

**THE RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND FINANCIAL
PERFORMANCE OF FIRMS LISTED AT NAIROBI SECURITIES EXCHANGE**

JARED AMENYA

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT FOR THE
AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION,
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.**

NOVEMBER 2015

DECLARATION

This research project is my original work, as far as I am aware it has never been submitted to any university or other institution of higher learning for the award of a degree or any other academic award.

Jared Amenya

D61/64704/2013

Signature.....

Date

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

Herick Ondigo

Lecturer, Department of Finance and Accounting

University of Nairobi, School of Business

Signature.....

Date

ACKNOWLEDGEMENTS

First and foremost I thank God for all His glory in guiding me throughout the project. Special thanks go to my University supervisor Mr. Herick Ondigo for his guidance, wisdom and support.

I would also like to acknowledge the encouragement from my colleague Mr. Sylvester Ndeto and my MBA classmates, friends and relatives whose remarkable devotions and dedication throughout the project work was incredible. May God bless the work of your hands and Lastly, I thank my family for their patience and encouragement as I toiled long hours toward accomplishing this piece of work.

My special thanks also go to management of Nairobi Securities exchange for their tireless effort to ensure that data is readily available and easy to access. I further thank scholars whose work I have used and depended on during the course of my research.

DEDICATION

This project is dedicated to my loving parents Mr. Richard Omenya and Mrs. Joyce Monyangi Omenya for the support I received from them both spiritual, emotional and financial support tirelessly in my education ever since primary level up to university level. May the Almighty God bless them abundantly

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENTS	iii
DEDICATION	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
ABSTRACT	xi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Capital Structure	2
1.1.2 Financial Performance	3
1.1.3 Capital Structure and Financial Performance	3
1.1.4 Nairobi Securities Exchange	4
1.2 Research Problem	5
1.3 Research Objective	7
1.4. Value of the Study	7
CHAPTER TWO	8
LITERATURE REVIEW	8
2.1 Introduction.....	8
2.2 Theoretical Review	8
2.2.1 Modigliani-Miller Propositions	8
2.2.2 Trade-off theory of Capital Structure	9
2.2.3 Pecking Order Theory	11
2.3 Determinants of Capital Structure	12
2.3.1 Leverage or Trading on Equity.....	12
2.3.2 Growth Opportunities	12
2.3.3 Dividend Payout	13

2.3.4 Size of the Firm	13
2.3.5 Period of Financing	14
2.3.6 Degree of Control	14
2.3.7 Choice of Investors	14
2.3.8 Capital Market Condition	14
2.3.9 Flexibility of Financial Plan	15
2.4 Empirical Evidence	15
2.4.1 International Empirical Evidence	15
2.4.2 Local Empirical Evidence	18
2.5 Summary of Literature Review	20
CHAPTER THREE	22
RESEARCH METHODOLOGY	22
3.1 Introduction	22
3.2 Research Design	22
3.3 Population	22
3.4 Sample and Sampling Technique	23
3.5 Data Collection	23
3.6 Data Analysis	23
3.6.1 Analytical Model	23
3.6.2 Test of Significance	24
CHAPTER FOUR	25
DATA ANALYSIS, FINDINGS AND INTERPRETATION	25
4.1 Introduction	25
4.2 Response Rate	25
4.3 Data Validity	26
4.4 Descriptive Statistics	26
4.4.1 A Trend Analysis for Firm Performance	26
4.4.2 A Trend Analysis for Debt Ratio	27
4.4.3 A Trend Analysis for Growth Opportunity	28
4.4.4 A Trend Analysis for Dividend Payout Ratio	29
4.5 Inferential Statistics	30

4.5.1 Correlation	31
4.5.2 Regression Analysis	31
4.5.3 Analysis Of Variance.....	33
4.6 Interpretation of the Findings.....	34
CHAPTER FIVE	36
SUMMARY, CONCLUSION AND RECOMMENDATIONS	36
5.1 Introduction.....	36
5.2 Summary	36
5.3 Conclusion	37
5.4 Recommendations for Policy.....	38
5.5 Limitations of the Study.....	39
5.6 Suggestions for Further Research	40
REFERENCES.....	41
APPENDICES.....	45
Appendix I: Letter of Introduction	45
Appendix II: List of Companies listed at Nairobi Securities Exchange as 10 th July 2015....	46
Appendix III: Sample list of firms that were used in the study	49

LIST OF TABLES

Table 4.1 Descriptive Statistics.....	30
Table 4.2 Correlation Matrix	31
Table 4.3: Regression Analysis.....	32
Table 4.4 Analysis of Variance (ANOVA).....	33
Table 4.5 Regression Coefficients	33

LIST OF FIGURES

Figure 4.1 Response Rate	25
Figure 4.2: ROE	26
Figure 4.3: Leverage	27
Figure 4.4: Price/Earning Ratio	28
Figure 4.5: Dividend Payout Ratio	29

LIST OF ABBREVIATIONS

ANOVA	Analysis Of Variance
DPR	Dividend Payout Ratio
EPS	Earnings per Share
R and D	Research and Development
ROA	Return on Assets
ROE	Return on Equity
SMSE	Small and Medium size Enterprises
STDAR	Short Term Debt Asset Ratio
TA	Total Assets
TCE	Transaction Cost Economics
TDE	Total Debt to Equity

ABSTRACT

The financing or capital structure decision is significant managerial decision. Locating the optimal capital structure has for a long time been a focus of attention in many academic and financial institutions that probes into this area. This is comprehensible as there is a lot of money to be made by advising firms on how to improve their capital structure. Defining the optimal capital structure is a critical decision. This decision is important not only because of the impact such a decision has on an organization's ability to deal with its competitive environment. The objective of this study was to determine the relationship between capital structure and financial performance of listed firms at Nairobi securities exchange for six year period i.e 2008-2013. The population of the study was all the 61 firms listed at the NSE but the study narrowed to a sample of 26 firms using the random selection sampling technique. The study used secondary data and descriptive research design was employed to achieve the objectives of the study. From the regression results obtained adjusted R square was 0.542 an indication that there was variation of 54.2% on financial performance of firms listed in the NSE due to changes in the independent variables which are capital structure, dividend payout ratio and growth opportunity at 95% confidence interval. It was also established that all the variables were significant as their significance value was less than 0.05. The three independent variables were correlated with profitability of firms listed at the Nairobi Securities Exchange. With growth opportunity and dividend payout ratio having a positive correlation but leverage has a negative correlation. The study concluded that increased financial leverage has a negative effect on firm performance as measured by ROE of companies listed in the NSE, Kenya. The higher the total debt, the less the return on equity as well as reduced shareholders wealth which indicates a need to increase more capital injection rather than borrowing. The study therefore recommends that corporate managers should reduce financial leverage in order to enhance firm performance. In addition the government should regulate the financial sector through various monetary and fiscal policies in order to reduce the cost of borrowing given that many companies rely on external borrowing to finance their cash requirements. Lowly geared firms perform better than their counterparts that are highly geared. It is also important for finance officers of the firms when seeking to fund the firm's assets to understand the impact of capital structure on their organization's financial performance as well the cost of funds.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A firm basic resource is the stream of cash flows produced by its assets. When the firm is financed entirely by common stock, all of those cash flows belong to the stockholders. When it issues both debt and equity securities, it undertakes to split up the cash flows into two streams, a relatively safe stream that goes to the debt-holders and a more risky one that goes to the stockholders (Erasmus, 2008).

According to Pandey (2005), Capital structure refers to the way in which an organization is financed a combination of long term capital (ordinary shares and reserves, preference shares, debentures, bank loans, convertible loan stock and so on) and short term liabilities such as a bank overdraft and trade creditors. A firm's capital structure is then the composition or 'structure' of its liabilities.

One of the most important issues in corporate finance is responding “how do firms choose their capital structure?” Locating the optimal capital structure has for a long time been a focus of attention in many academic and financial institutions that probes into this area. This is comprehensible as there is a lot of money to be made by advising firms on how to improve their capital structure. Defining the optimal capital structure is a critical decision. This decision is important not only because of the impact such a decision has on an organization’s ability to deal with its competitive environment (Borigham and Gapenski,1996).

The financing or capital structure decision is significant managerial decision, as it influences the shareholder return and risk. The market of the share also be affected by the capital structure decision. The company has to plan its capital structure initially at the time of its promotion. Subsequently, whether the funds have to be raised, a capital structure decision is involved. A demand for raising funds generates a new capital structure which needs a critical analysis (Ruzben, 1963).

1.1.1 Capital Structure

Brockington(1990), described capital structure of a firm as the components of its sources of financing, broadly categorized as equity and debt finance. Equity finance is that finance provided by the owners of the business and it is the risk bearing finance. Equity finance holders own a portion of the firm denominated in shares and they are entitled to a part of the profit of a business, referred to as a dividend. It is however, not mandatory to pay a dividend all the time as the company may retain the profits for financing expansion of its operations. Equity owners also share in the risks of the business and are the last to benefit when a business is wound up after debt holders have been paid.

Debt finance, on the other hand, is finance generated through borrowing from external sources such as banks or from issues of bonds, all of which attract a fixed return. Debt may be short term, repayable over periods shorter than one year, or long term, repayable over periods longer than one year. The lender does not gain a control of the business, but is paid a specified cost for the use of his funds, called interest. The borrower has a contractual obligation to pay the interest and to repay the principal when due, regardless of the performance or profitability of the business.

(Brockington, 1990)

1.1.2 Financial Performance

According to Erasmus (2008), Financial performance is a subjective measure of how well a firm can use its' assets from its' primary business to generate revenues. This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. Erasmus also noted that financial performance measures like profitability and liquidity among others provided a valuable tool to stakeholders to evaluate the past financial performance and the current position of a firm.

According to Madhyam (2010), some of the measures of financial performance are abbreviated as CAMELS (Capital,adequacy,Assest quality, management, Earning, Equity, Liquidity and sensitivity analysis) which guides the banking sector to establish their financial soundness. The activities undertaken by in mobile banking contribute to the financial soundness of the commercial banks in kenya.Some external enviromental factors can cause bank failures such as;deregulation,lack of information among customers,similar services offered by many banks,therefore the commercial banks have to be innovative and embrace technology to enable them offer diversified products attractive to the customers.

1.1.3 Capital Structure and Financial Performance

Borigham and Gapenski (1996) argue that an optimal capital structure can be attained if there exist a tax sheltering benefits provided that an increase in debt level is equal to the bankruptcy costs. They suggest that managers of a firm should be able to identify when the optimal capital structure is attained and try to maintain it at that level. This is the point at which the financing costs and cost of capital are minimized, thereby increasing firm value and performance.

Berger and Patti (2006) concluded that more efficient firms were more likely to earn a higher return from a given capital structure, and that higher returns can act as a cushion against portfolio risk so that more efficient firms are in a better position to substitute equity for debt in their capital structure. This is an incidental of the trade-off theory of capital structure where differences in efficiency enable firms to alter their optimal capital structure either upward or downwards.

1.1.4 Nairobi Securities Exchange

The NSE was established in 1954 as an overseas stock exchange. Prior to that, the NSE traded as an informal market with no rules and guidelines to govern trading activity. At the time of establishment, the NSE had no physical trading floor and transactions were carried out in a coffee-house forum over telephone and prices were determined through negotiation. The NSE used a periodic auction trading system for transacting. Over the past decade, the securities exchange has witnessed numerous changes, automating its trading in September 2006 and in 2007 making it possible for stockbrokers to trade remotely from their offices, doing away with the need for dealers to be physically present on the trading floor (Ngugi, 2003).

NSE is mandated to list companies on the securities exchange and enable investors to trade in securities of companies thus it is charged with the health of securities exchange. The NSE also helps mobilize domestic savings, thus reallocation of financial resources from dormant to active agents. It is regulated by Capital Markets Authority. In Kenya, there are currently sixty one companies listed in the Nairobi Securities Exchange, which is the only stock exchange firm in the country. Listed companies fall into two main segments, that is, the main market segment and

the alternative investment market segment. The Nairobi Securities Exchange has classified these companies into eleven sectors (NSE, 2014).

1.2 Research Problem

Empirical researches conducted to see the effect of capital structure on financial performance first includes the historical work of Modigliani and Miller (1963) modified an earlier capital structure irrelevance theory in which they argued that capital structure really does matter in determining the value of a firm. The theory was based on the argument that the use of debt offers a tax shield. Based on this assertion, firms could opt for an all-debt capital structure. Brigham and Gapenski (1996), however, contend that the Miller-Modigliani (MM) model is true only in theory, because in practice, bankruptcy costs exist and will even increase when equity is traded off for debt.

In an effort to validate MM theory in Kenya, Maina and Kondongo (2013) investigated the effect of debt-equity ratio performance of firms listed at the Nairobi Securities exchange. A census of all firms listed at the Nairobi Security Exchange from year 2002-2011 was the sample. The study found a significant negative relationship between capital structure (DE) and all measures of performance. These results collaborates MM theory that indeed capital structure is relevant in determining the performance of a firm. The study further found that firms listed at NSE used more short-term debts than long term.

Mohammadzadeh (2011), studied firms listed on Tehran Stock Exchange and found that firms' performance which is measured by Earning per Share and Return on Assets are negatively related to capital structure. These findings are consistent to Zeitun and Tian (2007) and Abor

(2007) who indicate firm performance is negatively related to capital structure while it's not consistent with findings of Berger and Udell (2006) who revealed a positive relation between firm performance and capital structure.

Munene (2006), examined the impact of capital structure on profitability of companies listed on the Nairobi Securities exchange during the five years 1999 - 2004. The researcher revealed that there is a weak relationship between capital structure and profitability of firms quoted at the Nairobi Securities exchange. The study also established that the firms listed on Nairobi Securities Exchange during this period relied more on external financing rather than retained earnings.

The results of empirical literature on the relationship between capital structure and performance are contradictory which justifies further research. Further many of the reported studies on the relationship between financial leverage and performance have been conducted in developed countries where capital markets are well-developed. The Kenyan capital market is relatively under developed and therefore the traditional capital structure theories that have their origin in the developed countries needed to be tested in the Kenyan context.

Despite the inconsistencies in findings of both locally and international studies, Kenya has recently been faced with a serious terrorist attacks which have negatively affected the Kenyan economy, This has prevented potential investors from making new capital investment as they are unsure of the economic implications of the attacks and thus overlook Kenya for more stable economies.

According to The Standard newspaper (24th July 2015), data released by the Kenya National Bureau of Statistics (KNBS) in its Economic Survey 2015, the tourism sector in Kenya has obviously been a casualty with travel advisories discouraging foreign nationals from travelling to the country. The economy grew by 5.3 per cent last year, a dip from the 5.7 per cent recorded in 2013, after the country took a hit from a decline in tourism earnings and a sluggish manufacturing sector which was the worst economic growth recorded in the last five years

Taking into consideration the above factors, this study seeks to find out the relationship between capital structure and financial performance of firms listed at Nairobi Securities Exchange.

1.3 Research Objective

To investigate the relationship between capital structure and financial performance of listed firms at Nairobi securities exchange

1.4. Value of the Study

The findings from the study will enlighten the business community in knowing the role that capital structure has in determining financial performance and on the other hand it will enlighten scholars on the importance of the capital structure to any business and will highlight areas for further research.

To managers, the study will help them to know how to optimize the firm's capital structure and to control it in order to have positive results thus helping firms to gain a competitive advantage over their competitors. It will also help future researchers to establish the relationship between capital structure and financial performance of firms and also assist training institutions enrich the courses they offer.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The first section of this chapter covers the theories of capital structure, the second section covers the determinants of capital structure and the third section covers the empirical studies.

2.2 Theoretical review

The theories covered in this section are Modigliani-Miller Propositions (1963), Trade-off theory and Pecking order theory.

2.2.1 Modigliani-Miller Propositions

Modigliani and Miller (1963) modified an earlier capital structure irrelevance theory in which they argued that capital structure really does matter in determining the value of a firm. The theory was based on the argument that the use of debt offers a tax shield. Based on this assertion, firms could opt for an all-debt capital structure. Brigham and Gapenski (1996), however, contend that the MM model is true only in theory, because in practice, bankruptcy costs exist and will even increase when equity is traded off for debt. They agreed that the value of the firm will increase or the cost of capital will decrease with the use of debt due to tax deductibility of interest charges. Thus, the value of corporation can be achieved by maximizing debt component in the capital structure.

This theory of capital structure for the study provided an important and analytical framework. According to this approach, value of a firm is $v_l = v_u = \frac{EBIT(1-t)}{r_e + t_d}$ where t_d is tax savings. Modigliani-Miller Proposition II is assuming that the tax shield effect of each is the

same, and continued in sight. Leverage firms are increased in interest expense due to reduced tax liability, has also increased the allocation to the shareholders and creditors of the cash flow. The above formula can be deduced from the company debt the more the greater the tax saving benefits, the greater the value of the company.

The revised capital structure of the Modigliani-Miller Proposition II, pointed out that the existence of tax shield in a perfect capital market conditions cannot be reached, in an imperfect financial market, the capital structure changes will affect the company's value. Therefore, the value and cost of capital of corporation with the capital structure changes in different leverage, the value of the levered firm will exceed the value of the unlevered firm. MM Proposition theory suggests that the higher the debt ratio is more favorable to corporate, but though borrowing adds an interest tax shield it may lead to costs of financial distress. Financial distress occurs when promises to creditors are broken or honored with difficulty. Financial distress may lead to bankruptcy.

2.2.2 Trade-off theory of Capital Structure

According to Myers (1984), a firm that follows the trade-off theory sets a target debt to value ratio and then gradually moves towards the target. The target is determined by balancing the tax benefits of using debt against costs of financial distress that rise at an increasing rate with the use of leverage. It also predicts moderate amount of debt as optimal. But there is evidence that the most profitable firm in an industry tend to borrow the least, while their probability of entering in financial distress seems to be very low. This fact contradicts the theory because if the distress risk is low, an increase of debt has a favorable tax effect. Under the trade-off theory, high profits should mean more debt-servicing capacity and more taxable income to shield and therefore

should result in a higher debt ratio. This idea has been developed in many papers, including Brennan and Schwartz (1978), DeAngelo and Masulis (1980) and Bradley, Jarrell and Kim (1984).

However, it has been questioned by many others, including Miller (1977) who argue that the Static Trade-off model implies that many firms should be more highly levered than they really are, as the tax savings of debt seem large while the costs of financial distress seem minor. A few such studies have since appeared, although some relate in part to financing tactics, and none gives conclusive support for the trade-off theory. For example, Mackie-Mason (1990) estimated a profit model for companies issuing debt or equity securities. He predicted that companies with low marginal tax rates—for example companies with tax loss carry-forwards—would be more likely to issue equity, compared to more profitable companies facing the full statutory tax rate. This was clearly true in his sample.

The results of Mackie-Mason (1990) are consistent with the trade-off theory, because it shows that taxpaying firms favor debt. But it is also consistent with a Miller (1977) equilibrium in which the value of corporate interest tax shields is entirely offset by the low effective tax rate on capital gains. In this case, a firm facing a low enough tax rate would also use equity, because investors pay more taxes on debt interest than on equity income. Thus, we cannot conclude from Mackie-Mason's results that interest tax shields make a significant contribution to the market value of the firm or that debt ratios are determined by the tradeoff theory.

2.2.3 Pecking Order Theory

In their pioneering work, Myers and Majluf (1984) showed that, if investors are less well-informed than current firm insiders about the value of the firm's assets, then equity may be mispriced by the market. If firms are required to finance new projects by issuing equity, underpricing may be so severe that new investors capture more than the NPV of the new project, resulting in a net loss to existing shareholders. In this case the project will be rejected even if its NPV is positive. This underinvestment can be avoided if the firm can finance the new project using a security that is not so severely undervalued by the market. For example, internal funds and/or riskless debt involve no undervaluation, and, therefore, will be preferred to equity by firms in this situation.

Myers (1984), refers to this as a pecking order theory of financing, i.e., that capital structure will be driven by firms' desire to finance new investments, first internally, then with low-risk debt, and finally with equity only as a last resort. The study presents a pecking order theory of financing choice. The defining prediction of the model is that firms will not have an optimal capital structure, but will instead follow a pecking order of incremental financing choice that places internally generated funds at the top of the order, followed by debt, and finally, when the firm reaches its debt capacity.

This theory is based upon costs derived from asymmetric information between managers and the market and the assumption that trade-off theory costs and benefits of debt financing are of second-order importance when compared to the costs of issuing new securities in the presence of asymmetric information. The development of a pecking order based upon costs of adverse

selection requires an adhoc specification of the manager's incentive contract and some limitation on the types of financing strategies that maybe pursued, Brennan and Kraus (1987).

2.3 Determinants of Capital Structure

Among factors that may be instrumental in affecting the capital structure decision of a firm include the following:

2.3.1 Leverage or Trading on Equity

According to Titman and Wessels (1988), the use of fixed cost in production process also affects the capital structure. The high operating leverage-use of higher proportion of fixed cost in the total costs over a period of time-can magnify the variability in future earnings. Both the bankruptcy cost theory and agency cost theory suggest the negative relation between operating leverage and debt level in capital structure. The bankruptcy cost theory contends the higher operating leverage, the greater the chance of business failure and the greater will be the weight of bankruptcy costs on enterprise financing decisions. Similarly, as the probability of bankruptcy increases, the agency problems related to debt become more aggravating. Thus, these theories suggest that as operating leverage increases, the debt level in capital structure of the enterprises should decrease.

2.3.2 Growth Opportunities

The higher the growth opportunities, the more the need for funds to finance expansion, and the more likely the firm is to retain earnings than pay them as dividends. Firms tend to use internal funding sources to finance investment projects if it had large growth opportunities and large investment projects. Such a firm chooses to cut, or pay fewer dividends, to reduce its dependence

on costly external financing. Firms with slow growth and fewer investment opportunities pay higher dividends to prevent managers from over-investing company cash. As such, a dividend here would play an incentive role, by removing resources from the firm and decreasing the agency costs of free cash flows, Titman and Wessels (1988),

2.3.3 Dividend Payout

The bankruptcy costs theory pleads for adverse relation between the dividend payout ratio and debt level in capital structure. The low dividend payout ratio means increase in the equity base for debt capital and low probability of going into liquidation. As a result of low probability of bankruptcy, the bankruptcy cost is low. According to the bankruptcy cost theory, the low bankruptcy cost implies the high level of debt in the capital structure. But the pecking order theory shows the positive relation between debt level and dividend payout ratio.

According to this theory, management prefers the internal financing to external one. Instead of distributing the high dividend, and meeting the financial need from debt capital, management retains the earnings. Hence, the lower dividend payout ratio means the lower level of debt in capital structure, Titman and Wessels (1988).

2.3.4 Size of the Firm

According to Titman and Wessels (1988), Small size business firms' capital structure generally consists of loans from banks and retained profits. While on the other hand, big companies having goodwill, stability and an established profit can easily go for issuance of shares and debentures as well as loans and borrowings from financial institutions. The bigger the size, the wider is total capitalization.

2.3.5 Period of Financing

The duration of financing is also another determining factor. When a company wants to raise finance for short period, it goes for loans from banks and other institutions; while for long period it goes for issue of shares and debentures, Titman and Wessels (1988).

2.3.6 Degree of Control

The degree of control that ordinary shareholders want to have is another factor that will influence its capital structure. Ordinary shareholders have got maximum voting rights in a concern as compared to the preference shareholders and debenture holders. Preference shareholders have reasonably less voting rights while debenture holders have no voting rights. If the ordinary shareholders want to retain control of the company, they will prefer floating of debentures to raise additional capital to floating of ordinary shares, Titman and Wessels (1988).

2.3.7 Choice of Investors

The Company's policy generally is to have different categories of investors for securities. Therefore, a capital structure should give enough choice to all kinds of investors to invest. Bold and adventurous investors generally go for equity shares and while conscious investors prefer a mix of loans and debentures, Titman and Wessels (1988).

2.3.8 Capital Market Condition

During economic depression, the company's capital structure generally consists of debentures and loans. While in period of boons and inflation, the company's capital should consist of mainly equity share capital as debt becomes expensive due to high interest rates, Titman and Wessels, (1988).

2.3.9 Flexibility of Financial Plan

The level of flexibility desired in altering the financial plans of a company will determine how much debt or equity it will hold to allow for contractions as well as relaxation in financial plans as and when necessary. Debentures and loans can be refunded back as the time requires. On the other hand equity capital cannot be refunded at any point which provides rigidity to plans. Therefore, in order to make the capital structure possible, the company should go for issue of debentures and other loans, Titman and Wessels (1988).

2.4 Empirical Evidence

This section covers both the international and local empirical studies.

2.4.1 International Empirical Evidence

Titman and Wessels (2008), analyses the explanatory power of some of the recent theories of optimal capital structure and extended empirical work on capital structure theory. It examines a much broader set of capital structure theories, implications in regard to different types of debt instruments, the authors analyze measures of short-term, long-term, and convertible debt rather than an aggregate measure of total debt and uses a factor-analytic technique that mitigates the measurement problems encountered when working with proxy variables. The results also indicate that transaction costs may be an important determinant of capital structure choice. Short-term debt ratios were shown to be negatively related to firm size, possibly reflecting the relatively high transaction costs small firms face when issuing long-term financial instruments. Since transaction costs are generally assumed to be small relative to other determinants of capital structure, their importance in this study suggests that the various leverage-related costs and benefits may not be particularly significant. In this sense, although the results suggest that capital structures are chosen systematically, they are in line with

Miller's argument that the costs and benefits associated with this decision are small. Additional evidence relating to the importance of transaction costs is provided by the negative relation between measures of past profitability and current debt levels scaled by the market value of equity.

Manawaduge et al. (2010) examined the implications of capital structure of corporate entities in an emerging market, Sri Lanka. The study used panel data regression analysis for a sample of one hundred and seventy one companies. The results demonstrate that most of the Sri Lankan firms finance their operations with short-term debt capital as against the long-term debt capital. It provides strong evidence to indicate that debt capital has a negative impact on firm performance. The study also found a significant negative relationship between tangibility and performance indicating inefficient utilization of non-current assets. The negative performance implications associated with over-utilization of short-term debts and the under-utilization non-current assets provide corporate managers with useful policy direction on appropriate capital structure and operational decisions.

Irfan (2011), investigated capital structure of 436 non-financial firms registered on Karachi Stock Exchange (Pakistan) from 2003 to 2008 to find which independent variables determine the capital structure of Pakistani firms. He found statistically significant coefficients for profitability, size, tangibility, growth, dividend and inflation. The negative relationships between profitability and leverage; positive relationships between growth and long term debt and dividend and total debt of firms confirm the presence of pecking order theory in determining the financing behavior of Pakistani firms. The strong positive relationships between tangibility and leverage and size and leverage support the theoretical predictions of trade-off theory. The positive relationship between expected future inflation and current borrowing supports market timing theory. The

research finds significant change in financing behavior of firms across industries. We also tend to find that the theories of capital structure explain the financing behavior of Pakistani firms.

Samuel, Ebenezer, Emire and Xicang (2012) did a study that sought to provide evidence on the impact of capital structure on a firm's value. The analysis was implemented on all the 34 companies quoted on the Ghana Stock Exchange for the year ended 31st December 2010. The ordinary least squares method of regression was employed in carrying out this analysis. The result of the study reveals that in an emerging economy like Ghana, equity capital as a component of capital structure is relevant to the value of a firm, and Long-term-debt was also found to be the major determinant of a firm's value. From the findings of this study, corporate financial decision makers are advised to employ more of long term debt than equity capital in financing their operations since it impacts more on a firm's value.

Akinyomi and Olagunju (2013) in ascertaining the determinants of capital structure of firms in Nigeria employed a descriptive survey research design with the population comprising of 86 manufacturing firms listed in the Nigerian Stock Exchange, out of which a sample size of 24 was obtained. The study analyzed the data using correlation coefficient and regression analysis pertaining to a ten year-period of 2003-2012 that amounted to 240 firm-year observations. The results of the study revealed that leverage had a negative relationship with firm size and tax on one hand and a positive relationship with tangibility of assets, profitability and growth on the other hand. However, only with tangibility of assets and tax that significant relationship was established. Furthermore, a significant relationship was established between tangibility of assets and size, tax and size, tangibility of assets and tax, tangibility of assets and growth, and finally between tax and growth in Nigeria.

O'Brien, David, Yoshikawa and Delios (2013) conducted a study to determine how capital structure influences diversification performance on Japanese firms from the transaction cost economics perspective. The analysis was implemented on all the firms listed in the Pacific-Basin Capital Markets Japan database that had market value information available from 1991 to 2001 with a book value of equity of more than 3 billion Yen. They analyzed data using the Hausman-Taylor instrumental variables (IV) regression model. Their empirical tests support TCE by showing that firms accrue higher returns from leveraging their resources and capabilities into new markets when managers are shielded from the rigors of the market governance of debt, particularly bond debt. The study also found that the detrimental effects of debt are exacerbated for RandD intensive firms and that debt is not necessarily harmful to firms that are either contracting or managing a stable portfolio of markets.

2.4.2 Local Empirical Evidence

Nyaboga (2008), did a study to establish the relationship between capital structure and agency cost for companies listed at the NSE. The findings indicated mixed results. Overall, a weak relationship existed between capital structure and agency cost of firms at NSE. On the other hand high growth firms indicated strong relationship between debt and efficiency ratios but very weak relationship in asset utilization.

Kaumbuthu (2011), carried out a study to determine the relationship between capital structure and return on equity for industrial and allied sectors in the Nairobi Securities Exchange during the period 2004 to 2008. Capital structure was proxied by debt equity ratio while performance focused on return on equity. The study applied regression analysis and found a negative relationship between debt equity ratio and ROE. The study focused on only one sector of the

companies listed in Nairobi Securities Exchange and paid attention to only one aspect of financing decisions.

Okoth and Gemechu (2013), showed that capital adequacy, asset quality and management efficiency significantly affect the performance of commercial banks in Kenya. However, the effect of liquidity on the performance of commercial banks is not strong. The relationship between bank performance and capital adequacy and management efficiency was found to be positive and for asset quality the relationship was negative. The study used linear multiple regression model and Generalized Least Square on panel data to estimate the parameters. The findings showed that bank specific factors significantly affect the performance of commercial banks in Kenya, except for liquidity variable. Thus, it can be concluded that the financial performance of commercial banks in Kenya is driven mainly by board and management decisions, while macroeconomic factors have insignificant contribution.

Maniagi et al. (2013) in the study of the relationship between a firm's capital structure and performance among a sample of 30 companies listed on NSE whose data for 5 yrs period 2007-2011, concluded that firms listed on NSE have adopted pecking order hypothesis due to undeveloped debt market and the restrictive covenants associated with long term debt, this makes long term debts expensive hence making firms borrow less. Most firms prefer to finance their activities by using short term debt. From the results the total assets was positively correlated to capital structure proxies which was significant. This indicates that long term debts was utilized by large firms that had large assets which could be used to act as collateral for securing the loans.

Kibet .B, Neddy .S, Irene .K. and John. K. (2013), carried out a study to investigate the relationship between capital structure and share prices based on the Energy listed firms on

Nairobi Stock Exchange (NSE). The study assessed effect of debt, equity and gearing ratio on share price. The study used a panel data pertaining to energy sector over the period 2006-2011 and employed multiple regression method. The findings indicated that the variables debt, equity and gearing ratio are significant determinants of share prices for the sector under consideration. Further, gearing ratio and debt were found to positively affecting share prices, while equity negatively affected share prices.

2.5 Summary of Literature Review

Various theories have been put forward by researchers to justify the existence of optimal capital structure of a firm. It is in fact a puzzle. The theories have been developed to try to unearth the financing preferences that managers may have in selecting a particular capital structure, Abor (2007).

The trade-off theory suggests that taxation and deadweight bankruptcy costs are important for the capital structure. The pecking order theory developed by Myers (1984), suggests that the financing order of firms, such as retained earnings, debt, and then equity, are important for the corporate capital structure. Further, the recent notion of the market timing hypothesis suggests that the timing of corporate financing based on the capital market conditions is the key for the capital structure. Also, Modigliani Miller theory suggests that the free cash flow problems and being disciplined by debts are important for the corporate capital structure.

There have also been difference in findings concerning this study, for example Mohammadzadeh (2011) studied firms listed on Tehran Stock Exchange and found that firms performance which is measured by EPS and ROA are negatively related to capital structure. These findings are

corresponding to Zeitun and Tian (2007) and Abor (2007) who indicate firm performance is negatively related to capital structure, while it is not corresponding with findings of Berger and Udell (2006) who revealed a positive relation between firm performance and capital structure. This study therefore came in to fill the void by establishing whether there was a relationship between capital structure and financial performance among investment firms listed at the Nairobi securities exchange.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights the research design that was used, the population, sampling frame and technique applied data collection and analysis method that was used.

3.2 Research Design

A descriptive research design was used in the study. According to Mugenda andMugenda (2003), descriptive research design is a scientific method of investigation where data is collected and analysed in order to describe the current conditions, terms or relationships concerning a certain specific field Problem. Data was obtained from financial statements of companies listed in the Nairobi Securities Exchange. The study period of interest was a six year period i.e. from 2008 to 2013.

3.3 Population

According to Mugenda and Mugenda (1999), a population is well defined as a set of people, services, elements and events, group of things or households that are being investigated. The target population of the study was the firms listed at the Nairobi Securities Exchange excluding those in financial sectors because they do not have a clear capital structure. In Kenya, there are sixty one (61) companies listed at the Nairobi Securities Exchange. Listed companies were preferred over non listed companies because financial statements of listed companies are readily available at NSE unlike the non listed companies.

3.4 Sample and Sampling Technique

The study employed the random sampling technique where three firms were randomly chosen from each sector of NSE .Therefore, the sample of the study was 26 firms listed at NSE.

3.5 Data Collection

The study used secondary data on firms listed at the Nairobi Securities Exchange. The secondary data was collected from published reports. This information was readily available at the Nairobi Securities Exchange and it is from this data where information was extracted to compute the relevant ratios.

3.6 Data Analysis

After collecting the data, the researcher analyzed and summarized using quantitative approaches notably descriptive statistics and regression analysis. Correlation analysis was also used to determine the relationship of capital structure and the financial performance of firms listed at the NSE.

3.6.1 Analytical Model

The aim of the study was to establish the relationship between capital structure and financial performance of firms listed at Nairobi Securities Exchange. The following regression model was used

$$Y = \alpha + B_1X_1 + B_2X_2 + B_3X_3 + e$$

Where,

Y- Financial performance measured by return on equity

α - Constant

X₁- financial leverage which was measured by debt asset ratio

X₂- refers to dividend payout ratio which was measured by dividend per share to earnings per share.

X₃- is growth opportunity which was measured by price earnings ratio which was obtained from the division of market price per share to earnings per share

B₁, B₂ and B₃- are regression coefficients of the respective independent variables

e- Error term which captures the unexplained variations in the model.

3.6.2 Test of Significance

Regression analysis was expected to yield correlation coefficient of determination and analysis of variance. Correlation coefficient (r) was used to measure the degree of relationship between capital structure and financial performance of firms quoted at the NSE. The coefficient of determination (r²) measured the percentage of variations in financial performance that is explained by the regression of financial performance on capital structure. Analysis of variance was conducted at a 5% significance level or 95% confidence level.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND INTERPRETATION

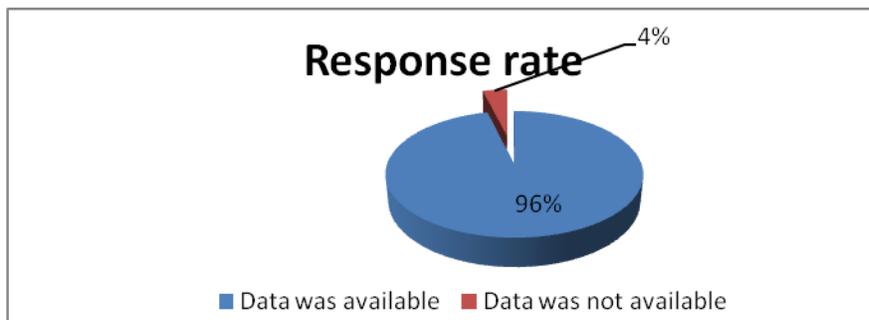
4.1 Introduction

This chapter presents the data analysis, results, interpretation, and discussion of the research findings. To achieve the objective of the study, Microsoft excel statistical software was used to analyze the data. The study aimed to determine the relationship between capital structure and firm performance for companies listed at the Nairobi Securities Exchange within the study period of year 2008-2013.

4.2 Response Rate

The study relied on secondary data from the NSE. This data includes financial reports from the randomly selected firm listed at the NSE. This data is readily available at the NSE website, the institutions website and from CMA handbooks. The researcher was able to get the required data and the figure below shows the response rate which was sufficient to achieve the objectives of the study.

Figure 4.1 Response Rate



Source: Research Findings

The researcher was only able to access data from only 96 % (25) of the targeted firms while 4 % (1) of the targeted firms were unable to provide the requisite data. The researcher was unable to get financial reports from Home Africa ltd for years 2009,2010,2011 and 2012 from NSE since it was only listed in year 2013.A formal request to the firm for the data was not answered.

4.3 Data Validity

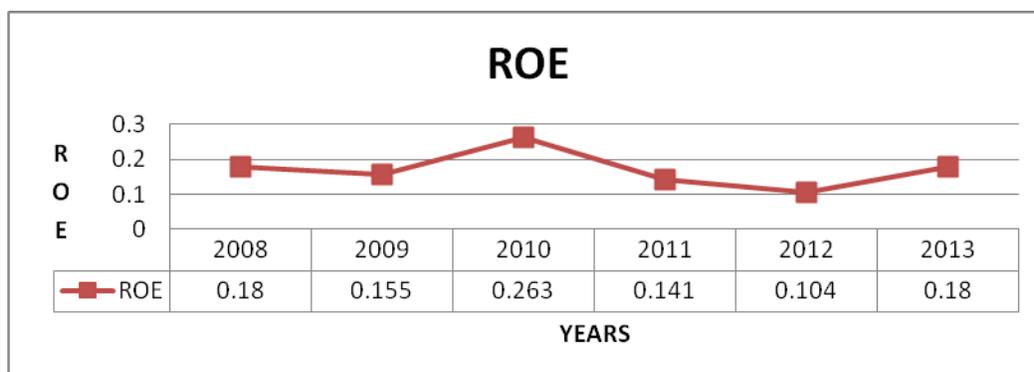
The study looked for data that would be able to meet the objectives of the study. The data collected from the various sources i.e CMA hand books, NSE and from the firms was cross checked for errors to test the validity of the data sources .The study found that the data sources provided similar data, therefore giving the study no reason to doubt the data collected and proving the data as valid. The data was fully able to meet the study needs and therefore was considered reliable for the study.

4.4 Descriptive Statistics

Descriptive statistics was used to analyze the trend analysis for firm performance, debt ratio, Growth opportunity and Dividend payout ratio

4.4.1 A Trend Analysis for Firm Performance

Figure 4.2: ROE

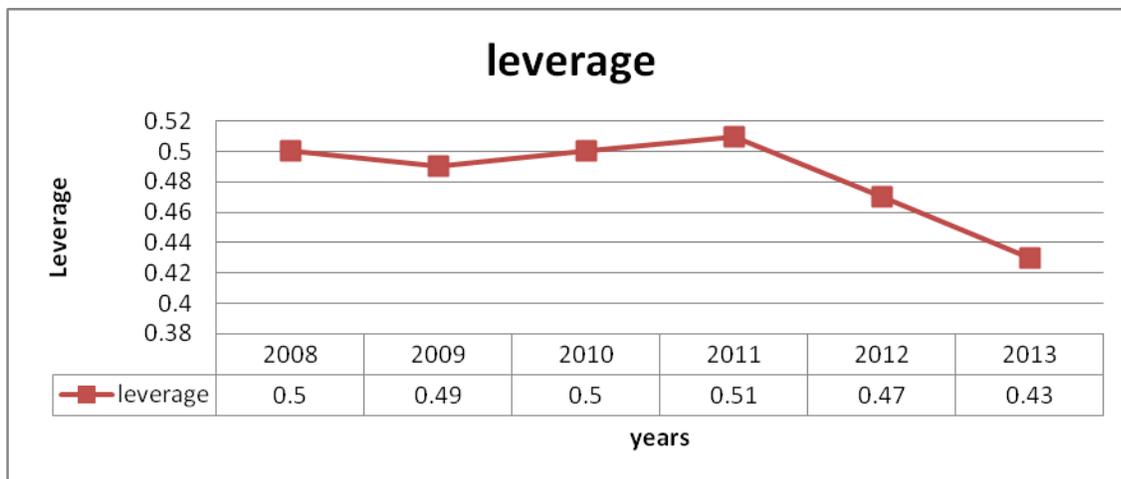


Source: Research Findings

The ratio indicates the return of profitability for every one shilling of equity capital contributed by the shareholders. Figure 4.2 above shows firm performance trend from 2008 to 2013. There was a decrease in profitability from 2008 to 2009. Then a sharp increase in ROE in year 2010 followed by a decrease in 2011 and a further decrease in 2012, then an increase in year 2013. However the firms under the study registered positive return on equity throughout the period of study. ROE was highest in 2010 and a high return on equity has an influence on firm's ability to attract both share capital and debt finance at favourable terms.

4.4.2 A Trend Analysis for Debt Ratio

Figure 4.3: Leverage



Source: Research Findings

The ratio indicate the proportion of total assets that has been financed using long term and current liabilities .This ratio is used by creditors to asses a company's financing relationship and its long term liquidity position. Any company that uses debt finance beyond 67 percent risk receivership. According to the above figure 4.3, the firms under this study seem to maintain favourable debt ratios. This means creditors will view the company's capital structure favourably

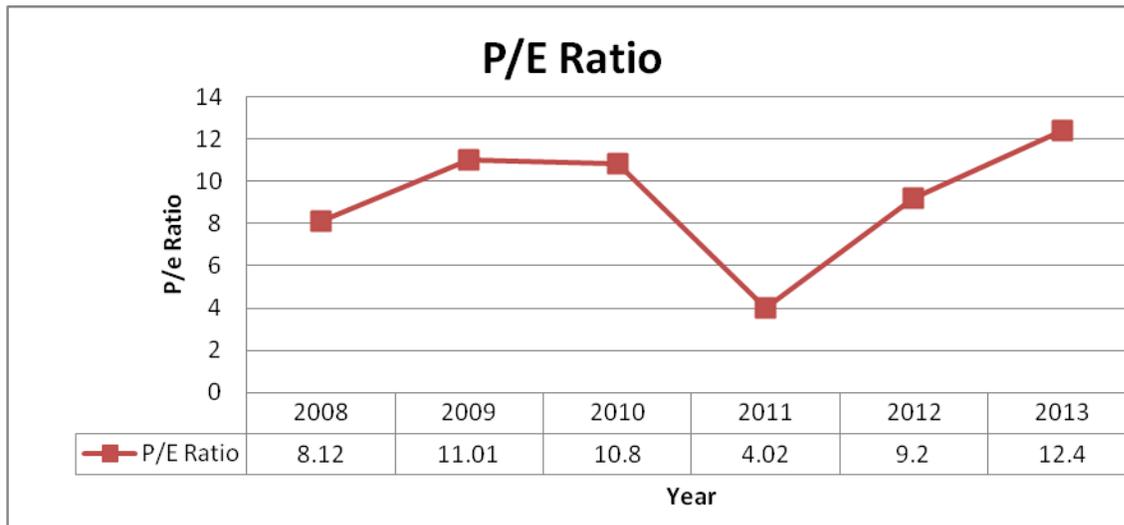
in addition to the company's shares selling high. Year 2011 registered the highest debt ratio with year 2013 registering the lowest.

4.4.3 A Trend Analysis for Growth Opportunity

PE ratio indicate the payback period i.e. number of years it will take to recover MPS from the annual earnings per share of the firm Results in Figure 4.4 below indicate that growth opportunity of the firms increased in year 2009 and then a slight decrease in year 2010. It was high in 2009 and 2010. This was followed by a decline in year 2011 thereafter steady increase in years 2012 and 2013.

During the period under study the P/E ratio is favorable and this can be viewed favorable by potential investors who might supply the company with further finance.

Figure 4.4: Price/Earning Ratio



Source: Research Findings

4.4.4 A Trend Analysis for Dividend Payout Ratio

This ratio reveals the company's retention policy .Figure 4.5 below shows almost a constant in dividend payment throughout the period of study

The dividend payout ratio was high in year 2009 and lowest in year 2012.

Figure 4.5: Dividend Payout Ratio



Source: Research Findings

According to table 4.1 construction and allied sector had the highest percentage (58.6%) of its capital being financed with debt finance but the debt ratio was favorable while manufacturing sector had the lowest debt ratio at 34.7%. Generally all the sectors had a favorable debt ratio.

Communication sector had the highest ROE. This means that the sector had the highest return of profitability for every one shilling of equity capital contributed by the shareholders .on the other hand the Automobiles sector had the lowest ROE.

Again the construction and allied had the highest dividend payout ratio compared to the other sectors. Firms in this sector may have lacked viable investment opportunities or they registered

high profits hence paying a high dividend payout. The investment sector paid the lowest portion of its earnings to its shareholders during the period of study.

Construction and allied also had the highest P/E ratio meaning that it had the highest number of years it would take to recover market price per share from the annual earnings per share of the firms in that sector while energy and petroleum sector had the lowest P/E ratio .

Table 4.1 Descriptive Statistics

Name	LEVERAGE	ROE	DPR	P/E
Agriculture	0.36	0.15	0.211	6.68
Automobiles	0.48	0.05	0.236	7.89
Commercial	0.55	0.115	0.217	11.47
Construction	0.586	0.167	0.387	13.37
Energy	0.486	0.0663	0.342	5.13
Investment	0.351	0.09	0.21	12.4
Manufacturing	0.347	0.173	0.291	9.376
Communication	0.41	0.22	0.254	12.2
Insurance	0.7	0.168	0.24	6.81
AVERAGE	0.44625	0.1289125	0.2685	9.8145
Min	0.347	0.05	0.21	5.13
Max	0.586	0.22	0.387	13.37
Std Dev	0.0931125	0.0585433	0.0661146	3.0100616
Variance	0.0086699	0.0034273	0.0043711	9.0604706

Source: Research Findings

4.5 Inferential Statistics

Inferential statistics tries to reach conclusions that extend beyond the immediate data and in this study, three statistical models (Correlation analysis, regression analysis and analysis of variance) were used to analyze the data.

4.5.1 Correlation Analysis

According to table 4.2 below, the range of the output for the correlation is between -1 to 1. A positive value indicates that the variables are positively related while a negative value indicates that the variables are negatively related.

Table 4.2 Correlation Matrix

	ROE	LEVERAGE	P/E	DPR
ROE	1			
LEVERAGE	-0.15131	1		
P/E	0.369413	-0.65931	1	
DPR	0.50932	0.432795	0.110667	1

Source: Research Findings

Each of the above study variables are perfectly correlated with itself as indicated by the coefficient of 1. Firm performance as measured by ROE has a negative correlation with leverage as measured by debt ratio (R=-0.151). Growth opportunity has a positive correlation with firm performance (R=0.369), dividend payout ratio is also positively correlated with firm performance (R=0.509)

4.5.2 Regression Analysis

In order to establish the statistical significance of the independent variables on the dependent variable (firm performance) regression analysis was employed. Adjusted R squared is coefficient of determination which explains the variation in the dependent variable due to changes in the

independent variable, from the findings in the table below the value of adjusted R squared was 0.542 an indication that there was variation of 54.2% on financial performance of firms listed in the NSE due to changes in the independent variables which are capital structure, dividend payout ratio and growth opportunity at 95% confidence interval. This shows that 54.2% of changes in financial performance of companies listed in the NSE could be attributed to their capital structure, dividend payout ratio and growth opportunity.

R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table below there was a strong positive relationship between the study variables as shown by 0.8577. A standard error estimate of 0.0884 was also obtained as shown below in table 4.3.

Table 4.3: Regression Analysis

<i>Regression Statistics</i>	
Multiple R	0.857770609
R Square	0.737999809
Adjusted R Square	0.542328353
Standard Error	0.088411649
Observations	25

Source: Research Findings

The study regression analysis also provided an ANOVA for the study model and the following was the outcome of the analysis in table 4.4. The significance value is 0.009 which is less than 0.05 thus the model is statistically significant in predicting how leverage, growth opportunity and dividend payout ratio influence profitability on firms listed at the Nairobi Securities Exchange.

4.5.3 Analysis of Variance

Table 4.4 Analysis of Variance (ANOVA)

ANOVA					
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	0.024095227	0.008032	1.027521	0.0045161
Residual	21	0.164149013	0.007817		
Total	24	0.18824424			

Source: Research Findings

The study established that all the variables were significant as their significance value was less than 0.05. The three independent variables were correlated with profitability of firms listed at the Nairobi Securities Exchange. With growth opportunity and dividend payout ratio having a positive correlation but leverage is having a negative correlation.

Table 4.5 Regression Coefficients

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Constant	0.719113	0.077395237	1.901813	0.010903
Leverage	-0.390647	0.104202891	-0.37489	0.031103
P/E Ratio	0.172745	0.188687448	0.91551	0.025037
DPR	0.477914	0.003156287	1.514165	0.014481

Source: Research Findings

From the regression model in table 4.5 above, taking all independent variables constant at zero, profitability of firms listed at the Nairobi Securities Exchange was 0.719 during the study period. According to table 4.5 all other independent variables at zero, a unit increase in leverage will lead to a 0.3906 decrease in profitability of firms listed at the Nairobi Securities Exchange, a unit increase in growth opportunity will lead to a 0.1727 increase in profitability of firms listed at the

Nairobi Securities Exchange, while a unit increase in dividend payout will lead to a 0.4779 increase in profitability of firms listed at the Nairobi Securities Exchange.

The study model therefore can be summarized as follows:

$$\text{ROE} = 0.7191 - 0.3906X_1 + 0.1727X_2 + 0.4779X_3 + e$$

Where –

X_1 is leverage which was measured by debt asset ratio

X_2 is growth opportunity which refers to growth opportunity which was measured by price earnings ratio which was obtained from the division of market price per share to earnings per share

X_3 - is dividend payout ratio which was measured from the division of dividend per share to earnings per share

e - Error term which is a representation of the unexplained part of the model (45.8%) which indicates presence of other factors that would improve the model.

4.6 Interpretation of the Findings

The study aimed to determine the relationship between capital structure and firm performance for companies listed at the Nairobi Securities Exchange within the study period of year 2008-2013. The study relied on secondary data from the NSE. The researcher was able to get the required data and the response rate was 96 percent which was sufficient to achieve the objectives of the study.

Firm performance as measured by ROE has a negative correlation with leverage as measured by debt ratio. Growth opportunity has a positive correlation with firm performance and dividend payout ratio is also positively correlated with firm performance. According to regression results the coefficient of determination was 0.542 an indication that 54.2% of changes in financial performance of companies listed in the NSE could be attributed to their capital structure, dividend payout ratio and growth opportunity. The standard error level was 0.08841 which covers the unexplained part of the model (45.8%) which indicates presence of other factors that would improve the model.

The p-value of 0.0045 realized from the ANOVA of the study results indicates that the outcome was statistically significant with an F statistic value of 1.027. The ANOVA of the study model therefore indicates that the model is applicable and able to provide the requisite relationships. The model shows the ability of the independent variables to predict and explain the dependent variable.

In addition to the above findings regression coefficients obtained indicate that growth opportunity and dividend payout ratio had a positive correlation but leverage had a negative correlation. The coefficient on leverage was negative an indication that there existed a negative relationship between leverage and financial performance of companies listed in the NSE. An increase in leverage would therefore lead to a decrease in the financial performance of companies listed in the NSE.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of findings of the previous chapter, conclusion, limitations encountered during the study. This chapter also elucidates the policy recommendations that policy makers can implement to achieve a high firm value. Lastly the chapter presents suggestions for further research which can be useful to future researchers.

5.2 Summary

The main objective of the study was to determine the relationship between capital structure and firm performance for companies listed at the Nairobi Securities Exchange within the study period of year 2009-2013.

The study found the regression model to have a correlation coefficient (R) of 0.87577 and a coefficient of determination of 0.542. This indicates that the model has a high correlation among the study variables and the model can be able to explain 54.2% of the dependent variable. This means that 54.2% variation in firms performance of firms listed at the NSE is attributed to the changes in the independent variables. Regression analysis also provided an ANOVA for the study model with a p-value of 0.0045 an indication that the ANOVA outcome was statistically significant.

The regression results obtained from the study show that the independent variables have differing relationship to the dependent variable. The model provided a constant with a positive

coefficient at 0.7191, which was observed to be statistically significant as indicated by a p-value of 0.0109. The model provided leverage as a significant determinant of change in firm performance with a negative coefficient of -0.3906 with a p-value of 0.0311.

P/E ratio on the other hand was provided as a significant variable with a positive coefficient of 0.1727 and a p-value of 0.0250. DPR was also confirmed a statistically significant factor in determining the change in firm performance with a positive coefficient of 0.4779 and a p-value of 0.01448. This indicates that all the model independent variables had the ability to predict the dependent variable and therefore they were all statistically significant.

5.3 Conclusion

The study concluded that increased financial leverage has a negative effect on performance as measured by ROE of companies listed in the NSE, Kenya. The higher the total debt the less the return on equity as well as reduced shareholders wealth which indicates a need to increase more capital injection rather than borrowing. The total loans in these firms could lead to high interest expense hence lowering the profitability of the firm. The firms should therefore fund investments from internal sources in order to enhance their financial performance. This is also supported by Maniagi et.al, (2013) who says that the benefits of debt financing are less than its negative aspects.

The study therefore concluded that the Agency theory which postulates that financial leverage mitigates against the agency problem is not applicable among companies listed in NSE, Kenya. The study established that as a company increases financial leverage the performance as measured by ROE declines contrary to expectations based on the agency theory.

These findings were inconsistent with the capital structure irrelevance theory that was first postulated by Modigliani and Miller (1963). These traditional capital structure theories argue that the amount of debt in the capital structure does not affect performance and the value of the firm. Abdul (2012) however, concluded that financial leverage has a significant negative relationship with the firm performance.

The research findings of this study also corroborate the empirical evidence obtained by Kaumbuthu (2011) and Oginda (2013) who found a negative relationship between financial leverage and ROE. The finding however, contradicts the findings by, Javed and Akhtar (2012), Mwangi (2010) who found the relationship between debt to equity ratio and return on equity to be significantly positive. The findings additionally, contradicted the agency theory postulated by Jensen and Meckling (1976) and extended by Elliots (2002).

The agency theory postulates that the use of leverage (long-term debt) in the capital structure can be used to mitigate the agency conflict by forcing managers to invest in profitable ventures that benefit the shareholders.

5.4 Recommendations for Policy

The results of this study have significant policy implications at the firm, industry, and macro levels. Firstly, this study found out that performance reduced as financial leverage increased. The study therefore recommends that corporate managers should reduce financial leverage in order to enhance firm performance.

This study further recommends that the government should regulate the financial sector through various monetary and fiscal policies in order to reduce the cost of borrowing given that many companies rely on external borrowing to finance their cash requirements. The high interest rate in Kenya is an impediment to the projected growth of the corporate sector as envisioned by Kenya Vision 2030. Lowly geared firms perform better than their counterparts that are highly geared.

It is critical for the chief executive officers and chief finance officers of the firms when seeking to fund the firm's assets to understand the impact of capital structure on their organization's financial performance as well the cost of funds

5.5 Limitations of the Study

The study focused only on listed firms and therefore the findings may not apply to all firms in Kenya thus more research should be conducted in other firms.

This study applied secondary data in meeting its mandate. A review of the same case using primary data sources involving the experts in the stock market might bring out different outcomes. The researcher decided to use secondary data because it is information from combined effort by experts to the public.

Time and finance were also other limiting factors. It was highly time consuming to get the financial statements of the listed firms and the time allocated for the research project was limited but I had to sacrifice most of my time and money to achieve my target to complete my study successfully.

5.6 Suggestions for Further Research

First, this study focused on all the 61 listed companies in the Nairobi Securities Exchange. Therefore, generalisations could not adequately be extended to every listed company as they have varying industry risk and asset structure. Based on this fact among others, it is therefore, recommended that a narrow based study covering a specific segment or company be done to find out the impact of capital structure on performance.

Similar studies to this can also be replicated in a few years to come to assess if the impact of capital structure on performance of the firms listed at the Nairobi Securities Exchange has changed as the Nairobi Securities Exchange continues to change.

Due to the shortcomings of regression models, other models such as the Vector Error Correction Model (VECM) can be used to explain the various relationships between the variables.

The unquoted firms should also be incorporated in future researches to determine whether similar results will yield.

REFERENCES

- Abor, J. (2007). Debt policy and performance of SMEs, *Journal of Risk Finance*, 8(4), 364-379
- Abor J. (2008). Determinants of the Capital Structure of Ghanaian Firms. *AERC Research Paper 176 African Economic Research Consortium*, Nairobi.
- Akinyomi, O.J. and Olagunju, A. (2013).Determinants of Capital Structure in Nigeria, *International Journal of Innovation and Applied Studies*, 3(4), 999-1005
- Berger A, Bonaccorsi di Patti E (2006). Capital Structure and Firm Performance. *Journal of Banking and Finance*, 9(5), 1065-102.
- Bradley M., Jarrell G. and Kim E. (1984), On the Existence of an Optimal Capital Structure: Theory and Evidence. *Journal of Finance*, 39 (7), 857-878
- Brennan M. and Schwartz, E. (1978), Optimal Financial Policy and Firm Valuation, *Journal of Finance* 39,pp.593-607
- Brigham E. and Gapenski L. (1996): *Financial Management. First Edition*,Dallas, Dryden Press
- Brennan M. and Kraus A. (1987) Efficient Financing Under Information Asymmetry. *Journal of Finance* 42, 1225-1243.
- De Angelo H. and R. Masulis (1980).Optimal Capital Structure Under Corporate and Personal Taxation, *Journal of Financial Economics*, 8(1), 3-29.
- Erasmus, P. D. (2008). Evaluating Value Based Financial Performance Measures , *Journal of Finance* 6,(3),93-117.

- Irfan A (2011), Determinants of capital Structure: Empirical Evidence from Pakistan. *Journal of Finance and Accounting*, 5(2), 57-96.
- Javed M, and Akhtar E. (2012), Optimal Financial Policy and Firm Valuation, *Journal of Finance* 39, pg.593-607
- Jensen F. and Meckling H. (1963), Corporate Income Taxes and The Cost of Capital: A Correction. *American Economic Review*.
- Kibet .B, Neddy .S, Irene .K. and John. K. (2013), The Effect of Capital Structure on Share Price on listed Firms In Kenya. *A Case of Energy Listed Firms*.
- Kaumbuthu M. (2011), Relationship between capital structure and return on equity for Industrial and allied sectors in the Nairobi Securities Exchange.
- Mackie M. (1990) Do Taxes Affect Corporate Financing Decisions? *The Journal of Finance* .45(5), 1471-1493.
- Munene .E. M. (2006), The Influence of the Tax Rate on the Capital Structure of Quoted Companies at the NSE, *Unpublished MBA Thesis, UON*.
- Maina L. and Kondongo O. (2013). Capital Structure and Financial Performance in Kenya: Evidence from Firms Listed at the Nairobi Securities Exchange. *Paper Presented at the Jomo Kenyatta University of Science and Technology Research Conference, Kenya*.
- Manawaduge, A. S., De Zoysa, A. and Chandrakumara, P. (2010), Capital Structure and emerging Markets: *Empirical Evidence from an Emerging Market in South Asia*.
- Maniagi J. and Gilbert N.(2013), Corporate Governance, Dividend Policy and Performance. *International Journal of Innovative Research and Development*, 25(6), 896-906
- Miller M. H. (1977). Debt and Taxes. *Journal of Finance* ,9(5), 471-502

- Modigliani F. and M. H. Miller (1963), Corporate Income Taxes and The Cost of Capital: A Correction. *American Economic Review*.
- Mohammadzadeh H. (2011) Capital Structure and Firm Performance; Evidence from Tehran Stock Exchange. 2011 Conference Islamic Azad University, Marand, Iran
- 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
- Mwangi P. (2010), *Relationship between capital structure and return on equity for Industrial and allied sectors in the Nairobi Securities Exchange*
- Nairobi Securities Exchange (2014, July 10). Retrieved on July 10, 2015, from www.nse.org
- Myers, S. C. (1984).The Capital Structure Puzzle, *Journal of Finance*, 34, (6),575 – 592.
- Ngugi, R.W. (2003), Development of the Nairobi Stock Exchange: *A Historical Perspective*, KIPPRA Discussion Paper No. 27.
- Nyambogo R. (2008), Relationship between capital structure and agency cost for companies listed at the Nairobi Securities Exchange
- O'Brien J. P., David, P., Yoshikawa, T. and Delios A. (2013), How capital structure Influences diversification performance: A transaction cost perspective. *Strategic Management Journal*.
- Oginda N.(2013), Corporate Governance, Dividend Policy and Performance. *International Journal of Innovative Research and Development*, 25(6), 896-906

Okoth V., Ongore N. and Gemechu, B.(2013). Determinants of Financial Performance of Commercial Banks in Kenya, *International Journal of Economics and Financial Issues*,32(23),4561-4589.

Pandey I.M. (2008). Financial Management, New Delhi, India: Vikas publishing House.

Ruzben J. Bodhanwala (1963) Capital Structure and Financial Performance: Evidence from Selected business companies in Colombo stock Exchange Sri Lanka, *Journal of Arts, Science and Commerce*.

Samuel M., Ebenezer F., Emire A., and Xicang .Z., (2012) Capital Structure and Firm Value: *Empirical Evidence from Ghana International Journal of Business and Social Science*; Nov2012, Vol. 3 Issue 22, p103

The Standard Newspaper, 24th ,July ,2015.

Timan S. and Wessels R. (1988). The determinants of capital structure choice. *Journal of Finance*, 36(12),563-581.

Zeitun, R. and Tian G. (2007) Capital structure and corporate performance: *evidence from Jordan, Australasian Accounting, Business and Finance Journal* ,12(8), 449-472.

APPENDICES

Appendix I: Letter of Introduction

Dear sir/madam,

RE: RESEARCH INFORMATION.

I am a MBA (finance) student at the department of finance and accounting, University of Nairobi. As part of the course, am undertaking a research project that seeks to establish the relationship between Capital structure and financial performance of firms listed on NSE.

I therefore request for access to all the relevant information concerning this research. The information is solely for academic purposes.

Yours faithfully,

Jared Ameyia

Appendix II: List of Companies listed at Nairobi Securities Exchange as 10th July 2015.

Agricultural

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

Commercial and Services

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

Telecommunication and Technology

17. Safaricom Ltd

Automobiles and Accessories

18. Car and General (K)
19. CMC Holdings Ltd
20. Sameer Africa Ltd
21. Marshalls (E.A.) Ltd

Banking

22. Barclays Bank Ltd
23. CFC Stanbic Holdings Ltd
24. IandM Holdings Ltd
25. Diamond Trust Bank Kenya Ltd
26. Housing Finance Co Ltd
27. Kenya Commercial Bank Ltd
28. National Bank of Kenya Ltd
29. NIC Bank Ltd
30. Standard Chartered Bank Ltd
31. Equity Bank Ltd
32. The Co-operative Bank of Kenya Ltd

Insurance

33. Jubilee Holdings Ltd Ord
34. Pan Africa Insurance Holdings Ltd
35. Kenya Re-Insurance Corporation Ltd
36. Liberty Kenya Holdings Ltd
37. British-American Investments Company (Kenya) Ltd
38. CIC Insurance Group Ltd

Investment

39. Olympia Capital Holdings ltd
40. Centum Investment Co Ltd
41. Trans-Century Ltd

Manufacturing and Allied

42. B.O.C Kenya Ltd
43. British American Tobacco Kenya Ltd
44. Carbacid Investments Ltd

- 45. East African Breweries Ltd
- 46. Mumias Sugar Co. Ltd
- 47. Unga Group Ltd
- 48. Eveready East Africa Ltd
- 49. Kenya Orchards Ltd
- 50. A.Baumann CO Ltd

Construction and Allied

- 51. Athi River Mining
- 52. Bamburi Cement Ltd
- 53. Crown Berger Ltd
- 54. E.A.Cables Ltd
- 55. E.A.Portland Cement Ltd

Energy and Petroleum

- 56. KenolKobil Ltd
- 57. Total Kenya Ltd
- 58. KenGen Ltd
- 59. Kenya Power and Lighting Co Ltd
- 60. Umeme Ltd

Growth Enterprise Market Segment

- 61. Home Afrika Ltd

Source: Nairobi Securities Exchange website (<https://www.nse.co.ke/listed-companies>)

Appendix III: Sample list of firms that were used in the study

AGRICUTULTURAL SECTOR

1. Kakuzi
2. Kapchorua
3. Rea Vipingo

AUTO MOBILE AND ACCESSORIES

4. CMC Holdings
5. Marshals ltd
6. Sameer Africa

COMMERCIAL AND SERVICES

7. Express Kenya
8. Scan group ltd
9. Standard group

CONSTRUCTION AND ALLIED

10. East Africa Cables
11. Crown paints
12. Athi river Mining

ENERGY AND PETROLEUM

13. Kenol Kobil
14. Kengen
15. Total Kenya

INVESTMENT

16. Centum
17. Olmpia
18. Transcentury

MANUFACTURING

- 19. BOC
- 20. Mumias sugar
- 21. Unga group

TELECOMMUNICATION

- 22. Safaricom

INSURANCE

- 23. Pan African Insurance
- 24. CIC Insurance
- 25. Jubilee

GROWTH ENTERPRISES MARKET

- 26. Home Africa

Source: Nairobi Securities Exchange website (<https://www.nse.co.ke/listed-companies>)