THE EFFECT OF CAPITAL STRUCTURE ON STOCK RETURNS AT NAIROBI SECURITIES EXCHANGE: A SECTORAL ANALYSIS

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DECLARATION

This research project is my original work and has not been presented for a degree

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ACKNOWLEDGEMENT

DEDICATION

This work is dedicated to my family.

ABSTRACT

The study's objective was to determine the effect of capital structure on stock returns at Nairobi securities exchange: a sectoral analysis. The researcher adopted an empirical research design. In this case, data was gathered relating to capital structure on stock returns of firms quoted in the Nairobi Securities Exchange over a five year period between 2011 and 2015. The target population for this study therefore comprised of 48 presently listed companies in the Nairobi securities Exchange's main segment. This study collected secondary data relating to stock returns of the listed companies at the Nairobi Stock Exchange for the period 2011 to 2015. Secondary data was collected from the annual reports of the publicly listed companies. Data analysis method was based on Pearson correlation analysis and a multiple regression model conducted on Statistical Package for Social Sciences (SPSS) on the accounting based measures of firm's capital structure used in this study. Adjusted R Square value and Analysis of Variance (ANOVA) was used to test the significance of the model. The researcher then presented the findings using appropriate graphs and tables. Research findings indicated that there is no relationship between capital structure and stock returns for firms listed in the NSE.

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ACROYMNS & ABBREVIATIONS

AHP   Analytical hierarchy process

APT   Arbitrage Pricing Theory

CAPM   Capital Asset Pricing Model

CBK   Central Bank of Kenya

CRM   Credit Risk Management

CRMS   Credit Risk Management Systems

EMH   Efficient-market hypothesis

EPS   Earning per Share

GDP   Gross domestic product

GOK   Government of Kenya

GVAR   Global vector autoregressive macro econometric model

MENA   Middle East and North Africa

ROA   Return on Assets

ROE   Return on Equity

ROI   Return on Investment

SPSS   Statistical Package for Social Sciences

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study on capital structure attempts to explain the securities and financing sources used by companies to finance investments (Myers, 2001). Brigham, (2004) referred to capital structure as a way in which an organization finances its operations which can be either through debt or equity capital or a combination of both. The theory of capital structure originated from the seminar paper published by Modigliani and Miller (1958) which proposed that the capital structure of a firm had no effect on its value since a firms value was an aggregate of all its profitable investments. From this controversial theory other scholars emerged with theories that tried to explain the rationale behind the choice of a given capital structure, notable among them being the strategic trade off and pecking order theories.

According to the trade-off theory, larger firms, which are more diversified, have lower bankruptcy costs, and easier access to capital markets, obtain more debt. The pecking order theory, however, suggests that larger firms rely on internal sources of finance and, hence, do not choose debt or equity as their first option for financing.

By utilizing an additional examination of pure capital structure changes, Masuli (2013) shows that change in leverage is positively related to change in stock returns. He studies daily stock returns following exchange offers and re-capitalizations where recapitalizations occur at a single time. However, his work also contains limitations. His sample contains a group of all companies that have gone through pure capital structure changes, which might represent a certain risk class itself. Therefore, one must be careful in assuming that characteristics of firms in this sub-sample are representative of all firms.

Empirical literature review reveals that although many studies have examined the determinants of either capital structure or stock returns, few have investigated both. Some show that stock returns determines capital structure (Baker & Wurgler, 2002; Welch, 2004), while others argue the opposite: that capital structure determines stock returns (Bhandari, 2008). Some studies show that capital structure and stock returns affect each other simultaneously.

1.1.1 Capital Structure

A firm's capital structure refers to the mix of its financial liabilities. There are two different ways of financing the assets of a company this is through equity or debt. Capital structure refers to the way a corporation finances its assets through some combination of equity and debt (Chava & Roberts, 2008).

The concept of capital structure has been defined by numerous scholars in different ways, notable among them being Shefrin (2005) who referred to capital structure as the mix of different types of securities (long term debt and common stock) which are issued by a company to finance its assets. While, Chung,(2007) and Webster (2012) see capital structure as a mix of debt and equity financing in a firm. From all the definitions above, it is eminent that capital structure in summary refers to the structure of a firm's liability.

Decisions relating to financing the assets of a firm are very crucial in every business and the finance manager is often caught in the dilemma of what the optimum proportion of debt and equity should be. As a general rule there should be a proper mix of debt and equity capital in financing the firm's assets. Capital structure is usually designed to serve the interest of the equity shareholders.

Therefore instead of collecting the entire fund from shareholders a portion of long term fund may be raised as loan in the form of debenture or bond by paying a fixed annual charge. Though these payments are considered as expenses to an entity, such method of financing is adopted to serve the interest of the ordinary shareholders in a better way.

Magara (2012) did a study on the determinants capital structure among firms listed at the Nairobi securities exchange where the study sought to find out the major determinants of capital structure. It was established that form the period 2007 to 2011, there was a positive significant relationship between firm size, tangibility of assets and growth rate and the degree of leverage of the firms listed at the Nairobi securities exchange.

Voulgaris, Asteriou and Agiomirgianakis (2004) indicate that capital structure and composition is a crucial aspect of business, and plays a vital role in firms' survival, performance, and growth. Firms choose different levels of financial leverage in their attempt to achieve an optimal capital structure, and capital structure policy involves a tradeoff between risk and return. An increase in debt intensifies the risk of a firm's earnings, which leads to a higher rate of return to investors. High risk tends to lower the stock's price, while a high rate of return increases it, so the firm's capital structure policy determines its returns.

1.1.2 Stock Returns

A return is the gain or loss of a security in a particular period. The return consists of the income and the capital gains relative on an investment, and it is usually quoted as a percentage. The use of all debt to finance the operations of a firm will be advantage on one side as debt interest will be tax and on the other side the firm will be under the control of creditor in order to control their stake in the use of debt capital increases agency cost between shareholders and debt holders. Many researchers still disagree on factors that

significantly affect firms capital structure, hence determination of optimal capital structure is a difficult task that go beyond many theories though many researchers agree that the economic and institutional environment in which the firms operate significantly affect the capital structure of a firm (Owolabi & Inyang, 2013).

These are factors that affect the share prices but are outside the share market itself. The many traders and investors in the market are at all times seeking to know the trend of the share prices, thus making the relationship between capital structure and stock returns of firms quoted in the Nairobi Securities Exchange a subject of interest.

1.1.3 Relationship between Capital Structure and Stock Returns

Capital structure is an amalgam of a firm's liabilities and equity. Capital structure and its composition is a crucial aspect of business, and plays a vital role in firms' survival, performance, and growth (Voulgaris, et al, 2004). Firms choose different levels of financial leverage in their attempt to achieve an optimal capital structure, and capital structure policy involves a tradeoff between risk and return. An increase in debt intensifies the risk of a firm's earnings, which leads to a higher rate of return to investors. High risk tends to lower the stock's price, while a high rate of return increases it, so the firm's capital structure policy determines its returns (Ahmad, Fida & Zakaria,2013).

Miller-Modigliani (1958) report evidence of a positive relationship between equity returns and leverage in selected industries. Evidence in the cross-section of all stocks is mixed: Bhandari (1988) report a positive relationship while empirical evidence reported by Korteweg (2004) and Masulis (1983) is negative. Fama and French (1992) find that market leverage is positively associated with returns, while book leverage is negatively related. Therefore, they argue that the difference between the two measures, book-to-market equity, helps to explain average returns. DeAngelo et al. (2006) explain that although high leverage

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mitigates agency problems, it also reduces financial flexibility because the utilization of the current borrowing capacity translates into less availability in the future.

1.1.4 Nairobi Securities Exchange

The NSE, an emerging market is the self-regulating organization in Kenya dealing with listed instruments and draws its membership from stock brokers, dealers and investment banks. The NSE is currently one of the most attractive and promising markets in Africa and many investors want to benefit from the high growth and promising economic outlook and therefore invest in the NSE (World Bank, 2006). In Kenya, dealing in shares and stocks started in the 1920's when the country was still a British colony.

Nairobi Securities Exchange (NSE) comprises of companies grouped in the following ten sectors Agricultural Sector, Automobiles & Accessories, Banking, Commercial & Services, Construction &Allied Sector, Energy & Petroleum, Insurance, Investment, Manufacturing & Allied and Telecommunication & Technology. Consequently, an appropriate capital structure should be profitable to the firm to enable it meet its obligations when due, and should be flexible so as to adjust to various challenges in economic conditions. Moreover, shares prices are highly affected by the business fundamentals, which are either economic or political.

However the market was not formal as there did not exist any rules and Regulations to govern stock broking activities. Trading took place on a 'gentleman's agreement.' Standard commissions were charged with clients being obligated to honor their contractual commitments of making good delivery, and settling relevant costs. At that time, stock broking was a sideline business conducted by accountants, auctioneers, estate agents and lawyers who met to exchange prices over a cup of coffee.

Since Africans and Asians were not permitted to trade in securities, until after the attainment of independence in 1963, the business of dealing in shares was confined to the resident European community (NSE market fact sheet file 2012). Notably, on February 18, 1994 the NSE 20-Share Index recorded an all-record high of 5030 points. The NSE was rated by the International Finance Corporation (IFC) as the best performing market in the world with a return of 179% in dollar terms. The NSE also moved to more spacious premises at the Nation Centre in July 1994, setting up a computerized delivery and settlement system (DASS). For the first time since the formation of the Nairobi Stock Exchange, the number of stockbrokers increased with the licensing of 8 new brokers.

The equity securities investment sector of the Nairobi Securities Exchange (NSE), is divided into four sectors namely the Agricultural sector; the Industrial and Allied sector; the Commercial and Services sector and the Finance and Investment sector. The group of equity securities investment sector in NSE is based on type of products and services provided by the companies whose equity securities are listed in those sectors. Stocks in NSE include bonds and Treasury bills.

The NSE is regulated by Capital Markets Authority CMA (2011) which provides surveillance for regulatory compliance. The exchange has continuously lobbied the government to create conducive policy framework to facilitate growth of the economy and the private sector to enhance growth of the stock Ngugi and Njiru (2005).

The NSE is also supported by the Central Depository and Settlement Corporation (CDSC) which provides clearing, delivery and settlement services for securities traded at the Exchange. It oversees the conduct of Central Depository Agents comprised of stockbrokers and investments banks which are members of NSE and Custodians CDSC (2004). These regulatory frameworks are aimed to sustain a robust securities market

1.2 Research Problem

Capital structure is arguably the core of modern corporate finance (Drobetz and Wanzenried, 2006). While Modigliani and Miller (1958) derived conditions under which capital structure is irrelevant for firm valuation, the subsequent theoretical literature has shown that a firm can influence its value and improve its future prospects by varying its optimal ratio between debt and equity. Fama and French (1992) argue that the two competing models of financing decisions are the tradeoff theory and the pecking order theory. The tradeoff theory model is whereby firms identify their optimal leverage by weighing the costs and benefits of an additional dollar of debt. The alternative model is the pecking order model of financing decisions which was developed by Myers (Myers, 1984).

However, literature provides conflicting assessments about how firms choose their capital structures, with the trade off, pecking order and market timing hypothesis all receiving some empirical support. For instance, Miller and Modigliani (1958) report evidence of a positive relationship between equity returns and leverage in selected industries. Evidence in the cross-section of all stocks is mixed: Bhandari (1988) report a positive relationship while empirical evidence reported by Korteweg (2004) and Masulis (1983) is negative. Fama and French (1992) find that market leverage is positively associated with returns, while book leverage is negatively related. Therefore, they argue that the difference between the two measures, book-to- market equity, helps to explain average returns. DeAngelo et al. (2006) explain that although high leverage mitigates agency problems, it also reduces financial flexibility because the utilization of the current borrowing capacity translates into less availability in the future.

Moreover, previous studies do not fully determine the effects of capital structure on stock returns, across different sectors especially in the case of firms quoted in the Nairobi Securities Exchange. However most of these studies have not been published and made within reach to the small and new investors in the NSE in form that is easily understandable. This is the gap the research seeks to fill by reviewing the question; what is the effect of capital structure on stock returns of firms quoted in the Nairobi Securities Exchange?

1.3 Research Objective

The study's objective will be to determine the effect of capital structure on stock returns of firms quoted in the Nairobi Securities Exchange.

1.4 Value of the Study

The purpose of the study will be to investigate the effect of capital structure on stock returns of firms quoted in the Nairobi Securities Exchange. This will be of benefit to both policy makers and investors to identify the specific factors affecting prices and can therefore be used as basis for making decision on strategies to be adopted in making investment decisions in the capital market. It will provide useful and adequate information to these investors with an aim of enabling them to develop an understanding on the relationship between risk and return as a key piece in building ones investment philosophy. The investors will also be in a position to protect themselves from selfish stockbrokers who take advantage of ignorant investors to benefits themselves at the expense of the investors. To the market regulators to establish the NSE performance against investors' perception of risks and returns and hence develop ways of building investors' confidence, the policy makers to review and strengthening of the legal

The study will assist the management of companies quoted in the NSE to appreciate different capital structure mix and their impact on stock returns. Management will also have opportunity to review their respective firm's capital structure with an aim of increasing stock returns as well as overall investor return. The study also assists Capital Markets Authority (CMA) and other government agencies i n developing regulatory and legislative framework that will assist companies listed in the NSE in developing and adopting appropriate capital structure that maximizes stock returns and investor return on investment in Kenya. In addition, the study is of importance to the academic community since it broadened the knowledge on capital structure and its relationship with stock returns of firms quoted in the Nairobi Securities Exchange. This provides a basis for future research.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter provides the literature review of the study and establishes the gap existing from the analyses of the available studies. The areas covered in this chapter include; theories used empirical evidence, conceptual framework and summary.

2.2 Theoretical Framework

This study will be guided by; Modigliani and Miller (MM) Theory, Static Trade-off Theory, Agency Cost Based Theory and Asymmetric Information Based Theory.

2.2.1 Modigliani and Miller (MM) Theory

Xiaoyan (2008) writes that MM theory is regarded as the starting of modern theory of capital structure. Modigliani and Miller (1958) illustrates that under certain key assumptions, firm's value is unaffected by its capital structure. Capital market is assumed to be perfect in MM world, where insiders and outsiders have symmetric information; no transactions cost, bankruptcy cost or distortionary taxation exist; equity and debt choice becomes irrelevant and internal and external funds can be perfectly substituted. If these key assumptions are relaxed, capital structure may become relevant to the firm's value. So following research efforts have been contributed to relaxing the ideal assumptions and describing the consequences.

According to Chen (2003) in their landmark paper in 1958, Modigliani and Miller(MM) showed that if a company's investment policy was taken as given, then in a world of perfect markets (a world without taxes, perfect and credible disclosure of all information, and no transaction costs associated with raising money or going bankruptcy) the extent of debt in a company's capital structure would not affect thefirm's value. The perfect capital markets they

assumed have attracted a wide variety of research of somewhat-less-than-perfect capital markets.

2.2.2 Static Trade-off Theory

Xiaoyan (2008) writes that in a static trade-off framework, the firm is viewed as setting a target debt-equity ratio and gradually moving towards it. Debt financing has one important advantage over equity: the interests that firm pays are tax-deductible while equity income is subject to corporate tax. But debt also increases financial risk thatmakes debt-financing choice not cheaper than equity. So, in a static trade-off consideration, managers regard the firm's debt-equity decision as a trade-off between interest tax shields of debt and the costs of financial distress. In particular, capital structure moves towards targets that reflect tax rates, assets type, business risk, and profitability and bankruptcy costs. Actually, the firm is balancing the costs and benefits of borrowings, holding its assets and investment plans constant (Myers, 1984).

The general results of various work in this aspect of leverage choice is that if there are significant "leverage-related" costs, such as bankruptcy costs, agency costs of debt, and loss of non-debt tax shields, and if the income from equity is untaxed, then the marginal bondholder's tax rate will be less than the corporate rate and there will be a positive net tax advantage to corporate debt financing. The firm's optimal capital structure will involve the trade-off between the tax advantage of debt and various leverage-related costs (Xiaoyan, 2008).

Due to the distinctions in firm-specific characteristics, target leverage ratios will vary from company to company. Institutional differences, such as different financial systems, tax rate and bankruptcy law etc, will also lead the target ratio to differ across countries. The trade-off theory predicts that safe firms, firms with more tangible assets and more taxable income

to shield should have high debt ratios. While risky firms, firms with more intangible assets that the value will disappear in case of liquidation, ought to rely more on equity financing. In terms of profitability, trade-off theory predicts that more profitable firms should mean more debt-serving capacity and more taxable income to shield, therefore a higher debt ratio will be anticipated. Under trade- off theory, the firms with high growth opportunities should borrow less because it is more likely to lose value in financial distress (Xiaoyan, 2008).

2.2.3 Agency Cost Based Theory

The development of agency theory in the 1980s, coupled with detailed research into the extent and effects of bankruptcy costs, has led to the current mainstream view that corporations act as if there is a unique, optimal capital structure for individual firms that results from a trade-off between the tax benefits of increasing leverage and increasing agency and bankruptcy costs that higher debt entails (Chen, 2003).

Theory based on agency costs illustrates that firm's capital structure is determined by agency costs, which includes the costs for both debt and equity issue. The costs related to equity issue may include: i) the monitoring expenses of the principal (the equity holders); ii) the bonding expenses of the agent (the manager); iii) reduced welfare for principal due to the divergence of agent's decisions from those which maximize the welfare of the principal. Besides, debt issue increases the owner-manager's incentive to invest in high-risk Proposals that yield high returns to the owner-manager but increase the likelihood of failure that the debt holders have to share if it is realized. If debt holders anticipate this, a higher premium will be required, which in turns increase the costs of debt. Then, the agency costs of debt include the opportunity costs caused by the impact of debt on the investment decisions of the firm; the monitoring and bond expenditures by both the bondholders and the owner-manager; and the costs associated with bankruptcy and reorganization. Since both equity and debt incur

agency costs, the optimal debt-equity ratio involves a trade-off between the two types of cost (Xiaoyan, 2008).

Chen (2003) notes that although remaining as the mainstream theory of capital structure, the trade-off theory has failed to explain the observed corporate behaviour particularly witnessed with the stock market reaction to leverage-increasing and leverage-decreasing transactions, which consistently yields stock price increases and decreases, respectively.

2.2.4 Asymmetric Information Based Theory

Theories based on asymmetric information assumed that firm managers and insiders possess private information about the firm's characteristics of return stream or investment opportunities that are rarely known by outside investors. Leverage choice under this framework is either designed to mitigate the inefficiencies of investment decisions that are caused by information asymmetry (Myers and Majluf, 1984) or used as a signal to outside investors about the information of insiders (Ross, 1977). And the pecking order theory results from asymmetric information will also be discussed in this section. Myers and Majluf (1984) draw attention to the use of debt to avoid the inefficiencies in a firm's investment decisions that would otherwise result from information asymmetries. The nature of the asymmetric information in this case is that insiders (managers) know more about the companies' prospects, risks and values than do outside investors. Because this information asymmetry between investors and firm insiders, if firms need to finance the new Proposals by issuing equity, the equity may be under-priced by the market. This has the effect of also under-pricing new equity which is used to finance new investment Proposals. Since theory under asymmetric information assumes that managers act at the interests of existing shareholders. The managers may even forgo a positive-NPV Proposal if it would require the issue of new equity, since this would give much of the Proposal's value to new shareholders at the expense of the old.

The fact that firms prefer internal to external financing and debt to equity if they issue securities is known as the hypothesis of pecking order (Myers, 1984). As internal funds (retained earnings) incur no flotation costs and require no additional disclosure financial information about the firms' investment opportunities and their potential profits that managers don't want to be made public. If a firm must use external funds, the preference is to use the following order of financing sources: debt, convertible securities, preferred stock, and common stock. Since only common stocks hold the right in the management, this preference reflects managers' incentives to retain control of the firms and willingness to avoid the negative market reaction to an announcement of a new equity issue. Myers (1984) also presents an asymmetric information model to explain this financing hierarchy. Firms prefer to finance real investment by issue less risky securities, that is, bonds other than equity. In case of equity issuing, firms will fall into the dilemma of either passing up positive NPV Proposals or issuing stocks at a price they think is too low.

2.3 Determinants of Capital Structure and Stock Returns

Based on the different theories, a number of empirical studies have identified firm-level characteristics that affect the stock return of firms. Among these characteristics are the size of the firm, leverage, profitability (earnings before interest, tax, depreciation and amortization) and liquidity.

2.3.1 Size of the firm

According to the trade-off theory, larger firms, which are more diversified, have lower bankruptcy costs, and easier access to capital markets, obtain more debt. The pecking order theory, however, suggests that larger firms rely on internal sources of finance and, hence, do not choose debt or equity as their first option for financing.

Empirically, studies have found that larger firms borrow more in order to take maximum advantage of tax shields. Thus, firm size is expected to have a positive effect on leverage. Since smaller firms may suffer from earnings depression and information asymmetry, it involves more risk than larger firms, and investors demand more return on their stock (Gallizo & Salvador, 2006). Hence, firm size is expected to have a negative effect on stock returns.

2.3.2 Leverage

Theoretically, if a firm is highly leveraged, then the investor will demand a higher return on its stock due to the high risk of bankruptcy (Bhandari, 1988; Yang et al., 2010). Therefore, one would expect leverage to have a positive effect on stock returns. Moreover, according to the pecking order theory, if a firm's internal sources are not enough to fund new Proposals; it will opt for debt financing. This shows that high- growth firms are highly leveraged because they can acquire more debt due to their need for greater financing. The trade-off theory hypothesizes that growth opportunities cannot be collateralized to acquire debt and that growing firms have enough resources to finance new activities. So, there is a negative relationship between growth and leverage. Empirical studies have also found that growth has positive and negative effects on leverage. Chen and Chen (2011) explain that a firm's growth causes variation in its value, and greater variation is associated with greater risk. This implies that growth positively affects stock returns.

2.3.3 Profitability

The pecking order theory of capital structure implies that profitable firms will not opt for debt or equity financing because they have sufficient funds to finance their assets. However, the trade-off theory proposes a positive relationship between profitability and leverage. Intuitively, this suggests that higher-profit firms can, on the strength of their reputation, easily acquire debt and take maximum advantage of tax shields. Hovakimian, Opler, and

Titman (2001) argue that there is no association between profitability and leverage because unprofitable firms also issue equity to offset the effect of excessive leverage. Empirically, a negative relationship emerges between firm profitability and leverage (Chen & Chen, 2011; Yang et al., 2010). Thus, we expect profitability to have a negative effect on leverage. Since higher-profit firms provide more return on their stocks, profitability should have a positive effect on stock returns.

2.3.4 Liquidity

The pecking order theory explains that retained earnings increase liquid assets; excess liquid assets are negatively associated with firm leverage. The trade-off theory suggests that firms with a high ratio of liquid assets should borrow more because they have the ability to meet their contractual obligations on time. This theory predicts a positive relationship between liquidity and leverage. Based on the empirical studies carried out, firms with high levels of liquid assets are likely to acquire less debt and rely on internally generated funds. Thus, liquidity should negatively affect leverage. While analyzing the effect of liquidity on stock returns, many empirical studies have found a negative relationship between liquidity and stock returns. Most theoretical and empirical studies have demonstrated that liquidity has a negative effect on stock returns since liquid stock involves less risk, so the return on liquid stock is low (Chen & Chen, 2011; Yang et al., 2010). Thus, there is a negative relationship between liquidity and stock returns.

2.4 Empirical Evidence

While studying the impacts of stock return Gulnur and Sivaprasad (2010) pointed out that in his work in MM proposition II The Abnormal Stock Returns and Leverage by testing 2673 listed companies on London Stock Exchange. The findings indicate that leverage has negatively and significantly affect the stock returns and effect remain negative and

significant even if other risk factors like tax rate and industry concentration were added. By utilizing an additional examination of pure capital structure changes, Masuli (2013) shows that change in leverage is positively related to change in stock returns. He studies daily stock returns following exchange offers and re-capitalizations where recapitalizations occur at a single time. However, his work also contains limitations. His sample contains a group of all companies that have gone through pure capital structure changes, which might represent a certain risk class itself. Therefore, one must be careful in assuming that characteristics of firms in this sub- sample are representative of all firms.

Bhandari (2008) indirectly tests the second of MM's propositions by examining whether expected common stock returns are positively related to the ratio of debt in the cross-section of all firms without assuming various industry-defined risk classes. His results provide evidence that leverage has a significant positive effect on expected common stock returns. His returns are adjusted for inflation, whereas our abnormal returns are market-adjusted, but using interest rates as an explanatory variable to account for changes in the cost of capital in the time series.

Dimitrov and Jain (2005) measure the effect of leverage changes on stock returns as well as on earnings-based measures of performance. Their results reveal a negative correlation between debt-to-equity ratio and risk-adjusted stock returns. The authors study how changes in levels of debt are negatively associated with contemporaneous and future-adjusted returns.

Miao (2005) develops an industry model of equilibrium between capital structure choices and production decisions made by firms facing idiosyncratic technological shocks. His results show that technology (i.e., productivity) is important in determining a firm's probability of survival and leverage ratio. His work also looks into understanding the theoretical impact of financing policies on firm turnover. Hull (1999) examines how stock

value is influenced by changes in a firm's leverage relative to its industry leverage. He measures industry leverage in terms of the median leverage for a given industry.

Mackay (2005) investigate the importance of industry with regard to a firm's real and financial decisions. They find that industry-related factors other than industry fixed effects can partly explain the variation of financial structures amongst competitive industries. Hou (2006) examine the effect of industry concentration and average stock returns. After controlling for determinants such as size, book-to-market and momentum they find that firms in more competitive industries earn higher stock returns.

Penman (2007) investigated the book-to-price effect in expected stock returns and its relation to leverage. They divide the book to price value into an enterprise and a leverage component. These stand for the operational risk and financial risk. They show that the leverage component is negatively related to expected stock returns.

Musyoki (2012) undertook a study on changes in share prices as a predictor of accounting earnings for financial firms listed in Nairobi Securities Exchange. Findings indicated that out of the eleven companies that were analyzed, all of them had positive change towards the accounting earnings in relation to the share price. Additionally, the relationship between accounting variables and the Nairobi Stock Exchange information indicated mixed results, with some companies showing a strong positive correlation and others weak correlation.

Mwangi, Anyango and Amenya (2012) undertook a study on capital structure adjustment, speed of adjustment and optimal target leverage among firms quoted on the Nairobi Stock Exchange. Findings indicated that on average however, a typical firm closes about 5.3% of the gap between the current and the desired leverage within one year. At this rate it takes about 10 years to close half of the gap between a typical firms' current

and the desired leverage ratios. The slow adjustment is consistent with the hypothesis that other considerations such as market timing or pecking order outweigh the costs of deviating from the optimal leverage.

Maniagi, Mwalati and Ondiek (2013) researched on capital structure and performance based on evidence from listed non-financial firms on Nairobi Securities Exchange (NSE) Kenya. Results showed that firms on NSE appear to use less debt in their capital structure making many firms to pay less interest. Thus not increasing the risks the firm may be exposed to as debt tend to reduce performance. It therefore becomes especially worthwhile to investigate the effects of capital structure on stock returns across firm since different outcomes are expected when comparing the static trade-off theory and the pecking order theory with one and another.

2.5 Conceptual Framework

Conceptual framework is a concise description of the phenomena understudy accompanied by a graphical or visual depiction of the major variables of the study (Mugenda & Mugenda, 2003). (Mathieson et al 2011) defined a conceptual framework as a virtual or written product, one that explains, either graphically or in narrative form, the main things to be studied- the key factors, concepts, or variables and the presumed relationships among them. Conceptual framework, according to educational researcher (Stratman and Roth, 2013), are structured from a set of broad ideas and theories that help a researcher to properly identify the problem they are looking at, frame their questions and find suitable literature. Most academic research uses a conceptual framework at the outset because it helps the researcher to clarify his research question and aim.

Independent Variable   **Dependent Variable**

Size of the firm

Leverage

Profitability

Liquidity

STOCK RETURNS
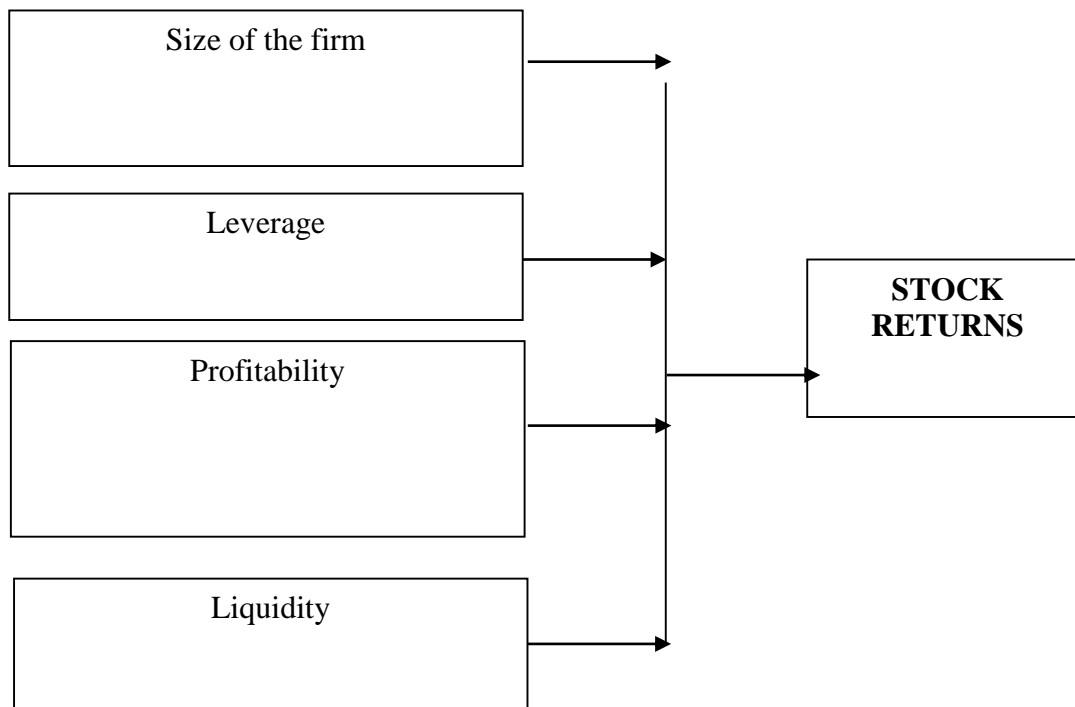
Figure 2. 1**:** Conceptual Model

2.6 Summary of Literature Review

As mentioned in the literature reviewed (Xiaoyan, 2008; Myers, 1984), the static trade- off theory explains that a firm's decision for getting to their optimal capital structure is related to the trade-off between the tax advantage of debt and several leverage-related costs. This static trade-off theory has dominated thinking about capital structure for a long time, however it has some shortcomings. Perhaps the main shortcoming is that many large, financially sophisticated and highly profitable firms make little use of debt in their financing. This is in contrast with the static-trade- off theory which assumes that these firms use relatively most debt. The thinking behind it from the static trade- off theory is that these firms face little risk of going bankrupt and there are high tax advantages from the tax shield to be obtained. Literature also discusses some firm- specific determinants of capital structure where both the static trade-off theory and the pecking-order describe assumptions on the

relationship between a determinant and leverage, which ultimately affect stock returns. For instance, Oolderink (2013) points out that these determinants are profitability, firm size and asset tangibility.

Empirical literature review reveals that although many studies have examined the determinants of either capital structure or stock returns, few have investigated both. Some show that stock returns determines capital structure (Baker and Wurgler, 2002; Welch, 2004), while others argue the opposite: that capital structure determines stock returns (Bhandari, 2008). Some studies show that capital structure and stock returns affect each other simultaneously (Yang, Lee, Gu, and Lee, 2010). While studying the impacts of stock return Gulnur and Sivaprasad (2010) pointed out that in his work in MM proposition II The Abnormal Stock Returns and Leverage by testing 2673 listed companies on London Stock Exchange.

The findings indicate that leverage has negatively and significantly affect the stock returns and affect remain negative and significant even if other risk factors like tax rate and industry concentration were added. This study therefore aims at filling this research gap by answering the following research question: what is the effect of capital structure on stock returns of firms quoted in the Nairobi Securities Exchange since all the above studies did not comprehensively address the problem?

According to Mason & Lind (1996), there are five steps in hypothesis testing which include stating null (H0) and alternative hypothesis (H1), selecting the level of significance or risk, the test statistics, decision rule and making a decision. According to Mason, Lind, & Marchal, (1999), 0.05 level of significance is used for consumer research project, 0.01 for quality assurance and 0.10 for political polling. In this case therefore, 0.05 significance level was used since we are establishing why the effect of capital structure on stock returns of firms.

CHAPTER THREE: RESEARCH METHODOLGY

3.1 Introduction

This chapter focused on methodology that the researcher used to accomplish the established research objective. This mainly refers to data collection, processing and analysis methods. Data collection instruments and procedures are also be discussed as well as the target population and study sample. The study has one objective that it seeks to assess the effects of capital structure on stock returns of firms quoted in the Nairobi Securities Exchange.

3.2 Research Design

The research design constitutes the blue print for the collection, measurement and analysis of data, (Kothari, 2005). A descriptive research design was used in this study. Descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals (Orodho, 2003). It can also be used when collecting information about people's attitudes, opinions habits or any other social issues (Orodho & Kombo, 2003).

The choice of this design is appropriate for this study since it utilized a questionnaire as a tool of data. This is supported by (Sekaran, 2003) who assert that this type of design enables one to obtain information with sufficient precision so that hypothesis can be tested properly. It is also a framework that guides the collection and analysis of data. (Gerson & Horowitz, 2002) observes that a descriptive research design is used when data is collected to describe persons, organizational settings or phenomenon. A descriptive study was appropriate for this study because it allows the researcher to examine the effects of capital structure on stock returns of firms quoted in the Nairobi Securities Exchange.

3.3 Population and Sample

Population refers to an entire group of persons or elements that have at least one thing in common. Population also refers to the larger group from which a sample is taken (Orodho & Kombo, 2003). A population can also be defined as including all people or items with the characteristic one wish to understand. Sampling is the process of selecting units from the population of interest so that by studying the sample a research may fairly generalize our results back to the population from which they wre chosen The target population comprises 48 companies listed in Nairobi Stock Exchange that do not deal with either banking or insurance as at 31/12/2015.

3.4 Data Collection

The study used secondary data relating to stock returns and firm's capital structures of the listed companies for the period 2005-2014, Secondary data of published financial reports. Kothari (2004) defines secondary data as data that is already available, referring to the data which have already been collected and analyzed by someone else. Polit and Beck (2003) explain that secondary research involves the use of data gathered in a previous study to test new hypotheses or explore new relationships. The data for this study related to a duration of ten years from 2006-2015.

3.5 Data Analysis

Data was analyzed based on Pearson correlation analysis and a multiple regression model conducted on statistical package for social science (SPSS) on accounting based measures of firms capital structure   Data available was corded and analyzed to ensure accuracy of information, and then the data collected was summarized and classified both qualitatively and quantitatively. This included an analysis of data to summarize the essential features and relationships of data in order to generalize and determine patterns of behavior and particular

outcomes. Descriptive analysis was employed; which include frequencies, percentages and ANOVA. The organized data was interpreted on account of concurrence to objectives using assistance of computer packages to communicate research findings. Frequency distribution tables and charts were used for data presentation. After the analysis and interpretation of data, a final report was written to provide a summary of the findings.

3.5.1 Analytical Model

The study adopted a multiple regression model at 5 percent assurance of significance level to establish the direction of the association between the independent variables and the dependent variable

In this case, the regression equation was expressed as $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 +$

$\beta_4 X_4 + e$………………. (i)

Where:

Y= stock return of firms ((Stock price at year end less Stock price at beginning of the year + dividend per share)/Stock Price at beginning of the period) $= \frac{(P1-P0)+D}{P0}$

β_0 = coefficient of intercept

X_1 = Leverage Ratio (debt to equity)

X_2= Size of the firm (calculated by the natural logarithm of total net assets)

X_3= Profitability (Earnings/Loss Per Share)

X_4= Liquidity Ratios (Current Ratio of the firm)

€ =error term

β1…β4 = regression coefficients of the independent variables

€ =error term

Each sector was then be compared against one another and variations done.

3.5.2 Test of Significance

The significance level, also denoted as alpha or α, is the probability of rejecting the null

hypothesis when it is true. The significance was tested at 5% level.

Table 3. 1: Diagnostic Table

Variable Type	Variable	Measurements
Dependent	stock return of firms	Leverage Ratio, Size of the firm, Profitability and Liquidity Ratios
Independent	Leverage Ratio	debt to equity
Independent	Size of the firm	sales volumes)
Independent	Profitability	assets to liabilities
Independent	Liquidity Ratios	debtors to creditors

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter covers analysis, findings and discussions of the collected data relating to stock returns and firm's capital structure of the listed companies at Nairobi Securities Exchange excluding banking and insurance for the period 2011 to 2015. Secondary data was collected from Nairobi Securities Exchange Handbooks and published books of accounts of the 48 companies listed in the Nairobi Securities Exchange. 12 companies; Williamson Tea, Atlas Development Services, Deacons Kenya Ltd, Nairobi Business Ventures Ltd, Umeme Ltd, The NSE, Home Africa Ltd, Kurwitu Ventures Ltd, Flame Tree Group Holdings, Kenya Orchards Ltd, Stanlib Fahari and Hutchings Biemer Ltd did not have complete information for the period under study. The researcher therefore used a total of 36 companies which translates to a response rate of 75% which is considered sufficient for statistical analysis.

Table 4. 1: Representation

Sector	Representation	Population	Percentage
Investment	4	6	67
Manufacturing And Allied	7	9	78
Telecommunication Technology	1	1	100
Real Estate Investment Trust	-	1	0
Agricultural	5	6	83
Energy And Petroleum	4	5	80
Construction And Allied	5	5	100
Commercial And Services	7	12	58
Automobiles And Accessories	3	3	100
TOTALS	36	48	75%

According to the table above, the study's overall representation was 75% which according to Mugenda and Mugenda (2003), a response rate of 50% is adequate for analysis and reporting.

4.2 Descriptive Statistics

Table 4. 2: Descriptives

	Stock Return	X1= Debt/Equity Ratio	X2= Ln of Total Assets	X3=EPS	X4= Current Ratio
Mean	0.051556978	0.324751954	15.50433077	-4.10644444	2.109666667
Standard Error	0.031846834	0.125972181	0.13032596	9.495841812	0.205375856
Median	-0.01129927	0.233904156	15.47678064	2.25	1.28
Mode	-0.25	0	#N/A	0.2	1.16
Standard Deviation	0.427270121	1.690094157	1.748506236	127.4000868	2.755406245
Sample Variance	0.182559756	2.856418259	3.057274056	16230.78211	7.592263575
Kurtosis	3.273975342	119.9200574	-0.649581807	177.0636894	18.60613486
Skewness	1.237690602	-9.751854398	0.086219367	-13.2508765	4.002359716
Range	3.06525	23.88079929	7.144167642	1776.5	18.66
Minimum	-0.89025	-20.07089366	12.13218388	-1697	0.1
Maximum	2.175	3.809905627	19.27635152	79.5	18.76
Sum	9.280256021	58.45535163	2790.779538	-739.16	379.74
Count	180	180	180	180	180
Largest(1)	2.175	3.809905627	19.27635152	79.5	18.76
Smallest(1)	-0.89025	-20.07089366	12.13218388	-1697	0.1
Confidence Level(95.0%)	0.06284353	0.248581584	0.25717292	18.73819586	0.405269284

Source: Author 2016

The mean for stock returns is 0.052 with a standard deviation of 0.427. The highest stock return recorded in the market within the period is 2.175 while the smallest is -0.89025. Data on stock returns is positively skewed with a positive skewness of 1.24.

Debt to Equity Ratio which measures the capital structure has a mean of 0.325 with a standard deviation of 1.69 data is negatively skewed with a high kurtosis of 119.92, the maximum Debt to Equity ratio is 3.81 while the least is -20.07.

The size of the firm was measured by the natural logarithm of total net assets. The mean was 15.5 with a standard deviation of 1.75. Data is positively skewed at 0.086 with a

relatively flat kurtosis of -0.65, the smallest firm had a natural logarithm of 12.13 which is approximately size of Ksh 185 million in net assets. The highest had 19.28 which translates to an approximate size of 236 million in net assets.

Total Earnings per share were used to show profitability of the firm. The market had a negative mean EPS of -4.1 which depicts a loss of Ksh 4.1 per every share held with a standard deviation of 127.4 that depicts high volatility in Earnings per share. The highest loss per share was a loss of 1697 per share while the highest profit per share was at Ksh 79.5. This data had a negative skewness of -13.25 with a sharp peak at a high kurtosis of 177.06.

Liquidity was measured by the use of current ratio which is calculated by current assets over current liabilities. The mean of current ratio was at 2.11 with a standard deviation of 2.76. The highest value of current ratio was at 18.76 with the least value being at 0.1. The data was positively skewed with a kurtosis of 18.6.

4.3 Regression Analysis

Table 4. 3: Output Summary

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.085115
R Square	0.007244
Adjusted R Square	0.01545
Standard Error	0.430558
Observations	180

Source: Author 2016

R square is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination. A coefficient of determination of 0% usually indicates that the model does not explain the variability of the response data around

the mean. An R squared of 100% shows that the model fully explains the variability of response data around the mean. Adjusted R squared on the other hand adjusts the statistic based on the number of independent variables in the statistic. The adjusted R squared of the model is -0.015.

This shows that the variability of our data from the mean is least explained by the model.

4.4 Line of Best Fit
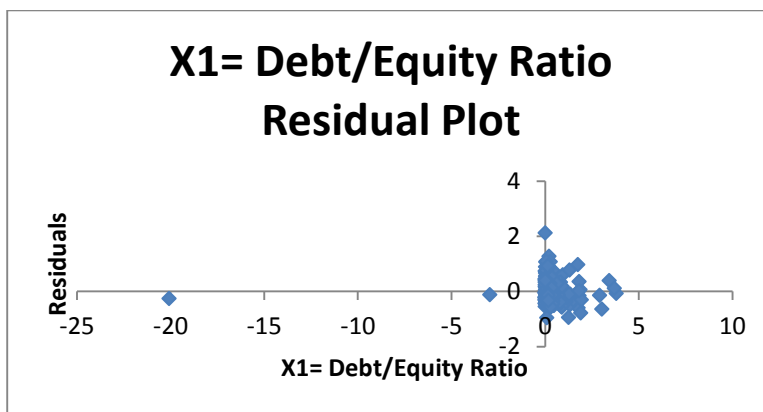
Figure 4. 1 Line of Best Fit

Source: Author 2016

The line of best fit of our data, clearly gives us a pictorial representation of our data. It confirms that the data is non linear and a linear model may not explain the variability of the data.

Table 4. 4: ANOVA

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	4	0.236737	0.059184	0.31926	0.00864
Residual	175	32.44146	0.18538		
Total	179	32.6782			

Source: Author 2016

In One way ANOVA, we reject the null when the p value is smaller than alpha. The null is also rejected when the critical F value is less than the calculated F value. The researcher

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obtained an F ratio of 0.319, while the critical value of F $_{(0.05, 4, 179)}$ is 2.4. This shows that F

critical > than the calculated value of F. The p value of 0.865 is however greater than the

alpha 0.05.

Table 4. 5: Coefficients

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.105149479	0.315601683	0.333171	0.739404	-0.51772592	0.728025	-0.51773	0.728025
X1= Debt/Equity Ratio	0.005816355	0.019083979	0.304777	0.760898	-0.03184802	0.043481	-0.03185	0.043481
X2= Ln of Total Assets	-0.0038792	0.019632675	-0.19759	0.843596	-0.04262649	0.034868	-0.04263	0.034868
X3=EPS	0.000268604	0.000255895	1.049663	0.29532	-0.00023643	0.000774	-0.00024	0.000774
X4= Current Ratio	0.002733136	0.012373031	0.220895	0.825432	-0.02168643	0.027153	-0.02169	0.027153

The table above shows there is no relationship between the independent variables to the

dependent variable.

4.5 Correlation Analysis

Table 4. 6: Correlation Matrix Table

	Stock Return	X1= Debt/Equity Ratio	X2= Ln of Total Assets	X3=EPS	X4= Current Ratio
Stock Return	1				
X1= Debt/Equity Ratio	0.017571537	1			
X2= Ln of Total Assets	-0.011274444	0.023275531	1		
X3=EPS	0.07753789	-0.059135111	0.12117618	1	
X4= Current Ratio	0.025600199	-0.018710426	-0.320002339	0.041516884	1

The table above shows a positive correlation of all the independent variables against the

dependent variable apart from the size of the firm which shows a negative correlation

against stock return. The table clearly shows the correlation of these variables against one another either being positive or negative.

4.6 Discussion of Findings

The Capital Structure of the companies was measured by Debt/Equity ratio which is the ratio of long term debt divided by shareholders equity. The researcher intended to find out the effect of Capital Structure on Stock returns for companies listed at the Nairobi Securities Exchange.

The researcher found an F critical of 2.4 which is greater than F calculated of 0.319. This suggests that we should reject the null hypothesis, but on the other hand, looking at the p value of 0.865 is greater than alpha level of 0.05 which depicts that the null hypothesis should not be rejected.

According to Mugenda and Mugenda (2003) the F value should be used along with the p value in order to decide whether the results are significant enough to reject the null hypothesis. A large F value shows that something is significant, while a small p value shows that all the results are significant. F statistic only compares the joint effect of all the variables together and in our case the joint effect of all the variables shows that the model is statistically insignificant in describing the relationship between capital structure and stock returns. However a p value higher than alpha shows that something is significant in the model and therefore we may not write off the entire model.

Adjusted R square of -0.015 also depicts that the model, does not explain variation of the data from the mean in which it has been clearly shown in the best line of fit that shows that the data set is not linear in nature. It therefore goes without saying that a linear model may not be used to predict such set of data.

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The study found out that despite the existence of a positive relationship between stock returns and capital structure, the relationship was insignificant. This finding can be associated with the conclusion by MM theory where they illustrated that under certain key assumptions, the value of the firm is unaffected by its capital structure. This study hence purports to support this theory. The study however contradicts findings by Gulnur and Sivaprasad (2010) who found out that leverage had a significant and negative effect on stock returns. Similar studies by Masuli (2013), Bhandari (2008) and Miao (2005) all found positive relationship between these variables.

The study further showed a negative correlation between stock returns and size of a firm. This is appalling as we expect large firms to record higher returns rather than their small counterparts. It shows that large firms at Nairobi securities Exchange do not fully employ their assets to optimally generate returns. The correlation between capital structure and profitability as measured by Earnings per share was negative. This shows that the use of more debt in firms reduces the profitability of these firms, probably due to the increased finance cost.

In summary the researcher found an insignificant positive relationship between capital structure and stock returns. Stock returns further improved with profitability of the firm and similarly with increased liquidity, it however declined with increase in size of the firm.

CHAPTER FIVE; SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter aims at linking and applying the results obtained from the study to solve real life capital structure and stock returns misalignments as described afore in the problem statement. This chapter will also elucidate the policy recommendations that policy makers can implement in order to better align institutions capital raising initiatives with the firms' stock returns. Indeed, policy and firm decision makers can play a bigger role in ensuring that leverage risk considerations forms part of the criteria that firms use when making financing decisions.

5.2 Summary and Conclusions

The main objective of this study was to establish the effect of Capital Structure on Stock returns of the firms listed at the Nairobi Securities Exchange. To achieve the objective the researcher sampled firms listed at the Nairobi Securities Exchange that exhibited the characteristics for the study. Secondary data was obtained on journals, handbooks and firms' websites in order to collect data, a descriptive study was undertaken by use of Spss statistical tool version 21. The results were presented by the use of tables and graphs.

The research findings indicated that there was an insignificant positive relationship (R^2= 0.00724) between the variables. The study also showed a positive relationship between stock returns and profitability as well as liquidity of the firm. However it showed a negative relationship between size of the firm and stock return.

From the study findings it would be safe to conclude that debt ratio had an insignificant relationship with Stock returns. Capital structure theory as attributed to Modigliani and Miller concluded that it doesn't matter how a firm finances its' operations and that the

value of a firm is independent of its' capital structure which makes capital structure irrelevant.

This conclusion is supported by the results of the regression analysis, where the One way Anova gives a calculated F value which is less than F critical. It shows a statistically insignificant relationship though the researcher could not reject the null hypothesis since the p value was greater than alpha of 0.05.

5.3 Policy Recommendations

It is important for finance directors and managing directors trying to fund the firm's assets to understand the impact of capital structure on their stock returns as well the cost of funds. This study established that capital structure and asset structure analysis is a very important analysis used to boost firm's competitive advantage and consequently stock returns. In addition the capital market analyst as well investment analyst should advise the investors as well firms on the optimal capital structure in order to maximize the shareholders wealth.

Borrowing introduces a risk to the company and on the return to shareholders in terms of reducing the amount of profit available to them, as well as exposing their assets to dissolution in the event of failing to repay the debt in the stipulated time. When a business's returns are likely to fluctuate greatly the use of increased debt magnifies the risk. Adequate emphasis must be placed on enabling such companies to employ more shareholders' funding than debt and reduce the risk that is inherent in the increased use of debt. Based on the results of the study the following recommendations were made.

The study showed a negative correlation between Capital structure and profitability as well as liquidity. This means that an increase in debt of a firm reduces profitability of a firm. The conclusion that borrowing does not always improve a firm's stock returns

leads to the recommendation that firms should use shareholders' funds as much as possible before they undertake to borrow, so that they minimize the risks related to borrowing, which include interest on the debt exceeding the return on the assets they are financing. Firms must therefore be encouraged or assisted to obtain equity by listing on the exchanges. This can be done by educating and sensitization of business owners of the benefits of listing, as well as granting of special fiscal measures to encourage them to list.

When a firm has exhausted its shareholders' funding and chooses to finance its expansion of operations by borrowing, special consideration must be taken to ensure that the assets financed by the borrowed funds bring in a higher return than the interest the firm is required to pay on the debt. If this is not done, the firm will erode the reserves in order to pay the debt as the assets financed will not be making enough returns to cover the debt. The firm must select source of funding carefully to avoid falling into the leverage risk trap.

The increase in debt has been found to reduce stock returns over time and increase the risks to the business owners. The Capital Market Authorities and the Exchanges should increase education of the business community in the advantages of listing over borrowing. In Kenya a large proportion of businesses are small and medium enterprises but very few of these are listed on the NSE.

5.4 Limitations of the study

There are various limitations to this study. The researcher relied on secondary data and therefore could not ascertain the accuracy and the correctness of this data which was heavily relied upon. Due to inadequate resources, the researcher conducted this research under constraints of finances. In addition Nairobi Securities Exchange analysts had to be pushed to assist with data. This was done through many calls to remind them. Others wanted to be

paid in order to give data. Other thought that the information they were requested to volunteer was confidential.

Time allocated for the study was insufficient while holding a full time job and studying part time. This was encountered during the collection of material as well as the data to see the study success. However the researcher tried to conduct the study within the time frame as specified.

5.5 Suggestions for Further Studies

Arising from this study, the following directions for future research in Finance were recommended as follows: First, this study focused on the listed companies in the Nairobi Securities Exchange. Therefore, generalizations 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 stock returns.

Similar studies to this can also be replicated in a few years to come to assess the effect of capital structure on stock returns at Nairobi securities exchange: a sectoral analysis. Also the effect of capital structure on corporate strategy is also another area of interest which can be under the area of further research and a more intense study along that area can come in handy.

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APPENDICES

Appendix I: LISTED COMPANIES AT THE NAIROBI SECURITIES EXCHANGE

AGRICULTURAL

1. Eaagads Ltd Ord 1.25

2. Kapchorua Tea Co. Ltd Ord Ord 5.00

3. Kakuzi Ord.5.00

4. Limuru Tea Co. Ltd Ord 20.00

5. Rea Vipingo Plantations Ltd Ord 5.00

6. Sasini Ltd Ord 1.00

7. Williamson Tea Kenya Ltd Ord 5.00

COMMERCIAL AND SERVICES
1. Express Ltd Ord 5.00

2. Kenya Airways Ltd Ord 5.00

3. Nation Media Group Ord. 2.50

4. Standard Group Ltd Ord 5.00

5. TPS Eastern Africa (Serena) Ltd Ord 1.00

6. Scangroup Ltd Ord 1.00

7. Uchumi Supermarket Ltd Ord 5.00

8. Hutchings Biemer Ltd Ord 5.00

9. Longhorn Kenya Ltd

TELECOMMUNICATION AND TECHNOLOGY
1. Access Kenya Group Ltd Ord. 1.00

2. Safaricom Ltd Ord 0.05

AUTOMOBILES AND ACCESSORIES

1. Car and General (K) Ltd Ord 5.00

2. CMC Holdings Ltd Ord 0.50

3. Sameer Africa Ltd Ord 5.00

4. Marshalls (E.A.) Ltd Ord 5.00

INVESTMENT

1. City Trust Ltd Ord 5.00

2. Olympia Capital Holdings ltd Ord 5.00

3. Centum Investment Co Ltd Ord 0.50

4. Trans-Century Ltd

MANUFACTURING AND ALLIED
1. B.O.C Kenya Ltd Ord 5.00

2. British American Tobacco Kenya Ltd Ord 10.00

3. Carbacid Investments Ltd Ord 5.00

4. East African Breweries Ltd Ord 2.00

5. Mumias Sugar Co. Ltd Ord 2.00

6. Unga Group Ltd Ord 5.00

7. Eveready East Africa Ltd Ord.1.00

8. Kenya Orchards Ltd Ord 5.00

9. A.Baumann CO Ltd Ord 5.00

Source: *Nairobi Securities Exchange (2014)*

Company Name	2015	2014	2013	2012	2011	2010	2015	2014	2013	2012	2011	2015		201
	Share price end				DPS		EPS						Current Ratio	
Eaagads Ltd	32.5	29	25.5	34	69.5	73	0	0	0	1.25	1.25	0.66	(1.30)	(1.84
Kakuzi Ltd	317	137	125	95	69.5	81.5	5	3.75	3.75	3.75	3.75	26.92	8.17	8.4
Kapchoria Tea Ltd	130	137	145	121	115	146	5	7	7.5	7.5	12.5	(2.91)	(5.82)	32.2
Limuru Tea Ltd	1085	771	500	430	335	300	1	1	1.25	1.25	7.5	0.45	(0.02)	1.7
Sasini Tea Ltd	16.35	14.1	13.3	11	12.1	13.3	1.25	0.25	0.25	0.75	0.8	4.83	0.20	0.4
Car and General Company Ltd	40	54	30	24	22.8	20	0.6	0.8	0.8	0.55	0.55	3.80	8.33	9.4
Marshalls (EA) Ltd	12	10	12.4	12	14.2	19	0	0	0	0	0	(1.42)	(0.17)	(7.64
Sameer Africa Ltd	3.75	6	5.15	4.25	4.4	7.7	0	0.3	0.25	0.2	0.2	(0.51)	(0.32)	1.4
Express Kenya Ltd	4.5	6.5	3.9	3.5	3.9	7.8	0	0	0	0	0	(1697.00)	(28.06)	0.0
Kenya Airways Ltd	8.2	12.4	12.5	14	32.3	60	0	0	0	0.81	1.5	(17.20)	(2.26)	(5.25
Longhorn Publishers Ltd	4.5	9.05	13.5	10.2	10.2	10.2	0.15	1.2	0.8	0	7.5	0.70	0.93	1.6
Nation Media Group Ltd	191	263	314	263	140	167	10	2.5	10	10	8	11.79	13.05	16.1
The Standard Group	28	34.8	26	21.8	25	45.5	0	0.5	0.5	0	0	(3.54)	2.70	2.3
TPS Eastern Africa Ltd	25	36	45.5	40	55	68.5	0.25	1.35	1.35	1.3	1.3	(0.78)	0.91	2.4
Uchumi Supermarket Ltd	8.95	12.8	17.9	18	11.4	14.5	0	0.3	0.3	0.3	0	(9.37)	1.45	1.3
WPP ScanGroup Ltd	30	45.8	48.3	68.5	41.5	61.5	0.5	0.5	0.4	0.6	0.7	3.36	3.16	2.1

Athi-River Mining Ltd	41.75	82.5	90	44.5	158	183	0	0.6	0.6	0.5	2	(5.84)	3.02	2.7
Bamburi Cement Ltd	175	139	194	185	125	187	13	12	11	10.5	10	14.49	9.80	9.5
Crown Paints Kenya Ltd	61	111	75	42.5	20.5	36	0.6	1.75	1.75	1.25	1.25	11.44	9.26	9.0
East African Cables Ltd	10.6	16.2	16.8	11.7	10.6	16.3	0	0.5	1	1	0.8	(5.66)	2.66	1.5
East Africa Portland Cement Company	57.5	80	57.5	60	80	115	0	0	0.75	0	0.5	79.50	(4.30)	19.7
KenGen	9.25	10.9	15.2	8.6	13.6	17.1	0.65	0.4	0.6	0.6	0.5	5.24	1.29	2.3
Kenolkobil Ltd	9.6	8.8	9.45	13.5	9.95	10	0.25	0.2	0.1	0	1	1.68	0.97	0.3
KPLC Company Ltd	18.35	13.4	14.5	15.2	21.5	200	0.5	0.5	0	0.5	0.45	3.81	3.58	2.2
Total Kenya	18.25	25.7	24.4	13.8	14.8	29	0.77	0.7	0.6	0.2	0	2.57	2.26	2.0
Centum Investment Company Ltd	63.5	20	19.8	13.1	13.1	21.5	0	0	0	0	0	10.45	4.54	1.5
Olympia Capital Holdings Ltd	6.25	5.2	3.65	3.9	5.05	6	0	0.25	0	0.1	0	0.35	1.13	0.2
Transcentury Ltd	8.25	19.3	28.8	23.5	27.3	27.3	0	0	0.4	0.4	0.25	(8.64)	(8.13)	2.2
BOC Kenya	102	125	125	99.5	100	132	5.2	5.2	5.2	5.05	6.8	7.61	11.76	10.3
British American Tobacco	785	900	595	493	246	270	42.5	39	37	32.5	30.5	49.76	42.55	37.2
Carbacid Investments Ltd	16.95	149	140	125	91.5	156	0.7	0.7	6	6	5	1.55	14.44	13.9
East African Breweries Ltd	304	289	320	223	195	181	7.5	5.5	5.5	8.75	8.75	12.06	8.67	8.2
Eveready East Africa Ltd	3.05	3.65	2.7	2	1.75	3	0	0	0	0	0	(0.37)	(0.85)	0.2
Mumias Sugar Group	2.35	2.85	4.2	6.1	7.15	12.9	0	0	0	0.5	0.5	(3.04)	(1.77)	(1.09
Unga Group Ltd	46.75	39.8	34	69.5	36	36.5	1	0.75	0.75	0.75	0.75	5.68	5.06	3.5
Safaricom Ltd	17.05	12.4	6	3.2	3.8	5.55	0.64	0.47	0.31	0.22	0.2	0.80	0.57	0.4