

**THE EFFECT OF CAPITAL STRUCTURE ON THE FINANCIAL
PERFORMANCE OF COMPANIES LISTED AT THE NAIROBI
SECURITIES EXCHANGE**

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**A RESEARCH PROJECT SUBMITTED IN PARTIAL
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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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This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This project is dedicated to my mother, Kheira Mohamed for being my inspiration despite her not going to a formal school.

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LIST OF ABBREVIATIONS

| | |
|--------------|-----------------------------|
| CFO: | Chief Finance Officer |
| CMA: | Capital Markets Authority |
| GDP: | Gross Domestic Product |
| MFI : | Micro-finance Institution |
| MM : | Modigliani-Miller |
| NPV: | Net Present Value |
| NSE: | Nairobi Securities Exchange |
| ROA: | Return on Assets |
| ROE: | Return on Equity |
| ROS: | Return on Sales |
| UK: | United Kingdom |
| USA: | United States of America |

ABSTRACT

It is argued that capital structure influences the financial performance of a firm. What constitutes, an optimal structure of capital is an issue that has not yet been answered and so remains controversial in finance. This study aimed at ascertaining the influence of the structure of capital on financial performance of entities listed at the NSE. The population of the study was all firms trading at the NSE for the five-year period starting January 1, 2013 ending December 31, 2017 excluding banks and insurance companies. The independent variable of the study was capital structure described through the use of total debt to total assets ratio and long-term debt to total assets ratio. Size of the entity measured using natural logarithm of total assets was used as a control factor. Financial performance was the dependent variable measured through return on assets. Secondary data was collected annually for a 5-year period (January 2013 - December 2017). A descriptive cross-sectional research design was used. Multiple linear regression analysis was employed to determine the variables relationships. A Statistical software (SPSS) was used to analyze the data. The study findings produced R-square value of 0.336 meaning that about 33.6 percent of the variation in the performance of firms trading at the Nairobi Securities Exchange can be explained by the three selected predictor variables while 66.4 percent in the variation of financial performance of firms trading at the Nairobi stock exchange market was associated with other factors not covered in this research. The study also found that the independent variables had a strong correlation with financial performance of the firms. ANOVA results showed that the F statistic was significant at 5% level with a $p=0.000$. Therefore, the model was fit to explain the relationship between the selected variables. The study findings further revealed that firm size statistically significantly positively influenced financial performance while total debt to asset ratio statistically significantly negatively influenced financial performance. Long term debt ratio to total assets was shown to be statistically insignificant in determining financial performance of firms in the study. This study therefore recommends when firms are setting their capital structure they should strike a balance between debt and equity. High levels of debt was found to reduce financial performance of listed firms and so firm managers should maintain debt at levels that do not impact negatively on financial performance to ensure the goal of maximizing shareholders' wealth is attained.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Decisions on capital structure composition are important for all business entities (Abor, 2005). Such decisions are critical, given the need to maximize profit earning and satisfy the need of many organizational stakeholders. The capital structure elements of a company consist of different sources such as common stock/equity, preference share capital, borrowings/debt (either short term or long term). Consequently, a company can select from different sets of capital structure combinations. It can decide not issue debt security and rather maximize the use of retained earnings and shareholders' funds. The company can consider and issue a wide range of financial securities such as futures and forward contracts, options, warrants, and high yield corporate bonds. Moreover, a wide range of options are available to the company to assess different proportions of issuing financial securities to raise capital by selecting an assorted blend of issuance that maximize company's value while contributing positively to performance growth and an optimal capital structure (Abor, 2005).

Groth and Anderson (1997) noted that the proposition of capital structure was first brought forward and documented by Modigliani and Miller (MM) in their initial study of 1958 and subsequently continued to evolve between 60s and 70s as the modern corporate finance principles and financial strategy continued to be adopted by profit maximizing firms. Since this initial MM theory, discussions emerged to the extent a company's core business activities and performance outlook are influenced by capital structure decisions attracting huge interests from finance experts, academics and corporate managers. Since then, corporate finance scholars and researches have not been able to identify an optimal capital structure design that generates maximum

earnings to the full satisfaction of the stakeholders of the firm (Abor, 2015). The ideal capital structure of a firm has been discussed and explained by numerous theories, however there is no conclusive evidence that a company's capital structure can impact and determine the amount of earnings a firm can realize in a given financial year (Abor, 2005).

The pecking order theory argues that management issues equity shares when trading at premium as investors buy them at a stock price higher than the fair value. This is possible if there are no conflicts of interests between the company managers and shareholders, hence the activities are carried out to maximize shareholder's wealth. According to Abor (2005), companies benchmark and evaluate the opportunity cost of using internal resources such as retained earnings as opposed to expensive external borrowings. Therefore, as per the pecking order hypothesis, companies that achieve a strong positive outlook and realize profitability use lower debt to finance core activities as compared to loss making ones. This implies retained earnings are ideally exhausted before a debt financing decision is explored (Abor, 2005).

1.1.1 Capital Structure

According to Rehman (2013), capital structure is about how entities employ debt and equity as far as financing their assets is concerned. This works as a financial tactic that encompasses utilization of additional acquired credit to optimize the returns on investments (Al-Otaibi, 2013). Capital structure provides an explanation of the relation between owner's funds and borrowed funds that makes up a firm's financing mix. Capital structure can alternatively be said to be the act of utilizing of a third party's funds to finance a firm which may lead to an increase in operating profits and taxable profits (Barakat, 2014). Debt can take different forms including bond issuance or long

term notes payables while shareholders' equity might take the form of common stock which has no preference, preference shares and undistributed earnings (Harris & Raviv, 1991).

Debt finance has both advantages and disadvantages in the growth of companies and expansion of the economy. Debt finance gives rise 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 returns of debt in 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 total debt with total assets possessed by the company. A low ratio indicates that a company depends less on debt while a high ratio indicates that a firm relies more on debt finance. Another measure of the structure of capital is ratio of debts to aggregate capital. Nevertheless, the widely preferred method of measuring capital structure as used by various researchers to compute capital structure in studies using capital structure to predict different variables is the proportion of debt to equity (Abhor, 2005).

1.1.2 Financial Performance

Al-Matari et al. (2014) define financial performance as the ability of a firm to achieve the range of set financial goals such as profitability. Financial performance can be described as an index of the extent to which financial benchmarks of a firm have been achieved or surpassed. It shows the extent to which financial objectives are being accomplished. As outlined by Baba and Nasieku (2016), financial performance show

how a company uses assets to generate revenues and thus it gives direction to stakeholder in their decision making.

Financial performance can be measured using a number of ratios, for instance, ROA, ROE and net interest margin. ROA is a measure that indicates the capacity of the bank to utilize the assets at its disposal to generate profits (Milinović, 2014). ROA is calculated by dividing operating profit by total asset ratio which is used for calculating earnings from all company's financial resources. On the other hand, NIM measures the spread of the interest paid out to the bank's lenders and the interest income that the banks generates in relation to their asset value. The NIM concept can be expressed as the net interest income divided by total earning assets (Gul et al., 2011).

1.1.3 Capital Structure and Financial Performance

As noted by Dawar (2014), there is enormous empirical evidence examining the correlation between capital structure decisions and company profitability. However, the conclusions reached thereon are divergent and led to debate among corporate finance scholars. Therefore, it is not clear whether the use of debt, equity or mix of both in equal or varying proportion influence profit earning in a positive or negative way.

According to Eriotis, Vasiliou and Neokosmidi (2007), decisions made to choose source of financing from different available alternatives should be taken with due care since it directly affects the financial wellbeing of the company. An incorrect selection of one source of finance to design target capital structure can lead to liquidity problems and in due course cash flow constraints and reputational risks. According to Abor (2005), the weight of debt and equity in a capital structure is very important to all firms existing for profit maximization goal. This is necessary given the need to maximize

returns on various organizational constituencies, and also because of the consequences such consideration has on a company's financial performance.

Study conducted by Ebaid (2009) in establishing the correlation between capital structure setting and profitability discovered significant negative correlation existing in short term debt compared to ROA. It noted that an increase in short term debt usage as a method financing led to reduction of ROA which shows that using more debt financing causes a decline in financial performance of the firm.

Abor (2005) argued that financial performance has an inverse correlation with the level of debt and the value of the company. He noted that the correlation between return on investment and debt demonstrate a negative correlation for the use of long term debt, and a positive correlation was observed in the use of short term debt. He summed up by indicating that short term debt facility is cheap and affordable positively impacting profitability. However, he found long term debt is a generally costly financial instrument that negatively impacts financial performance. In aggregate debt finance was found to have a negative relationship with financial performance.

According to the studies conducted by Abor (2005), Ebaid (2009), Dawar (2014) across different industries and regions, capital structure decisions were found to have a direct impact on the profitability of firms. However, researchers have reached different conclusions on whether debt to equity proportion in relation to total capital employed has an adverse effect on profitability and company value or a positive impact as a result of additional monitoring controls such as debt covenants that come with financial leverage.

From the publication of the original capital structure proposition of Modigliani and Miller in 1958, the topic has generated debates and differences of opinion on whether

capital structure can in any way influence firm profitability to provide return to its shareholders.

1.1.4 Companies Listed at the Nairobi Securities Exchange

NSE was formed as a voluntary brokers' association in 1954, it is registered under the Societies Act. It was not until 1988 that NSE was privatized. In 2006, the NSE implemented Automated Trading System (ATS) to enable live trading on the basis of first come first served. This system was also linked to the Central Depository System (CDS) and the Central Bank of Kenya to facilitate trading in Government bonds. Since then, it has undergone various changes and innovations, including the abolishment of the aggregate foreign ownership cap of the NSE listed companies in 2015. The Capital Markets Authority (CMA) is the state regulatory body mandated with licensing and regulating the Nairobi Securities Exchange. Public listings and offers of securities issued and traded at the NSE are also approved by the CMA (NSE, 2017). There are presently 66 firms registered at the NSE.

Due to the nature of their business, most firms listed at the NSE have a higher need for capital. Listed firms that manage capital structure efficiently aim to ensure an optimum balance between profitability and risk. Recent activities by these firms indicate their awareness on the role of capital structure on firm performance. The additional issuance of new shares by Atlas Development and Support Services Limited which shall be cross-listed in both the NSE and the London Stock Exchange and the rights issue that was further approved for Longhorn Publishers Limited indicate the firms are sensitive on the importance of decreasing leverage and therefore risk (CMA, 2016). The success of listed firms heavily depends on the effective skills of financial managers in making optimal capital structure decisions.

1.2 Research Problem

The structure of capital has a great influence on firms' stock return so long as it is efficiently and optimally utilized. The question of what makes up optimal capital structure however remains unanswered and the most controversial issue in the finance circles (Kajola, 2010). There does not exist a consensus regarding the nature of influence of the structure of capital 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 so as to shield the profits they make from taxation.

Companies listed in the NSE have embarked on massive use of debt to finance their capital structure with expectation of increasing their financial performances. Debt finance offers an opportunity for the firm to increase its performance by facilitating acquisition of the productive assets (Anyanzwa, 2015). Financial analysts have argued in support of debt use and considers debt finance as good in enhancing firms' performance provided it is acquired at favorable rate and its proceeds utilized in a good way. However, in the recent past some firms with huge debts in their capital structure such as Kenya Airways and Uchumi Supermarkets have reported huge losses and found themselves in serious debt crises owing creditors more than their net worth (Juma, 2016). This calls for a need to establishing an optimal structure of capital since it is crucial for growth and overall return of the listed firms.

Empirical evidence is largely inconsistent and quite varied on the effect of capital structure on performance. Saeedi and Mahmoodi (2011) studied the effect of capital structure on performance of entities in the TSE and resolved that the structure of capital has no effects on the performance of firms. Sebnem and Vuran (2012) affirmed this when they found a positive correlation between stock returns and financial structure. Akbarian (2013) explored the effect of leverage on companies' performance at T S E and found the existence of a negative relationship between leverage and free cash flow per share but the study also found a significant positive relationship with return of equity. Another study by Barakat (2014) examined the effect of financial leverage and profitability in Saudi industrial firms and established an insignificant inverse relationship between financial leverage and share value.

Locally, Maina and Ishnail (2014) found no weighty association linking the choice of the structure of capital to performance of the study entities trading at the NSE. The conclusion is contrary to Njeri and Kagiri (2015) whose findings were that capital structure and financial performance of listed commercial banks are positively correlated. Mwangi et al., (2014) found a statistically significant negative association between financial leverage and performance. Koech (2013) and Ogutu et al., (2015) affirmed this when they concluded that capital structure is inversely related to performance. Masereti (2014) sought to investigate the presence of a causal relationship between capital structure and stock returns. The researcher concluded that the two variables are correlated. Ndung'u (2014) found that increase in operating leverage increases the firm's stock returns. The lack of consensus among the various scholars on how capital structure influences financial performance is the motivation to carry out this study. The study sought to answer the question; what is the effect of capital structure on financial performance of firms enlisted at the NSE?

1.3 Objectives of the Study

To determine the effect of capital structure on performance of firms trading at the NSE

1.4 Value of the Study

The research findings will provide a rich source of reference to scholars, students and researchers who might want to undertake studies in the same field. The study will also help both researchers and scholars in identifying research gap in this field which will prompt and guide them in executing further studies.

Value of this study is to the various managers who are tasked with the management of firms listed on the NSE; this study provides useful information and recommendations to assist them in making more informed management decisions leading to shareholders' wealth maximization. The study increases the pool of knowledge available to assist both NSE listed firms seeking to list in future to enhance their performance and ensure sustainability.

The study findings will also aid the various regulatory agencies when developing legislation and regulatory framework around companies' capital structure. The regulators will thus consider this study as they formulate policies that will create a favorable environment for investors.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The section reviews theories that form the foundation of this study. In addition, previous empirical studies that have been carried before on this research topic and related areas are also discussed. The other sections of this chapter include determinants of financial performance, conceptual framework showing the relationship between study variables and a literature review summary.

2.2 Theoretical framework

This section provides a review of the relevant theories that explain the connection between capital structure and financial performance. The theoretical reviews covered are; pecking order, trade-off and the agency theory.

2.2.1 Pecking Order Theory

According to this theory, coined by Myers and Majluf (1984), there is no predefined optimal capital structure but instead firms display different preference for utilizing internal funds or retained earnings over external capital. It is 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 (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 and Majluf (1984), investors place low value on the company stock because of the inability of managers to convey information on the company prospects including new investment opportunities identified. This in return 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 striking a balance between the equity costs and returns. As a result, a firm decides on how much debt capital and how much equity capital to include in their capital structure by getting a balance between the costs and returns 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 results from divergence of interest among the different firm stakeholders and because of information asymmetry (Jensen & Meckling, 1976).

Thus, including cost of agency in the theory of tradeoffs signifies that a corporation ascertains its optimal financial structure by balancing the benefit of debt against expenses of excessive debt and the resultant equity agency expenses against debt agency costs. The theory further asserts that, as firm increases debt in their capital structure, the marginal cost associated with debt increases while the marginal benefits associated with debt decreases until an optimal point is reached. Beyond that point, the marginal costs of debt exceed the marginal benefits resulting to reduced firm value. In this regard, the firm should set an optimal financial structure in order to enhance its stock returns (Jensen & Meckling, 1976).

According to Myers (1984), firms with many tangible assets are supposed to poses high debt ratios unlike those with bigger volumes of intangible assets that need to 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 Agency Theory

The theory of agency exists where a principal delegates authority to an agent because he is unable to run his business. (Jensen & Meckling, 1976). The issue of agency occurs immediately when the interests of the principal and the agent are not the same. It is difficult and expensive for a principal to always monitor the work of an agent to ensure that the agent always advances the best interests of the principal. The theory of agency therefore helps in addressing the principal and the agent interests so as to ensure mutual

relations (Itiri, 2014). This concept is based on the notion that the interests of shareholders and the executives are not affiliated perfectly so as help them work towards a common goal of achieving the set organizational and objectives. The theory plays a crucial part in funding decisions because of the problems arising between the debt holder and shareholders (Aliu, 2010).

The theory suggests that agents in this case the managers prefer to have high cash flows even no profitable investment opportunities to invest the funds exist so that the funds can be used to promote the interests of the managers rather than for improving the firms value (Calabrese, 2011). The Jensen and Meckling (1976) agency theory explains that decisions on structure of capital need to aim to reduce the agency costs through scaling down equity in the structure of the capital. This is done by increasing debt financing hence increasing the market value of the firm as well as reducing the conflicts that may exist between management and shareholders.

Agency theory suggests that debt is used as a tool to control the manager since with debt financing managers will be forced to focus on using the free cash flows to service the debt other than trying to invest the funds in some unprofitable projects (Calabrese, 2011). The theory notes that managers' financial goals and interests can be aligned to shareholders by debt financing since the managers will be obliged to spend free cash flows on interest payment of the debt obtained to finance the firm's investment projects; hence paddling shareholder and agent interest together. Thus, the theory of agency supports the use of debt to improve the firm's financial performance (Mwangi, Muturi & Ngumi, 2016).

2.3 Determinants of Financial Performance

Performance of businesses is usually influenced by either internal and or external factors. Internal factors are different for each firm and determine its financial performance. Internal factors include agency costs, size of firms, the extent of leveraging, liquidity, management efficiency, capital, market power among others. External factors include; the country's economic growth, exchange rate volatility, interest rates, inflation among others (Athanasoglou, Brissimis, & Delis, 2005):

2.3.1 Firm Liquidity

Liquidity refers to the extent by which a company meets its immediate obligations in full and in a timely way. Excessive liquidity leads to building up of idle resources that do not create any profits for the firm while low levels of liquidity on the other hand, lead to damage of a company's goodwill, reduce credit standings and it can also lead to compulsory liquidation of company's assets. It cannot be doubted that each firm desires to attain the highest profitability by maintaining appropriate level of liquidity. However, magnifying profits at the expense of liquidity could 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).

The capability of the firm to pay its maturing obligations on a timely way is of vital importance and is closely related to how the firm performs and exists. The inability of the firm to maintain sufficient liquidity level can make the company insolvent and jeopardize its operations (Gitman, 2003).

2.3.2 Firm Size

The size of a listed firm is determined by its stock market capitalization. Firm size can also be assessed in terms of a firm's total assets. Firms, whose market capitalization is

low, on average, realize greater returns than firms whose market capitalization is high (Banz, 1981). The assertion was supported by Idris and Bala (2015) who established that market capitalization has a notable negative impact on the returns of the stock market. The assertions are due to the fact that investors demand higher returns from smaller firms compared to larger firms due to the risky nature of smaller firms (Pervan & Visic, 2012).

2.3.3 Age of the Firm

According to Sorensen and Stuart (2000), company's age may have an effect on firms' performance. According to Loderer, Neusser, and Waelchli (2009), the relationship that exists between the age of a company and profitability is positive. However, it has also been observed that a firm's performance may at times decline as companies grow older due to the fact that old age may lead to knowledge, abilities and skills being obsolete thereby resulting in decay in organizations. Agarwal and Gort (2002) state that this may explain why some older companies are usually taken over.

2.3.4 Macro-Economic Factors

Several studies have been undertaken to ascertain the impact of macroeconomic factors on performance of companies. The factors include but are not limited to monetary aggregates, rate of interest, investment level in the economy, consumer price index, producer price index, GDP growth, inflation, financial depth and the degree of market efficiency (Agarwal & Gort, 2002).

Kwon and Song (2011) carried out a research on mergers in the Korean market. The study found out that the global financial challenges negatively impact on the total abnormal return of the buying company when upon the making of a merger announcement. The study also stated that it may be possible that investors are more

averse to large cash outflows during a period of crisis. Flannery and Protopapadakis (2002) pointed out that inflation and money supply are well documented as the two macro-economic factors that have a significant influence on shareholders returns.

2.4 Empirical Review

Many empirical studies abound both locally and globally to support how the structure of capital and performance relate, but these studies have produced mixed results.

2.4.1 Global Studies

Sheikh and Wang (2013) conducted a study to examine the extent to which capital structure decisions influence company profitability by looking at companies quoted on the KSE for the years 2004 to 2009. The study population was covering 574 companies. Based on a simple random sampling, 240 companies representing industry wide business categories were studied and analysed using regression model. The study noted that total debt is negatively correlated with profitability indicator measured on return on assets. However, they argued realized net profit was positively influenced by the length of operation (age) and scale dimension (size). Short term and long term debts were noted to have positive correlation with profitability. Based on this study in Pakistan, structure of capital has a direct influence on the company's profitability, and specifically utilization of debt impacted profitability in a negative way.

Yazdanfar (2013) carried out a study on small and medium enterprises (SMEs) in Sweden to investigate drivers of firm profitability on 87,000 firms for the period 2006 to 2007. A sample of 12,530 companies was selected and analysed using unrelated regression model. The study argues that firm's financial profit realization is positively correlated with its size determined using logarithm of sales, age and year-on-year performance growth and the strength of its local procurement. Financial leverage and

total short term (current) assets were found to have a negative correlation with company profit. Number of years the company has been in business (age) was seen to have positive correlation with profitability given ages comes with trust, reputation, building of wide network of supplies and customers, negotiation of better trade terms and growth of the business network.

Yazdanfar (2013) noted that the dimension in terms of acreage (size of the company) has positive correlation with profitability. Size is measured based on proxy financial tools such as the logarithm of total assets or employee headcount. From this study, size, number of years in business, sound capacity of the local procurement influence profitability to a positive direction, while debt and increase in current assets impact company profitability in a negative way.

Ebaid (2009) performed a study in Egypt to observe the magnitude of influence a capital structure design has on company profitability by looking at a population of 200 firms quoted on Egyptian Exchange (EGX) for the period 1997 to 2005. A sample of 64 firms was reviewed using regression analysis. It notes that debt level is negatively correlated with profitability. He found out different results in examining the effect of debt maturity (short term or long term) on firm's profitability. Whereas long term debt was found to correlate negatively with profitability, short term debt on the other hand was found to show positive correlation with company profitability. Total debt level, however, was shown to have an overall negative effect on company profitability.

Abor (2005) studied the effect of structure of capital on company's profit potential in Ghana by looking at empirical analysis of firms enlisted on The Ghana Stock Exchange (GSE) for the period 1998 to 2002. Given the small number of listed companies in 1998 to 2002, a population study of 47 firms was conducted using regression system. He

discovered a positive correlation between short term debt loan and company profit generating potential. He argued that short term debt facility is less expensive compared to other sources of long term finance.

This study by Abor (2005) in Ghana demonstrates that use of long term debt has significant negative correlation with profitability, explaining the result of this long term debt negative impact as costly facility that could constrain company cash flow and would indeed lead to financial distress in the longer time period; concluding the need to limit the amount of long term debt a company can borrow. However, he revealed that size of the firm and sales compounded annual growth rate have medium positive correlation with profitability. Based on the study, it is evident that choice of external source of finance has greater influence on the company profitability. Due care needs to be taken whenever such conditions are made in an organisation.

2.4.2 Local Studies

Siro (2013) did a study in Kenya to examine the correlation between structure of capital and performance of firms trading at the N S E. A population covering 61 companies as at 2002 was reviewed. A regression method was used to observe the correlation of the elements under examination. He noted a notable positive correlation between financial leverage and ROE, and positive correlation between liquidity and (ROI). Hence, debt was found to influence profitability in positive way.

Stephen (2012) did a research to establish how the structure of capital framework correlates with a company's profit potential in Kenya. The population of the study undertaken was determined to be 61 companies quoted on the Nairobi Securities Exchange for the years 2001 to 2010. A simple random sampling method was used in selecting 27 companies. Variables derived from the sample selection were subjected to

regression analysis. Study results stated that there are many factors as well as both internal and external components in capital structure that influence company profitability. The contribution debt finance to optimal capital structure to drive performance varies with the maturity. Stephen (2012) states that short term debt and company profitability correlated positively; while long term debt reveal negative correlates with profitability. The total debt negatively correlates with profitability indicating the extent to which long term debt portion partially offsets short term debt positive contribution to profitability. He further argued that the size of the company, tangibility, growth rate and degree of leverage positively influences company profitability.

A study was conducted by Kuria (2010) to unveil the relationship between the structure of capital and profitability of commercial banks for the years 2008 to 2012. It employed population study involving 44 commercial banks in Kenya. From this population, a sample size of 35 commercial banks was chosen based random sampling. The variables extracted from the annual reports were subjected to regression analysis. He found a positive correlation between profits and the structure of capital with more debt capital. He concluded that debt is positively correlated with profitability of the banks. Hence further argues that capital structure decisions are not key performance catalysts due to the fact that on further analysis of the elements under study, it was found banks' profitability is influenced to a relatively smaller extent by capital structure framework. Therefore, financial leverage was found to have insignificant correlation with banks' profit realization. Hence given this conclusion, solid evidence to the extent debt influences profit earning is far from over given the mix signals of debt in terms of supporting sound internal controls through covenants partially offset by debt constraints and distress.

Tale (2008) did study Kenya to uncover the connection between financial leverage and company profitability in Kenya. The study population was companies quoted on NSE excluding banking and insurance sectors totaling to 40 companies. The sample was selected randomly to come up with 30 companies in the study for the years 2008 to 2013. A regression tool was used to interpret the data and the variable components. The study states that an increase in debt level led to increased reported profit, arguing that financial leverage correlates positively to profitability and company value.

He explained that use of debt finance can enhance the shareholders' wealth given the monitoring element of debt. Debt covenants limit the conflict of interest between managers who are the agents and the shareholders (principals) by paddling their interests together in order to engage in a positive net present value high return project.

2.5 Conceptual Framework

A number of different financial analysis tools have been used to examine correlation between firm performance (profitability) and capital structure (sources of finance). The factors characterized here are financial performance and capital structure. Three independent variables that were identified from the relevant reviews are being hypothesized to influence firms' profitability. These are long term debt to total assets ratio, total debt to total assets ratio and firm's size measured by the logarithm of total assets of the firm. The dependent variable is company reported profit represented by the return on asset (ROA).

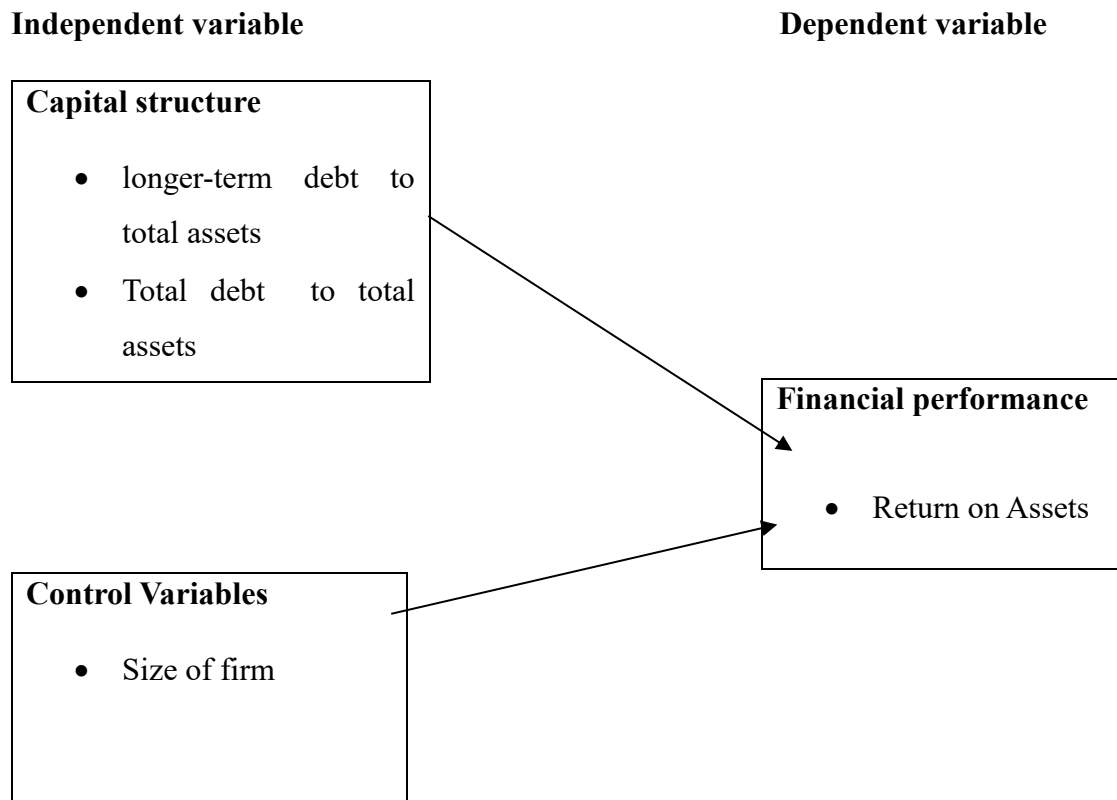


Figure 2.1: The Conceptual Model

Source: Author (2018)

2.6 Summary of the Literature Review

Various theoretical frameworks have attempted to elaborate on the capital structure concept. A discussion of three theories has been undertaken in this theoretical review. These are: Pecking order, the trade-off and the agency theory. Several empirical studies have been carried out both internationally as well as locally on the four objectives of this study. These studies' findings have also been discussed in this chapter.

The lack of consensus among the various scholars on the impact of the structure of capital on financial performance is reason enough to conduct further examination on the area of study. Saeedi and Mahmoodi (2011) studied the impact of the structure of capital on status of firms in the TSE and concluded that the structure of capital has no effects on the financial health of firms. Nirajini and Priya (2013) discovered a positive

correlation linking structure of capital and financial status. Maina and Ishnail (2014) found no weighty association between choice of the structure of capital and performance of Kenyan firms. The conclusion is contrary to Njeri and Kagiri (2015) who found that structure of capital and financial status of listed commercial banks are positively correlated. The study findings will contribute to this debate by investigating the effect of capital structure on financial of firms.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter has four sections namely; research design, data collection, diagnostic tests and data analysis.

3.2 Research Design

A descriptive cross-sectional research design was employed in the study to determine how the structure of capital and the financial performance of entities at the Nairobi stock exchange relate. Descriptive design was utilized as the researcher was interested in finding out the state of affairs as they exist (Khan, 2008). This research design was appropriate for the study as the researcher is familiar with the phenomenon under investigation but want to know more concerning the kind of associations between variables of the study. In addition, a descriptive research aims at providing a valid and accurate representation of the study variables and this helps in responding to the research question (Cooper & Schindler, 2008).

3.3 Population and Sampling

According to Burns and Burns (2008), population refers to the characters of interest upon which the study seeks to draw deductions. The population comprised of all the 66 firms listed as at 31st December 2017. The sample for the study was 48 firms after excluding commercial banks and insurance firms since their capital structure is a bit different from other firms.

3.4 Data Collection

Data was exclusively collected from secondary sources. It is always a regulatory requirement for firms listed at the NSE to report their values annually to the Capital

Markets Authority. The data was from the published annual financial reports of the listed firms for the period contained from January 2013 to December 2017 and was captured in a data collection sheet. The end result was information detailing structure of capital and financial status. The specific data collected was firms' revenue, long term liabilities, total liabilities and total assets.

3.5 Analysis of Data

The data collected from the different sources was arranged in a way to be helpful in addressing the research objective. Statistical software (SPSS version 22) was used for data analysis purposes. Both descriptive and inferential statistics were carried out. In descriptive statistics, the minimum, maximum, mean, standard deviation, sleekness and kurtosis were computed for all variables. In inferential statistics, both regression and correlation analysis were carried out. Correlation analysis involved determining the extent of relationship between the study variables while regression analysis will involve establishing the cause and effect between the result variable and every predictor variable: capital structure and size of the firm.

3.5.1 Diagnostic Tests

Linearity uses the mathematical equation $Y=c+bX$ where c is a constant to show the association between variable X and Y . The linearity test was obtained through the scatter plot testing or F-statistic in ANOVA. Stationary test is a process where the statistical properties such as mean, autocorrelation and variance structure do not change with time. Stationary was obtained from the run sequence plot. Normality is a test for the assumption that the residual of the response variable is normally distributed around the mean. This was determined by Shapiro-walk test or Kolmogorov-Smirnov test. Autocorrelation is the measurement of the similarity between a certain time series and

a lagged value of the same time series over successive time intervals. It was tested using Durbin-Watson statistic (Khan, 2008).

Multicollinearity is said to occur when there is a nearly exact or exact linear correlation among two or more of the independent variables. This was tested by the determinant of the correlation matrices, which varies from zero to one. Orthogonal independent variable is an indication that the determinant is one while it is zero if there is absolute linear dependence between them and as it approaches to zero then the Multicollinearity becomes more intense. Variance Inflation Factors (VIF) and tolerance levels were also carried out to show the degree of Multicollinearity (Burns & Burns, 2008).

3.5.2 Analytical Model

Using the collected data, the researcher conducted a regression analysis in determining the degree to which capital structure of firms and financial performance relate. The study applied the regression model below:

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

In which: Y = Financial performance as measured by net income ratio divided by total assets

β_0 = y intercept of the regression equation.

β_1 , β_2 and β_3 , = are the slope of the regression

X_1 = Capital structure as measured by total debt to total assets ratio

X_2 = Capital structure as measured by long term debt to total assets ratio

X_3 = Firm size as given by natural logarithm of total assets

ε = error term

3.5.3 Tests of Significance

The researcher carried out parametric tests for determining the statistical significance of both the model and individual parameters. The F-test was employed to determine the significance of the overall model and it was got from the ANOVA while a t-test was used to establish the statistical significance of individual variables.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND INTERPRETATION

4.1 Introduction

The chapter consists of data analysis, findings and interpretation. Findings are presented in tabular and diagrammatic form. Analysed data is to reflect the study objectives.

4.2 Diagnostic Tests

Diagnostic tests were carried out before the regression model was run. In this case, the tests conducted were Multicollinearity test, autocorrelation and Heteroscedasticity tests.

4.2.1 Multicollinearity Test

Multicollinearity can be defined as a statistical situation where two or more predictor variables in a multiple regression model are highly correlated. It is an undesirable situation where the correlations among the independent variables are strong. A set of variables is said to be perfectly multicollinear in case there is one or more exact linear relationship among some of the variables.

Table 4.1: Multicollinearity Test

| Variable | VIF | 1/VIF |
|-----------------------------|------------|--------------|
| Long term debt/total assets | 2.05 | 0.487792 |
| Total debt to total assets | 1.48 | 0.677366 |
| Firm size | 1.33 | 0.750329 |
| Mean VIF | 1.53 | |

Source: Research Data, 2018

The researcher carried out diagnostic tests on the collected data. A test of Multicollinearity was undertaken. Tolerance of the variable and the VIF value were used where values more than 0.2 for Tolerance and values below 10 for VIF suggest that there is no Multicollinearity. From the findings, the all the variables had a tolerance

values >0.2 and VIF values <10 as shown in table 4.1 suggesting that no Multicollinearity exists.

4.2.2 Autocorrelation Test

Correlation of error terms across time periods were checked by conducting a serial correlation test. The Wooldridge test for serial correlation was used to test for the existence of autocorrelation in the linear panel data which is a major challenge in panel analysis of data and it has to be accounted for so as to get the correct model specification. Below are the results.

Table 4.2: Breusch-pagan Serial Correlation Test

| Wooldridge test for autocorrelation in panel data |
|--|
| H0: no first-order autocorrelation |
| F(1, 193) = 2.840 |
| Prob > F = 0.1095 |
| Source: Research Data, 2018 |

The null hypothesis is that there is no first order serial /auto correlation. The p value of $0.1095 > 0.05$ shows that the study doesn't reject the null hypothesis. A conclusion is thus made that serial correlation is absent

4.2.3 Heteroscedasticity Test

The researcher checked for panel level heteroscedasticity by use of the Likelihood Ratio (LR) as indicated in the Table 4.3 below. This test used the null hypothesis that the error variance was homoscedastic. A chi-square value of 64.51 was produced by the likelihood-ratio test with a 0.0000 p-value. The chi-square esteem was statistically significant at 1 percent level and in this manner the invalid speculation of consistent fluctuation was rejected meaning the nearness of heteroscedasticity in the examination

information as suggested by Poi and Wiggins (2001). To deal with this issue the examination utilized the FGLS estimation method.

Table 3: Heteroskedasticity Test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of ROA

chi2(1) = 64.51
Prob > chi2 = 0.0000

Source: Research Data, 2018

4.3 Descriptive Analysis

Descriptive statistics gives a presentation of the mean, maximum and minimum values of variables applied together with their standard deviations. Table 4.4 below shows the statistics for the variables applied. An output of all the variables was obtained using SPSS software for the period of five years (2013 to 2017) on an annual basis. Financial performance had 0.0339 as its mean with a 0.1388 standard deviation. Long term debt to total assets had a mean of 0.1699 and a standard deviation of 0.1708. The total debt to total assets ratio gave to a mean of 0.5005 with a standard deviation of 0.2748. Firm size had a mean of 9.85 and a standard deviation of 0.848. The size of a firm was measured in natural logarithm form. The descriptive results also show that in terms of long term debt to total sums, the minimum value was 0.000 implying there was one or more firms that did not have long term debt in its capital structure. The minimum total debt to total assets was found to be 24.6%.

Table 4.4: Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|-----------------------------|-----|---------|---------|---------|-------------------|
| Financial Performance | 194 | -.570 | .390 | .03392 | .138785 |
| Long term debt/total assets | 194 | .000 | .819 | .16991 | .170848 |
| Total debt/total assets | 194 | .0246 | 1.7822 | .500451 | .2747911 |
| Firm size | 194 | 8 | 12 | 9.85 | .848 |
| Valid N (list wise) | 194 | | | | |

Source: Research Findings (2018)

4.4 Correlation Analysis

Correlation illustrates the association between variables (Levin & Rubin, 1998). Correlation indicated the relationship between the predictor variables and outcome variable. Table 4.4 shows the outcome of the correlation analysis.

The study found an existence of a negative and statistically significant correlation ($r = -.530$, $p = .000$) of the total debt to total assets ratio and performance. Further a negative and significant correlation between the ratio of long term debt to total assets and financial performance of listed firms as evidenced by ($r = -.181$, $p = .012$) existed. Firm size was determined to have a positive but insignificant impact on financial performance as evidenced by ($r = .107$, $p = .137$). The study further found that although the independent variables had an association with each other, the association was not strong to cause multicollinearity. This implies that there was no multicollinearity among the independent variables and therefore they can be used as predictors of performance of trading entities at the NSE in regression analysis.

Table 4.5: Correlation Analysis

| | | Financial Performance | Long term debt/total assets | Total debt/total assets | Firm size |
|-----------------------------|---------------------|-----------------------|-----------------------------|-------------------------|-----------|
| Financial Performance | Pearson Correlation | 1 | | | |
| | Sig. (2-tailed) | | | | |
| | N | 194 | | | |
| | | | | | |
| Long term debt/total assets | Pearson Correlation | -.181* | 1 | | |
| | Sig. (2-tailed) | .012 | | | |
| | N | 194 | 194 | | |
| | | | | | |
| Total debt/total assets | Pearson Correlation | -.530** | .507** | 1 | |
| | Sig. (2-tailed) | .000 | .000 | | |
| | N | 194 | 194 | 194 | |
| | | | | | |
| Firm size | Pearson Correlation | .107 | .321** | .222** | 1 |
| | Sig. (2-tailed) | .137 | .000 | .002 | |
| | N | 194 | 194 | 194 | 194 |
| | | | | | |

*. Correlation is significant at the 0.05 level (2-tailed).

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

Source: Research Findings (2018)

4.6 Regression Analysis

Outcome revealed in table 4.6 showed that total debt to total assets, long term debt to total asset and firm size were found to be satisfactory variables in explaining financial performance of quoted entities at the NSE. This means that total debt to total assets, long term debt to total asset and firm size explain 93.3% of the variations in the dependent variable which is financial performance. The adjusted R was 0.336.

Table 4.6: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .580 ^a | .336 | .325 | .113991 | 1.966 |

a. Predictors: (Constant), Ratio of long term debt to total assets, Total debt/total assets, Firm size
b. Dependent Variable: Financial Performance

Source: Research Findings (2018)

Table 4.7 provides the outcomes of the ANOVA which reveals that the overall model was statistically significant as supported by a p value of 0.000 which is lesser than the critical p value of 0.05. This was supported by an F statistic of 32.029 which implies that total debt to total assets, long term debt to total asset and firm size are good predictors of financial performance.

Table 4.7: Analysis of Variance

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 1.249 | 3 | .416 | 32.029 | .000 ^b |
| | Residual | 2.469 | 190 | .013 | | |
| | Total | 3.717 | 193 | | | |

a. Dependent Variable: Financial Performance
b. Predictors: (Constant), Ratio of long term debt to total assets, Total debt/total assets, Firm size

Source: Research findings (2018)

The research used t-test to determine the significance of each individual variable used in this study as a predictor of performance of companies trading at the stock market.

The p-value was used as an indicator of the significance of the relationship between the response and the predictor variables. At 95% confidence level, a p-value of less than 0.05 was interpreted as an index of statistical significance of the concepts. As such, a p-value above 0.05 indicates a statistically insignificant relationship between the dependent and the predictor variables. The results are as shown in table 4.8.

Table 4.8: Model Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients Beta | t | Sig. | |
|-------|-----------------------------|------------|-----------------------------------|-------|--------|------|
| | B | Std. Error | | | | |
| | (Constant) | -.182 | .099 | | | |
| 1 | Long term debt/total assets | .045 | .058 | .055 | .781 | .436 |
| | Total debt/total assets | -.307 | .035 | -.608 | -8.835 | .000 |
| | Firm size | .037 | .010 | .224 | 3.585 | .000 |

a. Dependent Variable: Financial Performance

Source: Research Findings (2018)

The results revealed that long term debt to total assets have a positive but insignificant influence on financial performance ($\beta=0.045$, $p=0.436$). The results also revealed that total debt to total assets had a negative and significant influence on financial performance ($\beta=-0.307$, $p=0.000$). The results also revealed that firm size had a positive and significant influence on financial performance ($\beta=0.037$, $p=0.000$).

4.7 Interpretation of Research Findings

The researcher was seeking to ascertain the influence of the structure of capital on financial performance of firms. The ratio of total debts to total assets and of long term debt to total assets were used as proxy for capital structure while firm size was the control variable. Performance of the firms measured by return on assets was the dependent variable. The influence of each predictor variable on the dependent variable was analyzed in terms of strength and direction.

The Pearson correlation coefficients between the variables revealed a strong negative correlation between total debt to total assets ratio and financial performance of firms. The relationship between sizes of firm and financial performance of firms was found to be weak, positive and not significant.

The model summary revealed that the independent variables: total debts to total assets ratio, long term debt to total assets ratio and size of firms explains 33.6% of changes on the measurement variable as shown by the value of R^2 implying that other factors not captured in the model accounted for 66.4% of changes financial performance of firms. The F statistic computed was higher than the critical value from the table implying the model was statistically significant and a fit prediction model for explaining how the selected predictor variables affect performance of entities trading at the NSE.

These study findings are in line with Stephen (2012) findings who states that there is a significant positive correlation between short term debt and company profitability; while long term debt had a negative correlation to profitability. The total debt has a negative correlation with profitability indicating the extent to which long term debt partially offsets short term debt positive contribution to profitability. He further argued that the size of the company, tangibility, growth rate and degree of leverage positively influences company profitability.

This study differs with Siro's (2013) findings who conducted a study to discover the correlation between capital structure and performance of firms enlisted at NSE. A population study covering 61 companies as at 2002 was reviewed. A regression method was used to observe the correlation of the elements under examination. He noted a strong positive correlation between financial leverage and ROE, as well as positive correlation between liquidity and return on investment (ROI). Hence, debt was found

to influence profitability in positive way.

This study also differs with Tale's (2008) findings who studied in Kenya to investigate the relationship between financial leverage and company profitability in Kenya. The study found that financial leverage correlates positively to profitability and company value.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The section presents a summary of research findings, the conclusions made from the results, and the recommendations for policy and practice. It also discusses a few limitations encountered and suggestions for future research.

5.2 Summary of Findings

The aim of the research was to determine how the structure of capital influenced the performance of firms trading at the NSE. From the results of correlation analysis, a weak negative correlation exists between long term debt to total assets ratio and financial performance of the firms trading at the NSE. The relationship between size of firms and financial performance of firms was found to be weak, positive and not significant. Existence of a strong negative relationship between ratio of total debts to total assets and financial performance of firms was evident.

From the regression analysis results, the findings revealed that 33.6% of changes in financial performance of entities quoted at the NSE are explained by the three selected predictor variables. This means that there are other factors not included in the model that account for 66.4% of changes in performance of entities trading at the NSE. The overall model was found to be significant as the P value was less than 0.05. This means that the selected independent variables significantly influence financial performance of enlisted entities at the NSE.

The regression model further revealed that individually total debt to total assets have a notable undesirable influence on financial performance of quoted entities and this implies that an increase in total debt will have a significant negative effect on financial

performance. It was also revealed that firm size has a significant positive effect on financial performance of listed firms and this implies that an increase in assets held by a firm will lead to an increase in financial performance. Long term debt to total assets was found to have an insignificant influence on financial performance.

5.3 Conclusion

The finding of the study leads to the conclusion that financial performance of firms trading at the securities market is significantly affected by the ratio of total debts to total assets, long term debt to total assets ratio, and the size of firms. Total debts to total assets ratio had a negative but statistically significant relationship with financial performance of firms meaning that an increase in leverage causes a decline in financial performance. The study found that size of firms had a positively and significantly affected the financial performance of firms.

The study therefore concludes that size of firms causes an improvement in the financial performance of firms trading at the NSE. The long term debt to total assets ratio was found to be a statistically insignificant determinant and therefore this research gives a conclusion that ratio of long term debt to total assets does not notably dictate financial performance of the firms trading at NSE.

This study concludes that predictor variables for this study the ratio of total debts to total assets, long term debt to total assets ratio and firms' sizes affect to a large extent performance of the firms. It can be concluded that these variables significantly impact financial performance as per the p value in ANOVA summary. By the three independent variables explaining 33.6% of changes in financial performance of firms implies that the variables excluded in the model explain 66.4% of changes in stock returns.

The study results are in line with Stephen (2012) who states that there is a significant positive correlation between short term debt and company profitability; while longer term debts correlate negatively with profitability. The total debt correlates negatively with profitability indicating the extent to which long term debt portion partially offsets short term debt positive contribution to profitability. He further argued that the size of the company, tangibility, growth rate and degree of leverage positively influences company profitability.

5.4 Recommendations

Total debts to total assets ratio had a notable negative influence on performance of entities financially. The researcher recommends that when firms are setting their total debts to total assets ratio they should strike a balance between the tax savings benefit of debt and bankruptcy costs associated with borrowing. High level of debt has been found to reduce financial status of firms from the findings of this study and so firm managers should maintain debt levels that do not impact negatively on financial performance to ensure the goal of maximizing shareholders' wealth is attained.

The study found evidence of a positive influence of firm size on financial performance of firms. It recommends adequate measures should be put in place by managers of these firms to improve and grow their financial performance through asset growth. Enlisted firms and all firms in general should work on increasing their assets that will cause a rise in financial performance since this leads to improved shareholder wealth which is the major goal of a firm.

5.5 Limitations of the Study

There exist inherent limitations as far as the accuracy of the data is concerned. The data was secondary in nature and the researcher is not aware of its authenticity and reliability based on its collection and storage and alterations that might have been done on it.

The analytical methodology was also very scientific. The study did not extract qualitative information that could explain the soft and hidden issues that affect the connection between capital structure and financial performance of quoted entities. An open ended questionnaire, an interview or a focus group discussion would have yielded qualitative information and hence collaborate this results.

The study concentrated on 5 years (2013 to 2017). The use of a lengthy period, may give different trends and outcome.

5.6 Suggestions for Further Research

A suggestion is given that more research ought to include a qualitative analysis of the relationship between capital structure and financial performance of enlisted entities. That study would deal with interviewing of vital respondents in the listed companies and this would reveal concealed insights into the fine detailed relationship between momentum strategies and financial performance of NSE firms' capital structure and financial performance of listed entities.

More scope of study ought to be concentrated on an extended period, may be 20 to 30 years. This would make it clear on whether the observed relationship changes over the years.

Since the R squared was not 100% it seems there are other variables that were not addressed by the study. Other studies ought to thus focus on other influencers of financial performance of quoted entities at the NSE.

REFERENCES

- Abor, J. (2005). The effect of capital structure on profitability: An empirical analysis of listed firms in Ghana. *The Journal of Risk Finance*, 438-445.
- Akbarian, S. (2013). The investigation Effect of Financial Leverage and Environment Risk on Performance firms of Listed Companies in Tehran Stock Exchange. *Journal of Applied Science and Agriculture*, 8(3), 249-255
- Aliu, N. O. (2010). *Effect of Capital Structure on the Performance of Quoted Manufacturing Firms in Nigeria*. Unpublished Thesis. Ahmadu Bello University
- Aliyu, S. U. R. (2011). *Does inflation has an impact on Stock Returns and Volatility. Evidence from Nigeria and Ghana*. Bayero University, Kano-Nigeria
- Al-shubiri F. (2010). Analysis the Determinants of Market Stock Price Movements: An Empirical Study of Jordanian Commercial Banks, *International Journal of Business and Management*, 12(7), 214-221
- Amato, L. & Burson, T. (2007). The Effects of Ratio of long term debt to total assets on Profit Rates in the Financial Service, *Journal of Economic and Economic Research*, 8(1).61- 81
- Baker, M. & Wurgler, J. (2002). Market timing and capital structure. *Journal of Finance*, 57(2).
- Banafa, A. S, Muturi, W & Ngugi, K (2015). The Impact of Leverage on Financial Performance of Listed Non-Financial Firm in Kenya. *International Journal of Finance and Accounting*, 4 (7), 1-20

- Barakat, A. (2014). The Impact of Financial Structure, Financial Leverage and Profitability on Industrial Companies Shares Value (Applied Study on a Sample of Saudi Industrial Companies). *Research Journal of Finance and Accounting*, 5(1), 55 – 66
- Burns, N. & Burns, S. (2008). *The Practice of Nursing Research: Conduct, Critique and Utilization: 5th Edition*: St Louis, Elsevier Saunders
- Calabrese, T. D. (2011). Testing Competing Capital Structure Theories of Nonprofit Organizations. *Public Budgeting & Finance*, 119-143
- Cooper, R., & Schindler, S. (2008). *Business research methods*. New York: Mc Grawhill
- Daferighe, E. & Sunday, C. S. (2012). The Impact of Inflation on Stock Market Performance in Nigeria. *American Journal of Social and Management Sciences*, 3 (2), 76-82
- Dehuan, J., & Jin, Z. (2008). Firm performance and stock returns: an empirical study of the top performing stock listed on shanghai stock exchange. *Academy of Accounting and Financial Studies Journal*, 24(2), 12-19
- Enekwe, C. I., Agu, C. I. & Eziedo, K. N. (2014). The Effect of Financial Leverage on Financial Performance: Evidence of Quoted Pharmaceutical Companies in Nigeria. *IOSR Journal of Economics and Finance*, 5(3), 17-25
- Erdugan, R. (2012). *The Effect of Economic Factors on the Performance of the Australian Stock Market*. Unpublished Dissertation. Victoria University, Melbourne

- Fama, E. F. (1981). Stock returns, real activity, inflation, and money. *The American Economic Review*, 71(4), 545-565.
- Fama, E. F. and French, K. R. (1998). Value versus Growth, The international Evidence, *Journal of Finance*, 53 (6) 1975
- Fisher, I. (1930). *The theory of interest*. New York, 43.
- Fisher, I. (2009). *The Theory of Interest*, Macmillan, New York, 323-352
- Gitman, L. (2003). *Basic Managerial Finance*. 2nd edition. New York: Harper & Row
- Harris, M. and Raviv, A. (1991). The theory of capital structure, *Journal of finance*, 46,297-355
- Idris, I., & Bala, H. (2015). Firms' Specific Characteristics and Stock Market Returns (Evidence from Listed Food and beverages Firms in Nigeria). *Research Journal of Finance and Accounting*, 6 (16), 188 -200.
- Itiri, I. O. (2014). *Impact of Financial Structure on the Performance of Quoted Firms in Nigeria*. University of Nigeria
- Jensen M, and Meckling, W. (1976), The Theory of the firm: managerial behavior, agency costs and ownership structure, *Journal of financial Economics* 3, 305-360
- Khan, J. A. (2008). *Research Methodology*. New Delhi. APH Publishing Corporation
- Koech, S. K. (2013). *The effect of Capital Structure on Profitability of Financial Firms Listed at the Nairobi Stock Exchange* (Unpublished masters' research project). University of Nairobi, Nairobi.

- Kraus, A. & Litzenberger, R. H. (1973). A State-Preference Model of Optimal Financial Leverage. *Journal of Finance*, 28(4), 911–922.
- Kuwornu, J. K. M. (2012). Effect of Macroeconomic Variables on the Ghanaian Stock Market Returns: A Co-integration Analysis. *Agris on-line Papers in Economics and Informatics*, 4 (2), 1-12
- Lee, J. (2012). Does Size Matter in Firm Performance? Evidence from US Public Firms. *Journal of the Economics of Business*, 16, 2, 189 –203.
- Maina, L., & Ishmail, M. (2014). Capital structure and financial performance in Kenya: Evidence from firms listed at the Nairobi Securities Exchange. *International Journal of Social Sciences and Entrepreneurship*, 1 (11), 209-223.
- Masereti, E. N. (2014). *Capital Structure and Stock Returns: Evidence from the Nairobi Securities Exchange* (Unpublished bachelor's research project). Strathmore University, Nairobi.
- Mishkin, F.S. & Eakins S. (2009). *Financial Markets and Institutions* (6thed.). Pearson Prentice Hall
- Modigliani, F. and Miller, M. H. (1958). The Cost of Capital, Corporate Finance and the Theory of Investment. *American Economic Review*, 48, 261-97.
- Mohohlo, N. R. (2013). *Capital structure and its impact on firm value of JSE Securities Exchange listed companies* (Unpublished masters research project). University of the Witwatersrand, Johannesburg.

- Mugambi, M. & Okech, T. C. (2016). Effect of Macroeconomic Variables on Stock Returns of Listed Commercial Banks in Kenya. *International Journal of Economics, Commerce and Management*, 4 (6), 390-418
- Muriuki A.M (2013). *The role of central bank rate on commercial banks profitability in Kenya*. Unpublished MBA Project, University of Nairobi.
- Mwangi, L. W. Muathe, S. K. and Kosimbei, G. (2014). Relationship between Capital Structure and Performance of Non-Financial Companies Listed in the Nairobi Securities Exchange, Kenya. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, 1(2), 72-90.
- Mwaniki, C. (2016, February Fourth). Industrial stocks register slower fall as NSE opens year on a downward trend. p. Business Daily
- Myers, S. (1977). Determinants of Corporate Borrowing, *Journal of Financial Economics*, 5, 146-175
- Myers, S. C. and N. S. Majluf. (1984). Corporate Financing and Investment Decision when Firms have Information that Investors do not have. *Journal of Finance and Accounting*, 9(7), 36-69.
- Ndung'u, N. (2001). *Liberalization of the foreign exchange market in Kenya and short term capital flows problem*, AERC Research Paper No. 109, Nairobi: African Economic Research Consortium.
- Ndung'u, C. N. (2014). *The Relationship between Capital Structure and Stock Returns of Firms Quoted in the Nairobi Securities Exchange* (Unpublished master's research project). University of Nairobi, Nairobi.

- Njeri, M. K., & Kagiri, A. W. (2015). Effect of Capital Structure on Financial Performance of Banking Institutions Listed in Nairobi Securities Exchange. *International Journal of Science and Research*, 4(7), 924 – 930.
- NSE (2017). The organization website-www.nse.co.ke
- Nyamita, M. O. (2014). *Factors Influencing Debt Financing and Its Effects on Financial Performance of State Corporations in Kenya*. Doctorate Thesis. Durban University of Technology
- Ogutu, A. W., Riro, K., & Ofunya, A. (2015). Effect of Capital Attributes on the Performance of Commercial and Services Companies Listed in Nairobi Stock Exchange. *International Journal of Social Sciences Management and Entrepreneurship*, 2 (1), 313 – 326.
- Onaolapo A. A., and Kajola S.O. (2010). Capital structure and firm performance. Evidence from Nigeria. *European Journal of Economics, Finance and Administrative Science*, 25 70-82.
- Saeedi, A. & Mahmoodi, I. (2011). Capital Structure and Firm Performance: Evidence from Iranian Companies, *International Research Journal of Finance and Economics*, 70(7), 20-29
- Sebnem, E. R., & Vuran, B. (2012). Factors Affecting Stock Returns of Firms Quoted in ISE Market: A Dynamic Panel Data Approach. *International Journal of Business and Social Research*, 2(1), 109 – 122.
- Sireesha, P. B. (2013). Effect of Select Macro Economic Variables on Stock Returns in India. *International Journal of Marketing, Financial Services & Management Research*, 2 (6), 197-207

- Širucek, M. (2013). *The Impact of the Money Supply on Stock Prices and Stock Bubbles*. Mendel University
- Slovan, A.N & Kevin, J. (2007). *Economics for Business*. Prentice Hall, Financial Times.
- Tahmoorespour, R., Ali-Abbar, M., & Randjbaran, E. (2015). The Impact of Capital Structure on Stock Returns: International Evidence. *Hyperion Economic Journal*, 1(3), 56 – 78.
- Taofik, M. I. & Omosola, M. A. (2013). The Relationship between Stock Return and Inflation in Nigeria. *European Scientific Journal*, 9 (4), 146 – 157
- Uddin, G. (2009). Relationship between Interest Rate and Stock Price: Empirical Evidence from Developed and Developing Countries (2009). *International Journal of Business and Management* 4(3), 43-51
- Vieira, R. S. (2010). The Relationship between Firm size and the Profitability: An Exploratory Study of Airline Companies between 2005 and 2008
- Wakiaga, P. (2016, June Monday). Manufacturing's big winners in Treasury's Sh2.3trn budget Nairobi. *European Scientific Journal*, 6 (2), 58 – 69
- Wang F. (2012). *Determinants of Chinese Stock Market Returns*. Unpublished MSc Thesis. Universiti Utara Malaysia
- Welch, I. (2004). Capital Structure and Stock Returns. *Journal of Political Economy*, 112 (1), 106 – 131

APPENDICES

Appendix I: Firms Listed at the NSE

AGRICULTURAL

Eaagads Ltd

Kapchorua Tea Co. Ltd

Kakuzi

Rea Vipingo Plantations Ltd

Limuru Tea Co. Ltd

Williamson Tea Kenya Ltd

Sasini Ltd

AUTOMOBILES AND ACCESSORIES

Car and General (K) Ltd

BANKING

Barclays Bank Ltd

I&M Holdings Ltd

Stanbic Holdings Plc

Diamond Trust Bank Ltd

KCB Group Ltd

HF Group Ltd

National Bank of Kenya Ltd

Standard Chartered Bank Ltd

NIC Group PLC

The Co-operative Bank of Kenya Ltd

Equity Group Holdings

COMMERCIAL AND SERVICES

Express Ltd

Kenya Airways Ltd

Nation Media Group

Sameer Africa PLC

Standard Group Ltd

Scangroup Ltd

Uchumi Supermarket Ltd

TPS Eastern Africa (Serena) Ltd

Longhorn Publishers Ltd

Deacons (East Africa) Plc

Atlas Development and Support Services

Nairobi Business Ventures Ltd

CONSTRUCTION AND ALLIED

Athi River Mining

Bamburi Cement Ltd

Crown Paints Kenya PLC

E.A.Cables Ltd

E. A. Portland Cement Ltd

ENERGY AND PETROLEUM

KenolKobil Ltd

Total Kenya Ltd

KenGen Ltd

Kenya Power & Lighting Co Ltd

Umeme Ltd

INSURANCE

Jubilee Holdings Ltd

Sanlam Kenya PLC

Kenya Re-Insurance Corporation Ltd

Liberty Kenya Holdings Ltd

Britam Holdings Ltd

CIC Insurance Group Ltd

INVESTMENT

Olympia Capital Holdings Ltd

Centum Investment Co Ltd

Trans-Century Ltd

Home Afrika Ltd

Kurwitu Ventures

INVESTMENT SERVICES

Nairobi Securities Exchange Ltd

MANUFACTURING AND ALLIED

B.O.C Kenya Ltd

British American Tobacco Kenya Ltd

Carbacid Investments Ltd

East African Breweries Ltd

Mumias Sugar Co. Ltd

Unga Group Ltd

Eveready East Africa Ltd

Kenya Orchards Ltd

Flame Tree Group Holdings Ltd

TELECOMMUNICATION AND TECHNOLOGY

Safaricom PLC

REAL ESTATE INVESTMENT TRUST

Stanlib Fahari I-REIT

NSE (2018)

Appendix II: Research Data

| COMPANY | Year | Financial Performance | Long term debt/ total assets | Total debt /total assets | Firm size |
|--------------------|------|-----------------------|------------------------------|--------------------------|-------------|
| Athi river mining | 2017 | -0.160 | 0.110 | 0.51 | 10.63041839 |
| | 2016 | -0.060 | 0.178 | 0.46 | 10.70807062 |
| | 2015 | 0.150 | 0.286 | 0.68 | 10.71547405 |
| | 2014 | 0.040 | 0.271 | 0.74 | 10.5671744 |
| | 2013 | 0.050 | 0.479 | 0.72 | 10.47283327 |
| Bamburi | 2017 | 0.140 | 0.128 | 0.27 | 10.66041958 |
| | 2016 | 0.150 | 0.117 | 0.33 | 10.52846675 |
| | 2015 | 0.120 | 0.111 | 0.29 | 10.62220366 |
| | 2014 | 0.090 | 0.124 | 0.30 | 10.60327432 |
| | 2013 | 0.110 | 0.115 | 0.28 | 10.63363002 |
| Car & General | 2017 | 0.010 | 0.128 | 0.64 | 9.973128177 |
| | 2016 | 0.020 | 0.086 | 0.67 | 9.9870044 |
| | 2015 | 0.020 | 0.108 | 0.66 | 9.953665335 |
| | 2014 | 0.040 | 0.139 | 0.65 | 9.911307428 |
| | 2013 | 0.060 | 0.091 | 0.64 | 9.838939087 |
| Carbacid | 2017 | 0.130 | 0.071 | 0.12 | 9.51943078 |
| | 2016 | 0.120 | 0.078 | 0.13 | 9.488799941 |
| | 2015 | 0.130 | 0.082 | 0.17 | 9.472570262 |
| | 2014 | 0.170 | 0.086 | 0.15 | 9.403663136 |
| | 2013 | 0.220 | 0.087 | 0.13 | 9.343290205 |
| Crown Berger | 2017 | 0.040 | 0.050 | 0.70 | 9.76875698 |
| | 2016 | 0.050 | 0.049 | 0.69 | 9.704067169 |
| | 2015 | 0.010 | 0.046 | 0.70 | 9.656974343 |
| | 2014 | 0.010 | 0.001 | 0.65 | 9.585778043 |
| | 2013 | 0.070 | 0.005 | 0.54 | 9.469149296 |
| East Africa Cables | 2017 | -0.100 | 0.170 | 0.73 | 9.84747524 |
| | 2016 | -0.080 | 0.222 | 0.66 | 9.877855251 |
| | 2015 | 0.020 | 0.200 | 0.60 | 9.923458677 |
| | 2014 | 0.390 | 0.191 | 0.61 | 9.89704926 |
| | 2013 | 0.060 | 0.146 | 0.55 | 9.833100236 |
| E.A Portland | 2017 | -0.040 | 0.156 | 0.38 | 10.43707463 |
| | 2016 | 0.150 | 0.177 | 0.36 | 10.4447023 |
| | 2015 | 0.310 | 0.258 | 0.40 | 10.36384846 |
| | 2014 | -0.020 | 0.350 | 0.57 | 10.19637675 |
| | 2013 | 0.110 | 0.355 | 0.56 | 10.20773406 |
| Eveready | 2017 | 0.350 | 0.011 | 0.29 | 8.887983933 |
| | 2016 | -0.180 | 0.008 | 0.55 | 9.034550654 |
| | 2015 | 0.390 | 0.006 | 0.43 | 9.179455558 |
| | 2014 | -0.190 | 0.150 | 0.77 | 8.968509566 |
| | 2013 | 0.050 | 0.108 | 0.58 | 8.973428983 |

| COMPANY | Year | Financial Performance | Long term debt/ total assets | Total debt /total assets | Firm size |
|----------------|------|-----------------------|------------------------------|--------------------------|-------------|
| Kakuzi | 2017 | 0.100 | 0.140 | 0.25 | 9.759375145 |
| | 2016 | 0.110 | 0.158 | 0.24 | 9.704529201 |
| | 2015 | 0.120 | 0.236 | 0.36 | 9.480740884 |
| | 2014 | 0.040 | 0.180 | 0.23 | 9.586300756 |
| | 2013 | 0.050 | 0.179 | 0.22 | 9.570256001 |
| KenGen | 2017 | 0.020 | 0.461 | 0.51 | 11.5765677 |
| | 2016 | 0.020 | 0.480 | 0.53 | 11.56496038 |
| | 2015 | 0.190 | 0.521 | 0.59 | 11.53468593 |
| | 2014 | 0.020 | 0.593 | 0.69 | 11.39829689 |
| | 2013 | 0.030 | 0.513 | 0.61 | 11.2757104 |
| KenolKobil | 2017 | 0.090 | 0.011 | 0.53 | 10.38199956 |
| | 2016 | 0.090 | 0.013 | 0.59 | 10.38384596 |
| | 2015 | 0.100 | 0.012 | 0.51 | 10.23997738 |
| | 2014 | 0.040 | 0.012 | 0.69 | 10.3786734 |
| | 2013 | 0.020 | 0.025 | 0.76 | 10.44904115 |
| KPLC | 2017 | 0.020 | 0.575 | 0.80 | 11.53358553 |
| | 2016 | 0.020 | 0.614 | 0.78 | 11.47354854 |
| | 2015 | 0.030 | 0.551 | 0.70 | 11.4401108 |
| | 2014 | 0.040 | 0.447 | 0.67 | 11.34424784 |
| | 2013 | 0.030 | 0.463 | 0.68 | 11.24836017 |
| KQ | 2017 | -0.060 | 0.819 | 1.31 | 11.16478099 |
| | 2016 | -0.190 | 0.761 | 1.23 | 11.19224677 |
| | 2015 | -0.190 | 0.584 | 1.03 | 11.26022169 |
| | 2014 | -0.020 | 0.381 | 0.81 | 11.17218536 |
| | 2013 | -0.040 | 0.331 | 0.75 | 11.0888304 |
| Safaricom | 2017 | 0.300 | 0.335 | 0.16 | 11.20867509 |
| | 2016 | 0.240 | 0.267 | 0.17 | 11.20189528 |
| | 2015 | 0.200 | 0.003 | 0.34 | 11.19578242 |
| | 2014 | 0.170 | 0.038 | 0.32 | 11.12904811 |
| | 2013 | 0.140 | 0.093 | 0.38 | 11.11010517 |
| Sameer | 2017 | 0.000 | 0.012 | 0.39 | 9.472737147 |
| | 2016 | -0.200 | 0.002 | 0.44 | 9.517310331 |
| | 2015 | -0.010 | 0.002 | 0.38 | 9.574173114 |
| | 2014 | -0.020 | 0.001 | 0.33 | 9.58629265 |
| | 2013 | 0.120 | 0.042 | 0.27 | 9.564486984 |
| Sasini | 2017 | 0.020 | 0.089 | 0.14 | 10.12044313 |
| | 2016 | 0.030 | 0.070 | 0.10 | 10.2257863 |
| | 2015 | 0.130 | 0.061 | 0.09 | 10.20532692 |
| | 2014 | 0.380 | 0.152 | 0.19 | 10.1740475 |
| | 2013 | 0.010 | 0.214 | 0.30 | 9.956858046 |
| Standard Group | 2017 | -0.050 | 0.086 | 0.58 | 9.64929951 |
| | 2016 | 0.050 | 0.140 | 0.53 | 9.64393911 |

| COMPANY | Year | Financial Performance | Long term debt/ total assets | Total debt /total assets | Firm size |
|---------------|------|-----------------------|------------------------------|--------------------------|-------------|
| | 2015 | -0.070 | 0.159 | 0.57 | 9.639049385 |
| | 2014 | 0.050 | 0.164 | 0.46 | 9.612863188 |
| | 2013 | 0.050 | 0.165 | 0.51 | 9.619351012 |
| Total Kenya | 2017 | 0.070 | 0.035 | 0.44 | 10.57992203 |
| | 2016 | 0.060 | 0.039 | 0.47 | 10.55853304 |
| | 2015 | 0.050 | 0.036 | 0.49 | 10.5343439 |
| | 2014 | 0.040 | 0.037 | 0.50 | 10.51244157 |
| | 2013 | 0.030 | 0.028 | 0.62 | 10.60188803 |
| Trans Century | 2017 | -0.210 | 0.241 | 1.01 | 10.27279193 |
| | 2016 | -0.050 | 0.197 | 0.80 | 10.27672717 |
| | 2015 | -0.050 | 0.235 | 0.97 | 10.27672717 |
| | 2014 | -0.080 | 0.129 | 0.37 | 10.33881456 |
| | 2013 | 0.030 | 0.198 | 0.45 | 10.37731122 |
| Uchumi | 2017 | -0.390 | 0.229 | 1.78 | 9.636215098 |
| | 2016 | -0.570 | 0.133 | 1.42 | 9.699162441 |
| | 2015 | -0.530 | 0.060 | 0.87 | 9.807060969 |
| | 2014 | 0.080 | 0.026 | 0.52 | 9.837894672 |
| | 2013 | 0.060 | 0.036 | 0.48 | 9.746130577 |
| Unga Group | 2017 | 0.000 | 0.074 | 0.47 | 10.01146348 |
| | 2016 | 0.060 | 0.106 | 0.38 | 9.963777584 |
| | 2015 | 0.070 | 0.117 | 0.38 | 9.938108652 |
| | 2014 | 0.060 | 0.123 | 0.39 | 9.90453043 |
| | 2013 | 0.040 | 0.080 | 0.47 | 9.90893404 |
| Nation Media | 2017 | 0.120 | 0.002 | 0.28 | 10.05385794 |
| | 2016 | 0.130 | 0.001 | 0.29 | 10.08543686 |
| | 2015 | 0.160 | 0.012 | 0.29 | 10.10369086 |
| | 2014 | 0.200 | 0.005 | 0.27 | 10.0771607 |
| | 2013 | 0.230 | 0.007 | 0.28 | 10.05858544 |
| BOC Kenya | 2017 | 0.020 | 0.000 | 0.28 | 9.348045572 |
| | 2016 | 0.060 | 0.000 | 0.24 | 9.347103147 |
| | 2015 | 0.060 | 0.000 | 0.26 | 9.365666907 |
| | 2014 | 0.100 | 0.000 | 0.24 | 9.361788255 |
| | 2013 | 0.080 | 0.005 | 0.22 | 9.420466199 |
| EABL | 2017 | 0.120 | 0.490 | 0.82 | 10.82391091 |
| | 2016 | 0.160 | 0.435 | 0.89 | 10.79061586 |
| | 2015 | 0.140 | 0.428 | 0.80 | 10.82568571 |
| | 2014 | 0.110 | 0.418 | 0.86 | 10.79841543 |
| | 2013 | 0.110 | 0.407 | 0.87 | 10.7613298 |
| Eaagads Ltd | 2017 | 0.170 | 0.066 | 0.08 | 8.965108527 |
| | 2016 | 0.050 | 0.064 | 0.09 | 8.88147881 |
| | 2015 | 0.010 | 0.035 | 0.15 | 8.633401791 |
| | 2014 | -0.090 | 0.106 | 0.19 | 8.649133245 |

| COMPANY | Year | Financial Performance | Long term debt/ total assets | Total debt /total assets | Firm size |
|------------------|-------------|------------------------------|-------------------------------------|---------------------------------|------------------|
| Williamson Tea | 2017 | 0.100 | 0.148 | 0.24 | 9.977955502 |
| | 2016 | -0.030 | 0.184 | 0.27 | 9.922420618 |
| | 2015 | 0.050 | 0.185 | 0.22 | 9.950919297 |
| | 2014 | 0.010 | 0.191 | 0.23 | 9.932400598 |
| | 2013 | 0.090 | 0.167 | 0.25 | 9.931417185 |
| Kapchorua Tea | 2017 | -0.030 | 0.191 | 0.30 | 9.30756214 |
| | 2016 | 0.050 | 0.196 | 0.29 | 9.331343669 |
| | 2015 | -0.010 | 0.222 | 0.28 | 9.297375054 |
| | 2014 | 0.070 | 0.221 | 0.28 | 9.285368474 |
| | 2013 | 0.090 | 0.195 | 0.38 | 9.317744805 |
| Limuru Tea | 2017 | -0.070 | 0.133 | 0.28 | 8.41831621 |
| | 2016 | -0.080 | 0.172 | 0.27 | 8.450546237 |
| | 2015 | 0.010 | 0.178 | 0.27 | 8.496608649 |
| | 2014 | 0.000 | 0.188 | 0.24 | 8.529686954 |
| | 2013 | 0.080 | 0.217 | 0.24 | 8.535302983 |
| | 2016 | -0.030 | 0.034 | 0.53 | 8.70802467 |
| | 2015 | -0.040 | 0.050 | 0.53 | 8.741307633 |
| | 2014 | 0.000 | 0.031 | 0.54 | 8.780990199 |
| | 2013 | 0.000 | 0.024 | 0.45 | 8.71190504 |
| Express | 2017 | -0.070 | 0.707 | 1.14 | 8.574068851 |
| | 2016 | -0.250 | 0.637 | 0.94 | 8.579298542 |
| | 2015 | -0.140 | 0.510 | 0.73 | 8.645321965 |
| | 2014 | -0.160 | 0.471 | 0.67 | 8.679357023 |
| | 2013 | 0.000 | 0.251 | 0.59 | 8.681715987 |
| TPS | 2017 | 0.010 | 0.336 | 0.48 | 10.24271091 |
| | 2016 | 0.000 | 0.316 | 0.44 | 10.23001735 |
| | 2015 | -0.030 | 0.246 | 0.39 | 10.19909116 |
| | 2014 | 0.010 | 0.173 | 0.35 | 10.20246589 |
| | 2013 | 0.030 | 0.184 | 0.35 | 10.2077985 |
| Scan Group | 2017 | 0.040 | 0.000 | 0.35 | 10.13858409 |
| | 2016 | 0.030 | 0.000 | 0.35 | 10.12989597 |
| | 2015 | 0.020 | 0.015 | 0.31 | 10.09581348 |
| | 2014 | 0.040 | 0.023 | 0.36 | 10.12333227 |
| | 2013 | 0.060 | 0.027 | 0.37 | 10.10532563 |
| Business Venture | 2017 | -0.230 | 0.451 | 0.68 | 8.157497989 |
| | 2016 | 0.030 | 0.428 | 0.68 | 8.191490038 |
| | 2015 | 0.030 | 0.222 | 0.59 | 8.048286545 |
| | 2014 | 0.100 | 0.354 | 0.76 | 7.900331996 |
| | 2013 | 0.030 | 0.317 | 0.75 | 7.654065951 |
| Home Africa | 2017 | -0.040 | 0.010 | 1.09 | 9.651067407 |
| | 2016 | -0.040 | 0.048 | 1.05 | 9.594393742 |
| | 2015 | -0.100 | 0.200 | 1.01 | 9.586847769 |

| COMPANY | Year | Financial Performance | Long term debt/ total assets | Total debt /total assets | Firm size |
|-----------------------------|------|-----------------------|------------------------------|--------------------------|-------------|
| | 2014 | 0.000 | 0.233 | 0.91 | 9.570383679 |
| | 2013 | 0.030 | 0.163 | 0.89 | 9.486352347 |
| Kurwitu | 2017 | -0.080 | 0.029 | 0.53 | 8.147479465 |
| | 2016 | -0.110 | 0.010 | 0.40 | 8.109397158 |
| NSE | 2017 | 0.100 | 0.003 | 0.05 | 9.323915929 |
| | 2016 | 0.090 | 0.006 | 0.07 | 9.304004475 |
| | 2015 | 0.160 | 0.006 | 0.07 | 9.282901811 |
| | 2014 | 0.190 | 0.008 | 0.08 | 9.226626709 |
| | 2013 | 0.230 | 0.012 | 0.36 | 9.060366895 |
| BAT | 2017 | 0.190 | 0.190 | 0.56 | 10.25055632 |
| | 2016 | 0.260 | 0.181 | 0.52 | 10.26716703 |
| | 2015 | 0.270 | 0.173 | 0.53 | 10.2714044 |
| | 2014 | 0.230 | 0.161 | 0.55 | 10.26134639 |
| | 2013 | 0.220 | 0.008 | 0.02 | 10.23008915 |
| MUMIAS | 2017 | -0.280 | 0.262 | 0.97 | 10.38185654 |
| | 2016 | 0.060 | 0.314 | 0.72 | 10.4281532 |
| | 2015 | -0.230 | 0.041 | 0.71 | 10.31033171 |
| | 2014 | -0.120 | 0.185 | 0.64 | 10.37223217 |
| | 2013 | -0.050 | 0.259 | 0.57 | 10.43587609 |
| Longhorn Publishers Limited | 2017 | 0.060 | 0.000 | 0.49 | 9.269217243 |
| | 2016 | 0.050 | 0.000 | 0.49 | 9.271131291 |
| | 2015 | 0.090 | 0.000 | 0.45 | 8.838420879 |
| | 2014 | 0.130 | 0.000 | 0.42 | 8.876540554 |
| | 2013 | 0.170 | 0.000 | 0.44 | 8.835702617 |
| Deacons (East Africa) PLC | 2017 | -0.540 | 0.184 | 0.79 | 9.191125311 |
| | 2016 | -0.120 | 0.124 | 0.49 | 9.358254736 |
| | 2015 | 0.040 | 0.157 | 0.39 | 9.395513702 |
| | 2014 | 0.030 | 0.071 | 0.28 | 9.292672883 |