.026 increases in the financial performance. Finally, when the asset tangibility increases with one unit, the financial performance of the firms quoted at NSE decreases by -0.078. The research study model can be summed up as follows:

$$ROA = 0.109 - 0.1X_1 + 0.026X_2 - 0.078X_3$$

Where:

X_1 represent debt ratio, which was captured by the ratio of debt to total assets owned by the firm.

X_2 represent the firm's liquidity level, which was captured by the ratio of current assets to the current liabilities.

X_3 represent asset tangibility, which was captured by the ratio of fixed assets to the total asset owned by the firm.

E is a stochastic error term which denotes the unexplained variations (65%) indicating the existence of other variables which can make the model better.

4.4 Interpretations of Findings

The objective of this research was to determine the effects the effects of capital structure composition on the financial performance of firms listed at Nairobi security Exchange. The firm's financial performance was measured using return on asset ratio while the capital structure was measured by use of debt ratio. The firm's liquidity level and the asset tangibility were used as the control variables for liquidity and asset tangibility respectively. The chapter conducted inferential statistics to find out the effects of capital structure on the financial performance. The results from the statistical analysis indicated that, there is a strong ($R= 0.593$) association between the capital structure and the financial performance of firms listed at Nairobi Security Exchange. The study findings revealed that the independent variables debt ratio, liquidity and asset tangibility explains and can be applied in making predictions of the financial performance of non-financial firms quoted at NSE. These independent variables namely debt ratio, liquidity and the asset tangibility could explain about 35% of the total variations of the financial performance of non-financial firms quoted at NSE.

The debt ratio has a negative effect on the financial performance. Firm's liquidity was found to have a positive relationship with the financial performance while the asset tangibility has a negative effect on the firm value. The level of standard error was 0.08105, which represent the unexplained percentage of the study model indicating that there exist other factors, which can make the model better for prediction purposes. The significance value of .001 from the ANOVA results of the study shows that the model was significant at 5% significance level with an F-ratio of 6.876. The model ANOVA analysis thus indicates the capability of the independent variables in providing explanations of about 35% of total variations in the financial performance. The study further established that capital structure affects financial performances negatively and in a statistically significant way.

Similar findings was found by Adekunle (2009) who did a research study on the impact of financial structure on the firm's profitability in Nigeria for the period 2001-2007. He sampled 30 non-financial companies quoted in Nigerian stock exchange and collected secondary data from company's financial statements. The study used debt ratios as the independent variables and ROA and ROE as the dependent variable. The study employed ordinary least square estimation approach and established that debt ratio has a significant negative relationship with the performance of the firms.

Kaumbuthu (2011) did a research study to determine the effects of capital structure on financial performance of allied and industrial sectors in the NSE for period starting from 2004-2008. Financial performance was measured using ROE while capital structure was measured by ratio of debt to equity. Regression analysis was used and concluded that a negative correlation exist between capital structure and the financial performance.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter shows the summary of the results of the prior chapters, the conclusions drawn from the study findings and the encountered shortcomings during the course of the study. The chapter makes also policy recommendations, which can be executed to attain high financial performance and firm's worth. Finally, the chapter shows suggestions for future research studies, which can be helpful to future scholars.

5.2 Summary

The main purpose of the research study was to ascertain the effect of capital structure on the financial performance of firms quoted at Nairobi Security Exchange for the period 2011-2015. The study sampled the 42 non-financial firms which had a response rate of 89%. This response rate was considered good for facilitating statistical analysis and completion of this study. The independent variable for the study was capital structure and the dependent variable was firm's financial performance while the control variables included liquidity and asset tangibility.

Analysis was done with the help of Statistical Package for Social Science (SPSS) version 21 and Microsoft's Excel. Descriptive statistics such as means and standard deviations were used to analyze the effects of capital structure on the financial performance. The findings from the descriptive analysis indicated that, the mean debt ratio was 1.9486 and standard deviation of 1.5742, the average liquidity ratio was 0.2252 and standard deviation of 0.2252 while the average tangibility of the fixed asset was 0.4914 and had the standard deviation of 0.2692

The study findings indicated that the independent variables debt ratio, liquidity and asset tangibility could explain about 35% of the total variations in the financial performance of companies listed at NSE. The debt ratio was significant at 5% with a coefficient of -0.1 , which implies that the financial performance of non-financial firms quoted at NSE is negatively affected by increase in debt ratio.

The firm's liquidity level as measured by the current ratio was significant at 5% significance level with a coefficient of 0.026 , which implies that the financial performance of the non-financial firms listed at NSE is positively correlated with the firm's liquidity. Therefore, an increase in the level of liquidity increases the firm's financial performance and the vice versa. The asset tangibility as measured by the ratio of fixed asset to the total assets owned by the company was significant at 5% confidence level with a coefficient of -0.78 , which implies that financial performance is negatively correlated with the increase in the fixed asset ratio. The analysis of the variance (ANOVA) an F-ratio of 6.876 and a p-value of 0.001 . This indicates that the study model was significant and can be applied for the purpose of making predictions since the p-value was less than 0.05 . The results from the statistical analysis therefore showed that the independent variables namely debt ratio, liquidity level and the firm asset tangibility have a significant effects on the firms level of the profitability.

5.3 Conclusions

The study concludes that there is a strong relationship between capital structure channels and firm financial performance of non-financial firms listed at Nairobi Security Exchange and that 35% of the total changes in financial performance of the non-financial firms listed at NSE a can be attributed to changes in the debt level in the capital structure, firms liquidity and the asset tangibility. The study also concludes

that capital Structure, liquidity level and asset tangibility affects financial performance of the non-financial performance positively and in a statistically significant way. Form the ANOVA statistics, the study concluded that the regression model was derived is reliable and has goodness of fit. The research study concludes that the capital structure as measured by the debt ratio has a significant influence on the financial performance of non-financial firms listed at NSE. This is denoted by the negative correlation between the debt ratio and the financial performance. The research study also concludes that firm's liquidity level has a positive influence on the financial performance, which indicates that, the more liquid a firm in meeting its short term obligations the more profitable it becomes. Finally, the study concludes that asset tangibility is negatively correlated with the financial performance of firms listed at NSE. Kaumbuthu (2011) & Adekunle (2009) findings also support this conclusion and argue that capital structure has a negative correlation with the financial performance. However, the findings contradicted with the research findings of Masiega *et al* (2013) & Jensen & Meckling (1976).

5.4 Recommendations

The findings of this research study have important policy implications on the individual firm, the industry and the macro levels. Since the research study found a negative correlation between the financial leverage and the firms value, the research study recommend that financial managers should decrease the finance leverage they employ in their capital structure in order to increase firms value. The research study further recommend proper regulation of the banking industry by the government in order to lower the cost debt acquisition and improve firm performance since numerous companies depends on debt financing in meeting the financial needs. The high cost of debt financing as depicted by high borrowing interest rates is an

impediment to the estimated corporate growth rate and therefore, financial managers should comprehend the effects such capital structure changes on the financial performance of the firms. The low geared companies with low interest rates seem to perform better than their counterpart companies with high debt ratio in the same industry.

Further, due to the positive correlation between the financial performance and the firm's liquidity level, the research study recommend firms to maintain adequate level of liquidity in order to enhance the financial performance and create more wealth to shareholders and other firm's stakeholders.

5.5 Limitations of the Study

The research concentrated on the firms quoted at NSE and thus their findings cannot be used in generalizing for all companies situated in Kenya. The aim of this study was to examine the relationship between capital structure and the financial performance of non-financial firms listed at Nairobi security exchange. Thus, the findings of the research study are only limited to non-financial firms listed at Nairobi Security Exchange and not all listed firms at Nairobi Security Exchange. In addition the study was carried out in Kenya, thus the findings may not be applicable in other firms in other parts of the world.

Since the study aimed to ascertain the effect of the capital structure on the financial performance of non-financial firms quoted at NSE. The research findings cannot therefore be applied to financial firms though they can be utilized as a reference point for the firms in developing countries such as Kenya because they encounter similar problems due to similar market demand and economic conditions, which they are exposed.

This research study relied heavily on the information from the secondary sources to establish the effect of the capital structure on the financial performance of non-financial firms listed at Nairobi Security Exchange. Secondary data sources was used because of the availability of the required information. Therefore, the accuracy of the statistical results depends on the accuracy of the data that was obtained from the financial statements.

5.6 Suggestion for the Future Research

The research study suggest similar research studies to be conducted for an extended period of time incorporating more accounting and financial variables and also considering the macroeconomic conditions prevailing in the country contrary to the present study which considers only three variables. In addition, the research study suggests similar study to be conducted in different sectors but on the same area of the study and with extended years of the study. In addition, future research studies should be carried out to find out the effects of the capital structure decisions on the firm value across countries for example East Africa.

Similar research studies should also be done on sector basis to determine whether the results from the statistical analysis hold for different companies from the different sectors. These studies should also identify other factors that determine the financial performance and establish their effects on the financial performance of non-financial firms listed at Nairobi Security Exchange. The research studies should also try to use other measures of the financial performance such as return on equity as an alternative of return on assets.

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APPENDICES

APPENDIX I: LIST OF COMPANIES LISTED AT NSE

AGRICULTURAL

1. Eaagads Ltd
2. Kapchorua Tea Co. Ltd
3. Kakuzi Ltd
4. Limuru Tea Co. Ltd
5. Rea Vipingo Plantations Ltd
6. Sasini Ltd
7. Williamson Tea Kenya Ltd

COMMERCIAL AND SERVICES

9. Express Ltd
10. Kenya Airways Ltd
11. Nation Media Group
12. Standard Group Ltd
13. TPS Eastern Africa (Serena) Ltd
14. Scangroup Ltd
15. Uchumi Supermarket Ltd
16. Longhorn Kenya Ltd
17. Hutchings Biemer Ltd

AUTOMOBILES AND ACCESSORIES

18. Marshalls (E.A.) Ltd
19. Sameer Africa Ltd

20. Car and General (K) Ltd

CONSTRUCTION AND ALLIED

21. Crown Berger Ltd

22. E.A. Portland Cement Ltd

23. Athi River Mining

24. E.A.Cables Ltd

25. Bamburi Cement Ltd

ENERGY AND PETROLEUM

26. Kenya Power & Lighting Co Ltd

27. Total Kenya Ltd

28. KenGen Ltd

29. Umeme Ltd

30. Kenol Kobil Ltd

INSURANCE

31. Pan Africa Insurance Holdings Ltd

32. Jubilee Holdings Ltd

33. Liberty Kenya Holdings Ltd

34. Kenya Re-Insurance Corporation Ltd

35. CIC Insurance Group Ltd

36. British-American Investments Company (Kenya) Ltd

INVESTMENT

- 37. Trans-Century Ltd
- 38. Centum Investment Co Ltd
- 39. Olympia Capital Holdings ltd

INVESTMENT SERVICES

- 40. Nairobi Securities Exchange

MANUFACTURING AND ALLIED

- 41. B.O.C Kenya Ltd
- 42. British American Tobacco Kenya Ltd
- 43. Carbacid Investments Ltd
- 44. East African Breweries Ltd
- 45. Mumias Sugar Co. Ltd
- 46. Unga Group Ltd
- 47. Eveready East Africa Ltd
- 48. Kenya Orchards Ltd

TELECOMMUNICATION AND TECHNOLOGY

- 49. Safaricom Ltd

GROWTH ENTERPRISE MARKET SEGMENT

- 50. Home Afrika Ltd
- 51. Kurwitu Ventures Limited
- 52. Flame Tree Group Holdings Limited

BANKING

- 53. Barclays bank
- 54. CFC Stanbic Holdings Limited
- 55. Diamond Trust Bank Kenya Ltd
- 56. HF Group Ltd
- 57. KCB Group Ltd
- 58. National Bank of Kenya Ltd
- 59. NIC Bank Ltd
- 60. Standard Chartered Bank Ltd
- 61. Equity Group Ltd
- 62. The Cooperative Bank of Kenya Ltd
- 63. I & M Holdings Ltd

REAL ESTATE INVESTMENT TRUST

- 64. Stanlib Fahari I-REIT