EFFECT OF CAPITAL STRUCTURE ON THE PERFORMANCE OF FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE

By

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DECLARATION

This research is my original work that has not been presented for a degree in any other University, for any other award and where other research studies have been referred to, they have been fully acknowledged.

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This research project has been submitted for examination with my approval as the university supervisor.

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I sincerely acknowledge the role played by the following important people during my research study.

Foremost, I thank God for His divine enablement.

DEDICATION

To my lovely parents,

William Kipruto Matelong

Grace Cherotich Kiprono

and

Ruth Chepotip Matelong

(A Fountain of Inspiration, Knowledge, Encouragement and Hope)

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ABBREVIATIONS

ADR	Actual Debt Ratio
ANOVA	Analysis of Variance
CFROI	Cash Flow Return on Investment
CS	Capital composition
EBIDTA	Earnings before Interest, Depreciation and Tax
EPS	Earnings per share
EVA	Economic Value Added
LTD	Long-Term debt
MM	Modigliani and Miller
NPM	Net Profit Margin
NPV	Net Present Value
NSE	Nairobi Securities Exchange
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Squares
ROA	Return on Assets
ROE	Return on Equity
SPSS	Statistical Package for Social sciences Software
TA	Total Assets
TD	Total debt
TE	Total Equity

ABSTRACT

This research paper sought to find out the effect of capital composition on the performance of firms listed on the exchange, Nairobi Securities Exchange (NSE). This research study primarily concentrated on 65 companies operating in Kenya and are listed on the Nairobi Securities Exchange (NSE) for the financial period spanning 5 years; from 2013 to 2017. Business firms were chosen based on the availability of information crucial for conducting the research study. Out of 65 listed companies on the NSE, only 60 had complete data as per this study requirements, representing 92% response rate. The study engaged descriptive research model and applied return on asset (ROA) as explained variable as well as two capital composition measures: TDTA and TDTE as explanatory variables. The research also incorporated size and growth as control variables. Regression analysis was applied on ROA, Return on Assets, as well as total debt to total assets, TDTA, and Total debt to Equity, TDTE, as capital composition variables and size (S) and growth (G) as control variables to determine the effects of capital composition on the performance of companies listed at the NSE. The regression results showed a strong positive relationship between capital composition and performance. This is so because the multiple R (+ 0.5572) approached + ve 1. The multiple regression results also showed that, 31.05% of the changes in the performance of business firms listed on the NSE is attributed to capital composition decisions while the 68.95% of the changes in the ROA of business firms could be attributed to other factors outside this study. Further, the regression results revealed a negative relationship between TDTA and ROA; while TDTE is positively correlated to ROA. The multiple regression results indicate that size and growth have a positive association with ROA. The sectoral regression analysis revealed a strong positive relationship between explanatory variables and explained variable for largely all the sectors since their multiple R(s) approached + ve. The work concludes that capital composition has a moderate positive relationship with ROA and positively affects the performance of firms listed on the NSE. It suggested that managers should consider using debt relative to equity since it affects their company's performance positively. It also recommends that managers should exercise due caution on the debt risk of the asset to be financed as TDTA has a negative relationship with ROA.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Damodaran (2001) described capital composition being equity and debt combinations applied to fund the operational activities and capital expenditures of firms. Capital composition effects on results of firms has ignited much debate following the landmark paper by Modigliani and Miller (1958) where the duo argued that capital composition exerts no effect on firm's value in a frictionless market condition. However, various scholars argue that the presence of imperfections in the market imply that capital composition choice influences the wealth of shareholders. Modigliani and Miller in an improvised paper incorporated corporate tax and concluded that debt financing optimizes firms' value owing to interest tax shield attributed to debt.

Myer and Majluf (1984) posited that large firms endowed with massive resources would prefer financing from internal sources to external sources. This submits that capital composition decision is relevant and therefore it influences firms' performance. Jensen and Meckling (1976) theorized that capital composition choices can be set up at optimal level by lowering agency costs. They suggested that the ownership structure of a firm should be designed in a way that aligns managerial interests to shareholders' interest. Furthermore, they argued that using more debt reduces free cash flows hence guarding managers' opportunistic behaviour. In the absence of universal consensus on what choice would qualify as optimal capital composition, it is critical to determine the effects of capital composition on performance of firms. Several such studies that have been researched, have yielded contradictory results.

Gleason and Mathur (2000) supported negative effect of debt on firms' profitability while Fosu (2013) found that capital composition and performance of a firm has a strong positive relationship.

1.1.1 Capital composition

Many authors have described capital composition in various ways, but these descriptions are explicit and exhibit similar meaning. Sudhindra (2008) said capital composition is the portion of funds structure representing sources of funding that are long-term in nature. That is, the blending of long-term funding sources including reserves and surpluses, debenture, equity shares capital, external long-term debt and preference share capital. According to Myers (2001), capital composition entails securities blended with financing sources utilized by corporate bodies to fund real investment. From this explanation, it is imperative to note that capital composition involves funding of assets by combining equity and debt.

In the current commercial environment, capital composition is pivotal in funds management. This is chiefly because capital composition gives insight of the firm's risks. An increasingly levered firm is the firm that has higher levels of debt. Therefore, highly levered firm possesses greater risk than firms with minimal debt level. Furthermore, major miscalculation in financing may plunge the firm into liquidation, bankruptcy and financial distress. When firms are unable to meet their debt obligations, they face financial distress' costs (Pandey & Chotigeat, 2004). Thus, highly levered firms must allocate efficiently debt and equity when constructing the capital composition to minimize cost. Funds managers are key in achieving the desired capital composition that sustain the industrial firms in the market.

Funds managers would be forced to minimize funding costs to optimize shareholders' wealth by choosing optimal debt equity ratio. This aims at relieving possible pressures on the long-term funding of firms (Mahmood, Affandi, Baharuddin, Mohamad, and Shamsudin, 2011).

It is essential to judge whether a change in the debt and equity ratio would result into an increase in shareholders' wealth when deciding on suitable borrowing levels. Analysts use various ratios to measure and give detailed explanations on capital composition These ratios include: short-term debt to total assets (STDTA), long-term debt to total assets (LTDTA), total debt to total assets (TDTA) and total debt to total equity (TDTE).

1.1.2 Financial Performance

From shareholders' standpoint, financial performance is measured by how well the shareholder is, at the ending period is compared to the beginning period (Berger & Patti, 2002). This is computed by utilizing ratios derived from data on stock market prices or figures in financial statements mainly the statement of financial position and income statement.

Assessing financial performance of firms permits decision makers in business to judge the outcomes of their strategies and activities objectively. A firm's activities and operations can hence be analysed over time. The financial performance results can be utilized when conducting sectoral or industry analysis.

Measuring financial performance depends on the information brought into the measurement system including instruments used. The indicators utilized in financial analysis to assess financial performance include: leverage, return on assets, account receivables turnover, capital efficiency, inventory turnover, liquidity and cash flow. In addition, current value creation indicators by Dallocchio, Le Fur, Vernimmen, Quiry, and Salvi (2009) include: accounting indicators including: Net profit or earnings, per share (EPS), which is the amounts of a firm's profit allocated to every outstanding ordinary share, Operating profit or EBIDTA obtained by adding back depreciation and amortization to the earnings before tax.

The return on assets, (ROA), which indicates how profitable a firm is compared to its total assets shows the efficiency of management in utilizing its assets to generate earnings and is computed by taking a firm's net income and dividing it by its total assets. Furthermore, return on equity (ROE), refers to net income divided by shareholders' equity. This measure indicates the efficiency of the firm in profit generation from the funds invested in the firm by shareholders. Other indicators include: market indicators such as Market Value Added; Total Shareholder Return and EPS, hybrid indicators such as EVA, CFROI and financial indicators such as NPV. This is then utilized to conduct capital budgeting analysis for profitability of an investment or project, hence affecting the financial performance of a firm.

1.1.3 Capital composition and Financial Performance

Beyond the limits of the capital composition irrelevance theory by Modigliani and Miller (1958), the presence of a link that subsists firm's capital composition and its value was acknowledged:

Jensen & Meckling, 1976), Agency theory (Berle & Means, 1932; and the Market Timing theory (Baker & Wurgler, 2002). Consequently, literature review shifting its focus from the capital composition influences on firm's value to the way in which variations in capital composition affect the performance of a firm. The Trade-off theory acknowledges a positive association subsisting the firm's debt level and performance to optimal level beyond which the relation turns negative. Agency theory contends that higher leverage in the environment of lower agency costs minimizes inefficiency and hence enhancing performance of a firm. Pecking Order theory concludes that there is a negative association between firm's debt and performance. In conclusion, there is no consensus on the link subsisting capital composition and performance.

Empirical studies have researched on the correlation amid capital composition and performance in various countries considering specific influencing factors and found contradictory. Some studies have delivered empirical evidence in support of the positive correlation between capital composition and firm's performance; others have found evidence in favour of a negative correlation while others find no correlation between the two variables. Further studies have given mixed evidence based on whether companies belong to diverse sectors or industries, supplying them with diverse growth opportunities.

1.1.4 Kenya's Market

Kenya's market has experienced capital composition problems in the recent past. Some firms have gone under receivership due to high leverage. A case in point is Karuturi flower firm limited which was put under receivership owing to their indebtedness to the CFC bank (Gitonga, 2014).

Uchumi supermarkets although now on recovery path, went under receivership in June 2006 following financial difficulties. Moreover, firms operating in Kenya will be required to raise more capital to list shares on the securities market should proposals to harmonize regulations for East African Community be adopted. In addition, it is vital to differentiate the effects of total debt to total equity and total debt to total assets owing to their diversity in return and risk profiles.

However, this study is aimed at determining capital composition effect on the performance of firms listed on the NSE and how these effects affect the sectors separately. The study further seeks to donate to already existing body of knowledge on capital composition and provide more insights regarding capital composition effects on performance of firms listed on NSE.

1.2 Research Problem

The theory of capital composition effects on performance has triggered much debate and concern in accounting and corporate finance literature following the landmark paper by Modigliani and Miller in 1958. In their seminal paper, the duo argued that under very limiting assumptions of perfect capital market condition, capital composition has no effect on firms' value. However, Modigliani and Miller made preference of purely debt funding due to tax shield in 1963 but this contradicted the traditional approaches.

The Trade-off theory established by Kraus and Litzenberger in 1973, recommended that one can find optimal capital composition by harmonizing tax shield benefits of debt and bankruptcy costs. This was after the recognition of the debt dead – weight cost of bankruptcy.

However, designing optimal capital composition is a problematic task in reality (Gohar & Shoaib, 2011). Jensen and Meckling (1976) demonstrated that the level of debt in a firm's capital composition has effects on the agency conflicts subsisting between shareholders and managers. As such, this can change manager's behaviours and alter their operational decisions. This proposition is supported by Graham and Harvey (2001), Harris and Raviv (1991) and Ebaid (2009).

In 1976, Jensen & Meckling theorized that optimized capital composition is obtained from compromising between many funding options that allow for reconciliation of conflicts of interest between the management and capital suppliers. According to this theory, capital composition can affect value of the firm by boosting management motivation and inciting creditors and shareholders to supervise the management and limit their abuses.

Quality decisions on capital composition are vital in the success of management of financial resources of a firm especially with the volatile lending rates in Kenya.

Due to lack of quality capital composition decisions, some firms have been put under receivership due to high levels of unsettled debt. For instance, Karuturi Flower Limited was put under receivership due to their inability to service the loan advanced by the CFC bank (Gitonga, 2014). Uchumi supermarkets also went under receivership in June 2006 following its failure to settle their debt obligations.

In addition, Kenyan firms will be required to raise more capital to list shares on the securities exchange should the proposal to harmonize capital market regulations for East African Community be adopted.

Several empirical studies (Ogebe, P., Ogebe, J. & Alewi, (2013); Fosu, 2013; Alawwad, 2013) have been done regarding capital composition and performance especially in advanced markets and recently in developing markets. These studies have generated mixed results with most concluding on negative relationship between capital composition and financial performance. Few studies in Kenya have been conducted to determine capital composition effects on the financial performance of a firm. Kondongo and Maina (2013) observed that the association between capital composition and financial performance is significantly negative.

Researches done on specific sectors differed with Maina and Kondongo (2013) findings. For example, Kuria (2013) studied the capital composition effects on commercial banks' financial performance in Kenya and he found no relationship between the two variables. Njagi (2013) also carried out a similar study on the agricultural companies listed on NSE and found that capital composition affects performance positively. This study therefore seeks to address these pertinent questions regarding the capital composition choice that can yield the best financial performance for a listed firm in Kenya. Does capital composition have any effect on the performance of firms listed on the NSE? How are the various sectors affected by capital composition choices?

1.3 Research Objective

The objective of this study was to establish the effects of capital composition on the performance of NSE listed firms.

1.4 Value of the Study

The outcomes of this research will be beneficial to both the existing and potential investors, who venture in trading shares of publicly-listed companies.

The findings create a framework for analysing and framing their investing decisions in cognizance of the effect debt and equity level has on the firms' performance.

The study outcomes will add to the body of knowledge on the capital composition effects on firms' performance. From theoretical standpoint, the research study will add into many studies carried out in Kenya.

This study will help the government of Kenya in formulating capital composition policies that steer towards maximizing firm performance and value. The research study will be helpful to consultants and financial analysts in their financial and advisory services to firms about capital composition and on performance in financial perspective.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section discusses theories, determinants, and the empirical studies on capital composition, as well as the effects on firms' performance, ending with the summary of the literature review.

2.2 Theoretical Review

The section describes relevant theoretical models on capital composition effects on firm's performance at varied proportions of equity and debt levels. These theories include: Modigliani-Miller, Pecking Order, Trade-off, and the Agency, as well as the Market Timing theories.

2.2.1 Modigliani-Miller (MM) Theory

The theory was founded on economic background, which formed basis of today's thinking on capital composition. It was developed by Franco Modigliani with Merton Miller in 1958. In their theory of capital composition irrelevance, they contended that in a condition of a frictionless market with the absence of taxes, perfect information on the market, transaction costs, and the privy to the lending rate being the same as interest rate, decisions on investments are unaffected by decisions on financial management. MM theory underscores that firm's value is independent from the capital composition, thus, capital composition does not affect firm's value and performance. The research findings by Kuria (2013) supported this theory while the research findings by Njagi (2013) revealed that capital composition influences firm's worth.

Being a foundational capital composition theory, this theory is important to this research study as it offers a framework upon which the research findings on the capital composition effect on performance are interpreted.

2.2.2 The Pecking Order Theory

The Pecking Order theory was originally coined by Donaldson (1961) and later advanced by Stewart Myers and Nicolas Majluf in 1984.They argued that managers are more conversant with the business' prospects, associated risks, and the value of the firm as compared to investors. The model underscores that the management of a firm considers utilizing internally generated funds to run operations and upon exhaustion, advancing for debts from lending institutions comes second but if the funds are insufficient, issuance of shares to raise equity capital can be resorted. The basis of the theory stems from access to firms' information asymmetry between the managements, lenders, and the providers of the equity. The type of debt adopted by a firm could be preferred to externally finance the capital without affecting business shareholding.

However, the contentious issue features on the way in which a rational capital provider is affected by the approach adopted to raise additional capital. The difference between managers and the investors is evidenced on the access or possession of information regarding the value of firm's assets and the prospective opportunities that would raise the value of the business. For example, issuance of new equity by a firm may be considered by the investors that the firms could be relatively doing well, and it is overvalued as noted by the management. The management can take advantage of overvalued perception to raise capital without giving investors true position of the business.

This theory supports this research study as it reveals the fact that the choice of financing triggers different perceptions among the stakeholders in a company and as such, the theory recommends management to be cautious on the choice of financing to avoid sending negative signals to the market which may hurt the company significantly.

2.2.3 Trade-Off Theory

Developed and advanced in 1973 by Kraus and Litzenberger, the theory has remained instrumental assessment of firms' capital composition and more importantly, balancing the benefits attributed to tax and the dead-weight costs related to bankruptcy. The theory suggests that companies can balance between the amount to be raised through debt and the equity financing based on the related costs and the benefits obtained from the two sources of capital.

The theory suggests that firms can optimize their overall value assessing or choosing the amount of debt or equity to be raised and its financial performance due to changes in the capital composition. This theory is critical to this research study as it suggests the existence of optimal capital composition arising from a management balance act on debt and equity financing options.

2.2.4 Agency Theory

Agency theory was first developed in 1932 by Berle and Means. They state that the value of a firm can be influenced continuous dilution of equity, which directly influence ownership and the control of a firm. At the same time, the management have better information on the firm's processes and it may leverage on the opportunity and pursue selfish interests rather than shareholders' interests.

In 1976, Jensen and Meckling advanced the theory and suggested that achieving optimal capital composition entails assessment of various options, such as addressing cases related to the conflict of interests exhibited by the management, sabotaging the role entrusted by the shareholders. According to this theory, the structure of the capital adopted can be greatly influenced by the decision of managers, which impacts firm's value of the firm. Therefore, the theory underscored that the management abuse can be reduce if stakeholders, such as shareholders and the creditors manage decisions made by managers.

2.2.5 Market Timing Theory

Market timing model is a common capital composition theory developed in 2002 by Baker and Wurgler. They stated the essence of timing, valuation of new stock price, and the sale. A firm may consider issuing or selling its stock when the market price is perceived to be overvalued in the market. Similarly, firms seek debt in a bid to raise capital when interest rates are seen to be relatively low in the financial market. Consequently, changes and the constant fluctuations in the prices of stock alongside interest rates impact the capital composition of firms and subsequently performance of firms. This theory is essential to this research study as it gives explanation on the importance of timing when management is contemplating which financing option to adopt to maximize firm's value through low cost financing.

2.3 Determinants of Firm's Performance

Profit maximization is one of the primary goal of business firms. The ability to generate profit is a good measure of the performance and distinguishes performing business firms from non-performing firms.

Most business activities and corporate strategies are performed and designed to maximize the profit. Performance of the firm is affected by many factors broadly clustered into micro and macro factors. Micro factors are usually firms specific and affects individual firms while macro factors affect all the firms and sectors.

2.3.1 Firm's Capital composition

Damodaran (2001) described capital composition to be debt and equity combination adopted by a firm to finance its business operations. The capital composition decision stems from weighing the resultant cost related with debt and equity financing because either financing option has 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 firm's value.

The appropriate use of the optimal capital composition in the financing acquisition of assets is important in maximizing shareholders' wealth and enhances the ability of the firm to compete by minimizing the cost of the capital (Su & Vo, 2010). Better understanding of capital composition is integral in managerial decision-making due to the influence risks and the business returns (Mwangi & Birundu, 2015).

Financial managers should always try to build up an optimal structure that would be advantageous to the shareholders in specific and other stakeholders, such as creditors, customers, employees, and the society at large. According to Abor (2005), firm have a chance to adjust its cost of capital and the value by changing the firm's capital composition.

2.3.2 Tangibility of Fixed Assets

Asset tangibility ratio refers to the amount of non-current assets to the total assets of the firm. The amount of fixed assets is instrumental in establishing the debt level of a firm, turnover and finally firm's 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, firms with relatively high levels of tangible assets have higher amount of debt level in the capital composition than firms with less tangible assets base. These external finances in turn lead to high turnover and enhance the firm's performance if efficiently utilized (Rajan, & Zingales, 1995).

The firm's tangible assets comprise of all assets owned with 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, equipment and other fixed assets. The tangible assets are very important to the firm and enables managers evaluate the asset position 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 behaviour and hinders wealth transfer to the shareholders. Therefore, debt level in capital composition have a positive correlation with the assets tangibility (Niu, 2008).

2.3.3 Firm Liquidity Level

Liquidity refers to the extent by which a firm 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 firm'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, firms should properly manage their liquidity to maximize their profitability (Vieira, 2010).

Assets are said to be liquid if such assets can be swiftly 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 current, cash, and the quick ratios, as well as working capital changes (Brealey et al., 2001). The ability of a firm to meet its maturing obligations on a timely way is of vital importance and is closely related to the financial performance and firm's going concern. The inability of the firm to maintain sufficient liquidity level can make the company insolvent and jeopardize its operations (Gitman, 2003).

2.4 Empirical Studies

Soumadi and Hayajneh (2012) studied the effect of capital composition and performance of the public Jordanian shareholdings and the firms listed in the Amman securities market.

The study applied multiple regression model, which was denoted as OLS techniques that examined the significance of capital composition on firms' performance. The research analysed 76 firms, where most of the firms were noted as industrial firms (53) and the other 23 being service corporations for a period of five years, 2001 to 2006. The study espoused that capital composition of any firm statistically associate to its performance in a negative way. Additionally, the study discovered that there was no significant contrast to the effect of the financial use between high and low financial leverage firms on their business performance. Furthermore, the study indicated that there is not difference of impact of financial leverage on high and the low growth firms based on their performance. This study was undertaken in a well industrialized economy unlike the Kenyan economy which is developing.

Manawaduga et al. (2010) assessed capital composition and its impact on a developing market in South Asia with a special attention to Sri Lanka's emerging markets. The applied regression analysis with the use of panel data for the sampled 171 firms. The outcomes showed that the majority of the Sri Lankan firms fund their operations short-term debt contrary to the long-term debt capital. The study indicated that the performance of the firm can be affected by debt capital. Besides, the study established negative relationship between the performance and the asset tangibility due to inefficient and wasteful usage of non-current assets. Negative performance can be attributed to over-utilization of debts, that is, borrowing short-term debts to finance operations and under-utilization of non-current assets by the business. Therefore, managers should adopt appropriate policy that advance for appropriate capital composition and enhance operational decisions.

The findings of the study contribute to growing knowledge on the capital composition and its performance in the emerging markets.

Fosu (2013) analysed the impact of competition of products in the market and capital composition on performance of various firms in South Africa. The attention was on the extent by which competition has influenced the industry. The paper sought to apply Boone indicator as a measure of competition in relationship to performance. The study used the method of panel data analysis. The sample population was 257 South African firms between the year 1998 and 2009. The findings of the study proved that financial leverage has notable positive effects on the financial performance of the firms.

Additionally, Ogebe et al. (2013) researched between the year 2000 to 2010 in Nigeria on the effect of capital composition on performance of the firms. Furthermore, the study conducted comparative analysis of selected firms. The firms were grouped into highly and lowly geared companies by placing the leverage threshold of highly geared firms to be those of above 10 percent. To achieve the objectives of the study, the static panel analysis was utilized. Fixed effect regression model provided a negative relationship between performance in respect to return on investment and the leverage of the firms. The findings depicted a strong evidence in support of theory of capital composition. The theory suggests that leverage is a vital determinant of the performance of the firms. The study only focused on the effect debt in the Nigerian's market unlike this study which focuses on the Kenya's market.

Alawwad (2013), conducted research on the effect of capital composition on the performance of the firms listed Saudi Arabia in the year 2008 to 2012.

The sample data was taken from 67 firms in 13 various sectors. The study employed regression model to determine the relationship between capital composition and performance of the firm. The control variable was the size of the firm. The findings showed that LTD and TD have notable effects on ROE. However, ROA has statistical relationship with the level of every debt. EPS and NPM were found to be positively related with STD while they depict inverse relationship with LTD and TD.

Maina and Kondogo (2013) analysed the effect of capital composition on the performance of listed firms at the Nairobi Securities Exchange. They collected secondary data from financial statements of the firms for the years between 2002 and 2011. The study employed casual research design and Gretl statistical tools to conduct panel regression analysis. The study found that the determinants of financial performance were equity and debt. There were negative but important findings between capital composition (DE) and all other measurements of financial performances. The implication is that the more a firm finances its activities with debt realizes low financial performance. The study also found that companies listed at NSE financed their activities with short term debt rather than long term debt.

Munene (2009) conducted exploratory study on factors that affect the capital composition among real estate companies in Kenya. He conceptualized a research framework and analysed the major variables within the framework. The qualitative research method comprised of six semi structured interviews with highly experienced respondents in the financial and real estate sectors. The findings of the research were that capital composition of the real estate companies in Kenya was dynamic. The capital composition would change at every stage in the life cycle of the company.

Menza (2009) employed empirical analysis of the relationship between stock returns and capital composition on firms listed at NSE during the years between 2001 and 2008. The researcher conducted investigations by applying linearity test of capital composition and mean excess returns of a company using sivaprasad and muradoglu (2007) methodology. He made minimal modifications on the model to ascertain the relationship. Additionally, he used Welch (2004), Actual Debt Ratio (ADR) as the capital composition measurement tool rather than Sivaprasad and Muradoglu (2007). He also, did portfolio level analysis of the company's ADR and mean excess returns using the models as noted by Fama (2002). The results of the paper could not ascertain whether stock returns reacted to ADR. Therefore, cannot be termed as being consistent with the Miller Modigliani findings and other published work in developed economies such as United Kingdom and the United States of America. The stock returns of the developed economies increased with leverage

Siro (2013) studied the influence of capital composition on financial performance of companies listed on the NSE. The financial performance was measured in reference to return on equity while capital composition was measured in reference to debt ratio. The sample population were 61 companies that were listed and registered with capital markets authority of Kenya. The study was conducted in 2012 with the secondary data from the NSE publications. The data was analysed using the regression analysis model with SPSS. The findings depicted an inverse relationship between financial performance and capital composition of the sample population. Furthermore, the results pointed out that when the debt ratio is big, return on equity would be small. Therefore, the companies should inject more capital on investments than leveraging on borrowing.

Kuria (2013) did research on the impact of capital composition on performance of commercial banks in Kenya. The study was conducted in the period between 2008 and 2012 among 35 commercial banks that were fully operational. The ratios of the population of study were obtained from data extracted from the financial statements of the banks during the period. Linear regression model together with SPSS 19 was used to analyse the data. The aim was to establish whether there is a notable relationship between the financial performance and capital composition of the banks under study. The findings proved that there is no notable relationship between the variables under study. There was negligible effect hence the conclusion that relationship between financial performance and capital composition does not exist among the commercial banks in Kenya.

Njagi (2013) researched on the performance of seven agricultural companies that are listed on the NSE and their capital compositions. He relied on the secondary data to assess the capital composition of these firms, using descriptive research design. The design was grounded in the quantitative data analysis and inferential techniques to analyse his findings. The application of adjusted R square, study findings indicated variations of the financial performance for the listed agricultural firms. The variance was attributed to short and the long-term debts, as well as the revenue. From the results, it is undisputed that firms' capital composition influenced financial performance through financial elements of both short and the long-term debts, and the revenue. In nutshell, the correlation analysis of the data revealed a strong relationship that linked financial performance the firms' capital composition.

2.5 Summary of Literature Review

In summary, there is no specific theory that explain the effect of capital compositions on the financial performance of companies. Varied views have been put forth by scholars, explaining their perceptions on the relationships from theoretical and empirical point of views. For example, Modigliani and Miller theorem, also referred to as the MM theory gave foundation to the relationship between capital composition and the performance. MM theory established that capital has no impact on the financial performance.

Other theoretical proponents, such as Kraus and Litzenberger, who advanced trade-off theory in 1973 and alongside the exponents of pecking order, agency and the market timing theories underscored that there are effects on the capital composition, which could be positive or negative and affect firm financial performance. Majority of the scholars noted the benefit of short term debt. The debt reduces agency-related issues and the information asymmetry, as well as the imperfect or expensive enforcement of contracts. Myers (1977) cited advantages of shorter term debts in his seminal paper.

He noted that the debt (short-term) can be applied as a tool for improving financial performance owing to its use as a control device, where the management ought to make appropriate financing decisions to boost shareholders' value.

The previous empirical studies on the effect of capital composition on the financial performances of companies have elicited different conclusions. Several scholars such as Ogebe et al., (2013) and Siro (2013) obtained a negative relationship between the financial performance and capital composition of different firms.

Fosu (2013) found a negative relationship between capital composition and financial performance. Alawwad (2013) obtained a positive relationship with the short-term debt while long term debt proved negative results on financial performance. However, Kuria (2013) found no relationship between the variables of the study on commercial banks in Kenya.

Since several empirical studies are providing mixed findings and many of them concluding a negative relationship between the variables, this study sought to establish whether capital composition has effect on performance for firms listed on NSE. The study also sought to investigate how various sectoral performance of the economy are affected by TDTA and TDTE variables under study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section covers research design, population, data collection and data analysis.

3.2 Research Design

This study adopted descriptive research design. The design is informed by the classification by method of analysis as espoused in Mugenda (2003)**.** This research study sought to determine the extent to which capital composition composition impacts the performance of NSE listed firms. Nachmias and Frankfort (1996) recommended that, in scientific research, the concept of co-variation is expressed through the measure of correlation. As such, the study undertook correlation analysis to establish evidence of association between the subject two variables.

3.3 Population

This research study was a census of all the NSE listed firms. There were 66 currently listed firms divided into 12 sectors composed of several individual firms (appendix 1).

3.4 Data Collection

This research work used secondary quantitative information from published audited financial reports of NSE listed firms from 2013 to 2017. The design was preferred owing to the availability of audited financial statements of the listed firms. Auditors assess financial reports and opines on the financial health status of the firm.

The researcher analysed the financial statements and extracted the relevant figures for computing the ratios of the various capital composition measures and performance indicator in the final analysis of the descriptive relationship between the variables. Using the published financial reports for the years 2013 to 2017, capital composition measures and financial performance indicator were computed.

3.4.1 Independent Variables

Capital composition measuring indicators: - short term leverage to total assets, long term leverage to total assets, total leverage to total assets and total leverage to total equity ratios (Abor, 2005). This study employed capital composition measures of total debt to total assets (TDTA) and total debt to total equity (TDTE) ratios as explanatory variables.

3.4.2 Dependent Variable

The performance indicators used as proxy of firms' performance include: EPS, ROA and ROE (Mwangi & Birundu, 2015). This study however, adopted ROA as the key financial performance measure. This measure was computed by taking net income after tax by total assets. It shows the firm's management efficiency in employing the company's assets to generate profit.

3.4.3 Control Variables

For the sake of realizing the primary objective, the researcher designed regression model which incorporated leverage variables under consideration. However, there are other factors other than the said variables that influence firm's performance.

Consequently, additional explanatory variables that are directly relevant to financial performance were incorporated into regression model with a view to circumvent omitted-variable bias in the study. The said variables were considered control variables and include: firm's size indicated by natural logarithm of total assets and firm's growth measured by finding the differential degree in book value of total assets (King & Santor, 2008).

3.6 Data Analysis

According Resnik and Shamoo (2003), data analysis entails the application of statistical tools and techniques in in search of answers to research questions through detailed evaluation and interpretation of data collected. This sub-section discusses the analytical model used for data analysis and the reliability tests performed to assess the significance of the model.

3.6.1 Analytical Model

Multiple regression analytical model was used to establish the effects of TDTA and TDTE (capital composition) on ROA of NSE listed firms. The research adopted the regression model used by Gohar and Shoaib (2011) with little adjustments to fit the research's need.

The regression model:

CS =f (TDTA, TDTE)

Performance =f (CS), by expansion,

Performance = f (TD/TA, TD/TE).

Control variables = Size (S), Growth (G)

The model can be developed using multiple regression analysis as follows:

Performance = $\beta_0 + \beta_1$ TDTA + β_2 TDTE + β_3S + β_4 G + €

Where,

Performance= Financial performance (proxy by ROA)

C S = Capital composition

TDTA = Total Debt to Total Assets

TDTE = Total Debt to Total Equity

$\acute{\varepsilon}$= Error term

β_0 = the constant and β_1, β_2, β_3, and β_4 are coefficients

Reliability tests include: R^2, F- test, T- test and ANOVA

3.6.2 Reliability Tests

To test the significance of the analytical regression model of capital composition and financial performance, all calculations were performed at 5% significance level. Correlation Coefficient (r) was obtained and utilized to judge the strength and direction of the association between ROA and each of the independent variables.

Coefficient of determination (R Square) was used to measure the degree at which explanatory variables influence the explained variable. The goodness of fit of the analytical regression model was tested by using ANOVA. F critical value together with a p-value of 5% or less was utilized to test the reliability of the regression model. T-statistics was used to test for the level of significance of association between performance and each of the explanatory variables.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter covers data analysis, results and discussion on the research.

4.2 Descriptive Statistics

The descriptive statistics' applied in the analysis include: mean, standard deviation, minimum and maximum.

Table 4.1: Descriptive Statistics

Descriptive Statistics	TDTA	TDTE	SIZE	GROWTH	ROA
Mean	0.5833	1.6209	16.8376	0.1171	0.0394
Standard Deviation	0.2743	10.8747	1.8970	0.1925	0.1075
Minimum	0.0457	-168.2807	12.4761	-0.2734	-0.5671
Maximum	1.7822	30.8421	20.2829	1.7084	0.3521

Source Data: Microsoft Excel Data Analysis Output

   a. Dependent Variable ROA

   b. Independent Variables: TDTA, TDTE and Control Variables S and G

The descriptive statistics tabulated above reveal that businesses operating in Kenya and are listed on NSE had their total debt to total assets' mean being 0.5833 and standard deviation of 0.2743.

The relatively lower standard deviation (0.2743) compared to the mean (0.5833) gives an indication of low disparity in data distribution. The maximum value of 1.7822 indicates that Uchumi Supermarket borrowed more debt compared to its assets in 2017. The minimum value of 0.0457 shows that Nairobi Securities Exchange Ltd used the lowest proportion of debt compared to its assets in 2017 among the listed firms under study.

Total debt to total equity of firms listed on the NSE under this study had an average of 1.6209 and a standard deviation of 10.8747. The fact that the standard deviation is comparably greater than the mean indicates that there is a high variation in data distribution. In addition, maximum value of 30.8421 indicates that Mumias Sugar Co. Ltd employed the highest debt level relative to equity in 2017. The minimum value of -168.2807 shows that Trans-Century Ltd employed the lowest debt relative to equity in 2017 compared to the other listed firms.

Furthermore, the descriptive statistical outputs indicate that, Natural logarithm of total assets had average of 16.8376 and standard deviation of 1.8970. The comparable low standard deviation to the mean implies that there is low disparity in data distribution. The minimum value of the Natural logarithm of total assets of 12.4761 shows that Limuru Tea Co. Ltd was the smallest in 2016 compared to the other listed firms under this study. The maximum value of the Natural logarithm of total assets of 20.2829 implies that KCB Group Ltd had the largest asset base in 2017 compared to other NSE listed firms under this study.

In addition, the listed companies posted mean growth of 0.1171 while the standard deviation of 0.1925 for the period spanning five years under this study. The relatively high standard deviation compared to the mean indicates that there is high disparity in data distribution. Kenol Kobil Ltd experienced the lowest growth of (-0.2734) in 2015 while Longhorn Publishers Ltd experienced the highest growth of 1.7084 in 2016 among the NSE listed companies in Kenya.

The research further reveals that NSE listed companies under this study had an average ROA, return on assets, of 0.0394 with standard deviation for 0.1075. Uchumi Supermarket Ltd had the lowest ROA of (-0.5671) while Rea Vipingo Plantations Ltd had the highest ROA of 0.3521 in 2016 among the listed firms in Kenya under this study.

4.3 Inferential Statistics

The research sought, in a descriptive manner, to determine effect of capital composition on the performance of companies operating in Kenya and are listed on NSE. The performance of the companies operating in Kenya and are listed on the NSE was obtained by computing ROA for the 92% of the companies whose published books of accounts for the study period (2013-2017) was readily available. The capital composition of the NSE listed companies was obtained by computing the debt ratios (TDTA and TDTE).

4.3.1 Correlation Analysis

The summary outputs for the correlation among the variables under this study is tabulated as below.

Table 4.2 Correlation Data Analysis Outputs

Variable(s)	TDTA	TDTE	SIZE	GROWTH	ROA
TDTA	1.0000				
TDTE	0.0512	1.0000			
SIZE	0.4507	0.1353	1.0000		
GROWTH	(0.0495)	0.0434	0.1100	1.0000	
ROA	(0.4563)	0.0945	0.0289	0.2226	1.0000

Source Data: Microsoft Excel Data Analysis Output

   a. Dependent Variable ROA

   b. Independent Variables: TDTA, TDTE and Control Variables S and G

Correlation analysis' that was performed between the explanatory and explained variables yielded mixed results. A strong negative correlation was observed amid ROA and TDTA.

 Moreover, the correlation results show that ROA has a weak positive relationship with Total Debt to Total Equity (TDTE), size and growth. Furthermore, the correlation results depict a perfect positive relationship between ROA and itself.

4.3.2 Multiple Linear Regression Analysis

The regression analysis' was performed on the data collected and below is the established multiple linear regression model:

ROA= -0.0868 – 0.2225**TDTA** + 0.0008**TDTE** + 0.0145**S** + 0.0909**G**

4.3.2.1 Reliability Tests

Table 4.3: Analysis of R and R^2 Statistics'

Multiple R	R Square	Adjusted R Square	Standard Error	Observations
0.5572	0.3105	0.3004	0.0899	280

Source Data: Microsoft Excel Data Analysis Output

   a. Dependent Variable ROA

   b. Independent Variables: TDTA, TDTE and Control Variables S and G

4.3.2.2 R and R^2 Statistics'

The multiple R explains the connection amid the dependent or predicted variable (ROA) and the explanatory variables (TDTA, TDTE, S & G). The research found R (0.5572) approaching + ve 1 indicating existence of strong positive relationship amid performance (ROA) and predictor variables'. The Adjusted R Squared (R^2) explains the variation in the ROA arising from changes in the explanatory variables.

From table above, the adjusted R Square (R^2) was 0.3105 meaning that 31.05% of the total variation in the performance (ROA) of the NSE listed companies is accounted for by the changes in the capital composition measured by the TDTA and TDTE while

68.95% is attributable to factors outside this study. As a result, the multiple regression models are deemed to exhibit a weak explanatory power.

4.3.2.3 F-Statistics and ANOVA

The F- Statistics is applied when analysing the significance of the overall multiple linear regression. The overall model is considered significant and hence reliable for making sound financial management decisions if the F statistics of individual variables is greater than its respective significance F.

Table 4.4: Analysis of F-Statistics

ANOVA					
	D f	**SS**	**MS**	**F**	**Significance F**
Regression	4	1.0006	0.2502	30.9568	0.0000
Residual	275	2.2223	0.0081		
Total	279	3.2229			

Source Data: Microsoft Excel Data Analysis Output

   a. Dependent Variable ROA

   b. Independent Variables: TDTA, TDTE and Control Variables S and G

From the table above, the F-statistics is greater than the significance F (30.9568 >0.0000) indicating that the overall multiple linear regression model is significant and hence reliable in making sound decisions regarding optimal capital composition choices.

4.3.2.4 T-Statistics

The t-statistics is applied to analyse the influences' of independent variables on the predicted variable on their own. The influence of predictor variables on their own on dependent variable is considered significant if their respective absolute values of t-statistics are bigger in value compared to the critical value for t-statistics (1.96) at 95% confidence level.

Table 4.5: Analysis of T-Statistics

Variable (s)	Coefficient (s)	Standard Error	t-Statistics	P-value	Lower 95%	Upper 95%
Intercept	(0.0868)	0.0498	(1.7427)	0.0825	(0.1849)	0.0113
TDTA	(0.2225)	0.0221	(10.0587)	0.0000	(0.2661)	(0.1790)
TDTE	0.0008	0.0005	1.6197	0.1064	(0.0002)	0.0018
SIZE	0.0145	0.0032	4.4776	0.0000	0.0081	0.0209
GROWTH	0.0909	0.0283	3.2095	0.0015	0.0351	0.1466

Source Data: Microsoft Excel Data Analysis Output

    a. Dependent Variable ROA

    b. Independent Variables: TDTA, TDTE and Control Variables S and G

From the table above, it is evident that TDTA, size and growth have significant influence on their own on ROA since their respective absolute t-statistics (10.0587, 4.4776 and 3.2095 respectively) are greater than the critical values of t-statistics, 1.96, at 5% significant level. On the other hand, the absolute t-statistics for TDTE (1.6197) is smaller than the worth of t-statistics, 1.96, at 5% significance level. This implies that TDTE has minimal influence on its own on ROA.

From the multiple regression results used to confirm the link amid TDTA, TDTE, and ROA, it is evident that there is a negative link amid TDTA and ROA. This indicates that an upward change in TDTA by 1 results into reduction of ROA by 22.25%. Further, an equivalent increase in TDTE, size and growth by 1% results into an increase in ROA by 0.08%, 1.45% and 9.09 % respectively.

4.4 Sector Analysis

4.4.1 Multiple Linear Regression Model Summaries for the Sectors

Table 4.6: Multiple Linear Regression Model Summaries

Sector(s)	Multiple Linear Regression models
Agriculture	**ROA**= -0.49 + 0.94 TDTA-0.5069 TDTE + 0.032**S** + 0.106**G**
Commercial	**ROA**= 0.35 - 0.46 **TDTA - ** 0.004 **TDTE** - 0.007 **S** + 0.002 **G**
Automobiles	**ROA** = 0.41 – 0.70 **TDTA** - 0.002 **TDTE** + 0.004 **S** + 0.16 **G**
Banking	**ROA**= 0.29 – 0.41 **TDTA** + 0.001 **TDTE** + 0.004 **S**+ 0.02 **G**
Insurance	**ROA**= 0.14 -0.16 **TDTA** - 0.002 **TDTE** + 0.0004 **S** + 0.09 **G**
Investment	**ROA**= 0.12 – 0.09 **TDTA** + 0.001 **TDTE** - 0.004 **S** + 0.14 **G**
Manufacturing	**ROA** = 0.22 – 0.08 **TDTA** - 0.01 **TDTE** - 0.004 **S** + 0.11 **G**
Construction	**ROA** = 0.12 - 0.16 **TDTA** - 0.04 **TDTE** + 0.001 **S** + 0.20 **G**
Energy & Petroleum	**ROA**= 0.34 + 0.13 **TDTA** - 0.02 **TDTE** - 0.02 **S** + 0.01 **G**
Telecommunication	**ROA** = -6.71 + 1.49 **TDTA** – 0.33 **TDTE** + 0.35 **S** – 0.55 **G**
Investment Services	**ROA** = 49.19 -0.5 **TDTA** + 0.83 **TDTE** - 3.35 **S** – 1.07 **G**

    a. Dependent Variable ROA

    b. Independent Variables: TDTA, TDTE and Control Variables S and G

4.4.2: Sectored Analysis of R and R^2

This section discusses, correlation coefficient, Multiple R, and coefficient of determination, R Squared, for various sectors under study.

Table 4.7: Analysis of R and R^2

Sector(s)	Multiple R	R Square	Observations
Agriculture	0.5179	0.2682	35
Commercial and Services	0.7860	0.6177	45
Automobiles and Accessories	1.0000	1.0000	5
Banking	0.5581	0.3115	55
Insurance	0.8702	0.7572	30
Investment Services Sector	1.0000	1.0000	5
Manufacturing and Allied	0.5408	0.2924	35
Construction and Allied	0.6119	0.3744	25
Energy and Petroleum	0.7717	0.5956	25
Investment Sector	0.7475	0.5484	15
Telecommunication Sector	1.0000	1.0000	5

    a. Dependent Variable ROA

    b. Independent Variables: TDTA, TDTE and Control Variables S and G

From the table above, the coefficient of multiple correlations for the insurance, agricultural, commercial & services, investments', manufacturing & allied, construction as well as energy & petroleum are close to one, implying that there is strong link amid ROA and TDTA & TDTE. However, this is opposite for the banking industry. The adjusted R Square (R^2) on the other hand are as given in the table above. This shows the given proportions of the total variation in the business performance of the sectoral firms listed on the NSE that are accounted for by the changes in TDTA and TDTE while the remaining proportions are changes in ROA attributable to factors outside this study. As a result, the multiple regression model is deemed to have high explanatory power hence reliable as a basis in making sound decision making regarding financial performance and capital composition.

4.4.3: ANOVA Analysis

Table 4.8: Sectored Analysis of ANOVA

Sector (s)	F- Stat	Significance F
Agriculture	2.7487	0.04644
Commercial and Services	16.1599	0.0000
Automobiles and Accessories	Not applicable	Not Applicable
Banking	5.6551	0.0008
Insurance	19.4945	0.0000
Investment	3.0354	0.0703
Manufacturing and Allied	3.0997	0.0300
Construction and Allied	2.9923	0.0436
Energy and Petroleum	7.36328	0.00081
Telecommunication	Not Applicable	Not Applicable
Investment Services	Not Applicable	Not Applicable

Source Data: Microsoft Excel Data Analysis Output

    a. Dependent Variable ROA

    b. Independent Variables: TDTA, TDTE and Control Variables S and G

From the table above, the F-statistics is greater than the significance for the 8 sectors indicating that the overall multiple linear regression models is significant and hence reliable in making sound decisions regarding effect of structure of capital on business firms' performance.

4.4.4: T-Statistics

The t-statistics was used to analyse effect of predictor variables' on the predicted variable on their own. The influence of predictor variables on their own on dependent variable is considered significant if their respective absolute values of t-statistics are greater compared to the critical value of t-statistics, (1.96), at 95% confidence level.

Table 4.9: Sectored Analysis of T-Statistics

Sector (s)	TDTA	TDTE	SIZE	GROWTH
			T-Statistics	
Agriculture	0.5798	(0.5211)	2.7514	1.2291
Automobiles and Accessories Sector	65535	65535	65535	65535
Banking Sector	(1.4451)	0.3365	0.9267	0.6693
Commercial and Services Sector	(7.6185)	(0.7928)	(0.6041)	0.0261
Construction and Allied Sector	(0.3494)	(0.4687)	0.0571	1.9608
Energy and Petroleum Sector	1.1708	(1.2958)	(4.4773)	0.5678
Insurance Sector	(2.9362)	(0.3884)	0.0589	2.6686
Investment Sector	(0.9177)	1.5932	(0.1845)	1.2567
Manufacturing and Allied Sector	(0.9971)	(2.0804)	(0.2563)	0.7543
Telecommunication and Technology	65535	65535	65535	65535
Investment Services Sector	65535	65535	65535	65535

Source Data: Microsoft Excel Data Analysis Output

   a. Dependent Variable ROA

   b. Independent Variables: TDTA, TDTE and Control Variables S and G

The t-statistics results show that, in commercial and services, insurance, investments services, telecommunication and technology, TDTA have a significant influence on their respective ROA since their absolute significant value are greater than the critical value of t (1.96) at 5% significance level. On the contrary, in agriculture, automobiles & accessories, banking, construction & allied, energy & petroleum, manufacturing & allied, TDTA have an insignificant influence on its own on the respective ROA because their absolute significant value are less than the critical value of t, (1.96), at 95% confidence level.

 In automobiles & accessories, manufacturing & allied, telecommunication & technology and investment Services' Sector, TDTE have a significant influence on their own ROA since their absolute significant value are greater than 1.96, the critical value of t-statistics at 95% confidence level. On the contrary, in agriculture, banking, construction & allied, energy & petroleum, insurance, investment, manufacturing & allied Sectors, TDTE have insignificant influence on its own on the respective ROA because their absolute significant values are less 1.96, the critical value of t-statistics at 95% confidence level.

In telecommunication & technology, investment services', energy & petroleum, agriculture, automobiles & accessories, sectors' size have significant influence on their own ROA since their absolute significant values are bigger than 1.96, the critical value for t-statistics at 5%, significance level.

However, in banking, commercial & services, construction & allied, insurance, investment, manufacturing & allied sectors, sectors' size exhibit insignificance on their own ROA since their absolute significant values are less compared to the 1.96 which is the critical value for t-statistics at 5%, significance level.

In automobiles & accessories, construction & allied, insurance, telecommunication & technology and investment services' sectors, sectors' growth have significant influence on their own ROA since their absolute significant values are greater than, the critical value for t (1.96), at 5% significance level. On the contrary, growth have insignificant influence in other sectors.

4.5 Discussion of Findings

From a statistical point of view, the research concludes that, substantial positive link exists amid ROA and TDTA & TDTE since the correlation coefficient (0.5572) approached + 1. This research revelation, is greatly aligned to, the findings of Fosu (2013) in research. Indeed, this finding is supported by the theory on capital composition as it gives an indication that capital composition associates very strongly with performance and as such, it drives performance.

Capital composition, represented by TDTA affects in a negative way the business' performance of business firms', listed on exchange, Nairobi Securities Exchange. This implies that the company chooses more debt relative to assets to fund its activities is likely to experience negative results in business and thus, caution must be exercised when choosing the funding option. This finding is consistent with the Siro (2013) and Kondongo (2013) who found an endearing negative link amid capital composition and business' performance. The research results are supported by the Trade-Off theory which invites management to be balancing amid taxation benefits emanating from debt funds and bankruptcy cost. Conversely, the statistical results show that TDTE effectively contributes positively the business performance indicated by ROA. This means capital composition, represented by TDTE should be preferred when funding business activities as it yields positive results on company performance.

The sectoral analysis revealed a strong positive link amid capital composition and performance for all the sectoral firms operating in Kenya's economy. For automobiles and accessories, telecommunication and investment services sectors, the study correlation revealed a perfect positive relationship subsisting capital composition and ROA. The regression results for the various sectors implied that significant changes in sectoral performance is attributed to changes in equity-debt choices. The findings on regression is backed by the theoretical framework on capital composition. For instance, the fact that the research findings projected a positive linkage subsisting amid capital composition and performance shows that capital composition impacts on performance and therefore there is need to pay attention to the ratio of equity and debt to be applied to the business to produce excellent and sustainable performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This part seeks to link and apply the study outcomes to help resolve and provide guidelines to real life misalignments regarding capital composition as duly described earlier in the problem statement. This chapter also expounded on the policy recommendations that decision makers can put into practice to better align their respective firm's capital raising techniques with the firms' financial performance. It is indeed evident that capital composition forms part of the criteria that firms use when making funding decisions as they know that it will end up impacting business performance.

5.2 Summary of Findings

The overriding objective of this rese work, was in a descriptive manner, determine the effect of capital composition on performance of business firms, listed on NSE. To attain this objective, research considered a population of all businesses listed on NSE. The business firms depicted the relevant characteristics for the study. Secondary data was used, and it was obtained from the published books of accounts for the respective firms contained in the NSE Handbook and the company websites. The research findings indicated an overall strong positive relationship (R=0.5572) amid the ROA and TDTA, TDTE, S, and G. The sectoral analysis revealed a strong positive relationship (R) amid ROA and TDTA, TDTE, S, and G for all the eleven sectors since their multiple R(s) were approaching + ve 1.

The research findings further revealed a moderate positive effect (R^2=0.3105) of capital composition on the performance. This meant that approximately 31.05% of the performance of NSE listed firms is explained by the firm's capital composition.

The sectoral findings revealed that the capital composition effect on performance was both strong and positive (R^2) for the investment services sector, telecommunication sector, investment sector, insurance sector, energy and petroleum sector commercial & services' sector, automobiles & accessories' sector. The study also revealed that capital composition had a moderate effect upon performance in agricultural sector, manufacturing sector, construction sector and banking sector.

From this study, at 5% significance level, it is evident that the variables produce significant values from the statistical lenses (since t-values are high i.e. $p < 0.05$). As such, when variables are duly combined, they can be used to describe capital composition effect on performance of listed businesses on NSE.

From the study findings, it would be appropriate to conclude that capital composition has a positive relationship (TDTE) and negative relationship (TDTA) with the performance (ROA) of business firms listed on the Nairobi Securities Exchange.

5.3 Conclusion

It was considered of utmost importance that when managers and finance directors for firms are trying to fund the firms' assets and operations to have both clear and concise understanding of effect of debt-equity structure on the performance of businesses they manage.

From the study findings, it was evident that debt financing relative to equity financing (TDTE) improved performance of business firms leading to the endorsement of more debt finance than equity. Therefore, business firms ought to be facilitated to access debt through issuance of debt instruments such as bonds and commercial papers.

If a company exhausts its equity financing and opts for debt financing, due diligence should be done to make sure assets financed by debt yield higher returns than the interest payment owed by the firm. Failure to do so would cause erosion of the reserves to repay the debt since the assets acquired won't be generating adequate returns to offset the debt. As such, the firm ought to choose the funding source with due care to avoid plunging into debt risk trap.

5.4 Limitations of the Study

This research paid much attention to the business firms listed on the Nairobi Securities Exchange and therefore, research findings from this research study cannot be used to generalize for all the business firms operating in Kenya. Furthermore, there are 65 listed business firms in Kenya but financial data for only 60 companies was available and therefore, the findings from this research study do not duly reflect all the listed firms.

The study also focused on the Kenya's market and as such, the research findings wouldn't be applicable to other business firms in other world markets.

The study focused on the endearing effect of capital composition on performance of business firms listed on the NSE for the definite period spanning 5 years from 2013 to 2017. This implies that the research findings would be limited to the study period and as such, the research findings may not apply for the period before this study period and the period after this study period.

The research study focused on both the overall and the sectoral analyses and therefore the findings may not apply to specific companies since each company has varying risk and asset structure. Each company has specific strategies that guide decision making.

The research study heavily dependent on the information derived from secondary sources to determine, effect of capital composition on the performance of business firms, listed on Nairobi Securities Exchange. The secondary Source Data was adopted due to its readiness of information necessary for this study. In this regard, the accuracy of the research findings greatly relied on the accuracy of the financial reports.

5.5 Suggestions for Further Studies

The study recommended that a comparable research to be undertaken to incorporate all the business firms operating in Kenya; both listed and non-listed to establish, effect of capital composition on performance of business firms operating in Kenya.

Furthermore, the analysis study should be extended to both regional and global markets with a view to, establish effect of capital composition on performance.

The study suggested that a further similar study be done in future incorporating more financial and accounting variables putting into consideration the macro-economic variables prevailing in the country. The study period should be extended beyond the 2013-2017 period which was the case in this study. This will inform trend analysis.

The research study focused on both the overall and the sectoral analyses and therefore the findings may not apply to specific companies since each company has varying risk and asset structure. The research study at the company level would give one an opportunity to appreciate the firm's competitive strategies that may be driving firm's performance.

The research study heavily dependent on the information derived from secondary sources to determine, effect of capital composition on the performance of business firms, listed on Nairobi Securities Exchange. The secondary Source Data was adopted due to its readiness of information necessary for this study. In this regard, the accuracy of the research findings greatly relied on the accuracy of the financial reports and as such, any inaccuracies in the financial reports may lead to managerial misjudgment.

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Appendices

Appendix 1: List of Business Firms, Listed on the NSE

1. **Agricultural Sector**

   1. Eaagads

   2. Kapchorua Tea

   3. Kakuzi

   4. Limuru Tea

   5. Rea Vipingo Plantations

   6. Sasini

   7. Williamson Tea Kenya

2. **Automobiles & Accessories**

   8. Car and General

3. **Banking**

   9. Barclays Bank

   10. Stanbic Holdings

   11. I&M Holdings

   12. Diamond Trust Bank Kenya

   13. HF Group

   14. KCB Group Ltd

   15. National Bank of Kenya

   16. NIC Group PLC

   17. Standard Chartered Bank Ltd

   18. Equity Group Holdings

   19. Co-operative Bank

4. **Commercial & Services**

    20. Express

    21. Sameer Africa

    22. Kenya Airways

    23. Nation Media Group

    24. Standard Group

    25. TPS Eastern Africa

    26. Scangroup

    27. Uchumi Supermarket

    28. Longhorn Publishers

    29. Atlas Development and Support Services

    30. Deacons

    31. Nairobi Business Ventures Ltd

5. **Construction & Allied**

    32. Athi River Mining

    33. Bamburi Cement

    34. Crown Paints Kenya

    35. E.A.Cables

    36. E.A.Portland Cement

6. **Energy & Petroleum**

    37. Kenol Kobil

    38. Total Kenya

    39. KenGen

40. Kenya Power & Lighting

41. Umeme Ltd

7. Insurance

42. Jubilee Holdings

43. Sanlam Kenya

44. Kenya Re-Insurance Corporation

45. Liberty Kenya Holdings

46. Britam Holdings

47. CIC Insurance Group

8. Investment

48. Olympia Capital Holdings

49. Centum Investment

50. Trans-Century

51. Home Afrika

52. Kurwitu Ventures

9. Investment Services

53. Nairobi Securities Exchange

10. Manufacturing & Allied Sector

54. B.O.C Kenya

55. British American Tobacco

56. Carbacid Investments

57. East African Breweries

58. Mumias Sugar

59. Unga Group

60. Eveready East Africa

61. Kenya Orchards

62. Flame Tree Group Holdings

11. Telecommunication & Technology

63. Safaricom

12. Real Estate Investment Trust

64. Stanlib Fahari

13. Exchange Traded Fund

65. New Gold Issuer