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

BY

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DECLARATION

I declare to the best of my knowledge that this is my original work and has not been presented for a degree in this or any other university. To the best of my knowledge and belief, the research project contains no material previously published or written by another person except where due reference is made. No part of this project may be reproduced without prior permission of the author and / or University of Nairobi.

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DECLARATION BY SUPERVISOR:

This is to declare that this research project has been presented for examination with my approval as the appointed University supervisor.

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DEDICATION

This research project is dedicated to my family my dad Simon Mwaura, mum Jacinta Nduta, sisters Mercy Wanjiku & Faith Wanjiru; for giving me the invaluable support to concentrate on this research. God bless you all. I thank Almighty God who is my source of all inspiration in allowing me to undertake this project that is too involving in terms of time and resources.

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LIST OF ABBREVIATIONS

CIS: Collective Investment Schemes

CMA: Capital Markets Authority

DPO: Dividend Payout Ratio

NSE: Nairobi Securities Exchange

ROA: Return on Assets ratio

SPSS: Statistical Package for Social Science

TANG: Total Assets Ratio as Indictor of Firms' Tangibility

USA: United States of America

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ABSTRACT

A firm has to issue various securities in a countless mixture to come across particular combinations that can maximise its overall value which means optimal capital structure. If a wrong mix of finance is employed; the performance and survival of the business enterprise may be seriously affected. The study's general objective was to evaluate the relationship between capital structure and financial performance of investment firms listed at the Nairobi Securities Exchange. A descriptive survey research design was employed in this study. The target population of the study comprised of the three investment companies which were listed under the investment sector of the market segment of the Nairobi Securities Exchange (NSE) as at June 2014. A census approach method was used in the study where the three companies were selected without sampling. The study utilised panel data which consist of time series and cross-sections. The data for all the variables in the study were extracted from published reports and financial statements of the listed investment companies in the NSE covering the years 2010 to 2013 where quarterly reports were used. Quantitative method of data analysis and inferential analysis were used as analysis techniques. A general model for panel data that allowed the study to be estimated using panel data with great flexibility and formulate the difference in the behaviour of the cross-section elements was adopted. From the findings on the Adjusted R squared, the study revealed that there was variation of financial performance of investment firms listed in the NSE due to variations in long-term debt, total debt and size. The study revealed that long term and total debt were the major factors influencing the financial performance of investment firms listed in the NSE. From the findings on the correlation analysis the study revealed that there was a strong relationship between capital structure and financial performance. The study concludes that total debt has a negative impact on financial performance of the firms listed in the NSE. 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. The study also recommends that there is need for the firms to adopt strategies that would increase their size base and utilize the profits generated from the operations to acquire more assets and improve their financial performance. There is need for the firms to have a strong capital structure which provides them strength to withstand financial crises and offers shareholders a better safety net in times of depressions.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Capital refers to structure as the way in which a firm finances its operations which can either, be through debt or equity capital or a combination of both (Brigham and Houston, 2005). Financial Performance is the blue print of the financial affairs of a concern and it reveals the organization's ability to translate its financial resources into mission related activities. The importance of financing decisions cannot be over emphasised since many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives (Majumdar, 2009). The finance factor is the main cause of financial distress. Financing decisions result in a given capital structure and suboptimal financing decisions can lead to firm's failure. A great dilemma for management and investors alike is whether there exists an optimal capital structure. The objective of all financing decisions is wealth maximisation and the immediate way of measuring the quality of any financing decision is to examine the effect of such a decision on the firm's performance.

High performance is more than high returns. It is the ability to generate high returns for the level of risk assumed by a firm (Kester, 2006). Credit risk, liquidity risk, market risk and so on are some of the risks firms assume in order to earn optimal returns. High performing institutions are those that manage and control their risk the best by employing effective trade-off between risk and returns. Firms are constantly looking for ways to achieve high performance and therefore a lot of theories have been formulated and studies conducted by firms in efforts to determine the factors that influence performance of firms. A set of these theories and studies identify capital structure as one of the factors affecting a firm's performance on one hand and on the other hand these theories and studies contradict the view that Capital structure does affect a firm's performance arguing that capital structure is irrelevant to a firm's performance. The capital structure of a firm is basically the way a firm finances its assets through some combination of debt and equity that a firm deems as appropriate to enhance its operations (Stewart, 2011).

1.1.1 Capital Structure

The term capital structure represents the proportionate relationship between the different forms of long term financing (Varaiya, Kerin and Weeks, 2007). It refers to the way a corporation finances its assets through some combination of equity, debt, or hybrid securities. A firm's capital structure is then the composition or 'structure' of its liabilities. For example, a firm that sells $20 billion in equity and $80 billion in debt is said to be 20% equity-financed and 80% debt- financed (Holmes, 2003). The firm's ratio of debt to total financing, 80% in this example is referred to as the firm's on leverage. Gearing ratio is the proportion of the capital employed of the firm which come from outside of the business finance, e.g. by taking a short term loan.

Funds used for firms operations may be generated internally or externally. When raising funds externally, firms choose between equity and debt. Most of the effort of financial decision making process is centered on the determination of the optimal capital structure of a firm. Kochhar (2006) defines capital structure as a mixture of financial liabilities (debt and equity) that is used to finance the operations of a firm. Different theories have been proposed to explain the optimal mix of debt and equity. The theories suggest that firms select their capital structure depending on attributes that determine the various costs and benefits associated with debt and equity financing. Explanations vary from the irrelevancy hypothesis to the optimal capital structure where the cost of capital is minimized and the value of the firm maximized (Narayanan, 2008).

1.1.2 Financial Performance

Financial measures are regarded as "lag" indicators of performance whereas Intellectual capital measures (like non-financial measures) are regarded as "lead" indicators since they are mainly intended to generate future earnings power. While all future earnings are uncertain, it is greater for intellectual capital than for tangible assets. Hamilton (2010) asserts that fund managers in forecasting the valuation of firms use financial information. Traditionally, firms relied on their tangible assets to drive their performance and firm-level strategy. The performance of business organizations is affected by their strategies and operations in market and non-market environments. Sizable, long-term investments in tangible and intangible assets have long term consequences. An investment today will determine the firm's strategic position many years. They further state that these investments also have a considerable impact on the organization's future cash flows and the risk associated with those cash flows. A business' cost of capital

provides both a benchmark to evaluate its performance and a discount rate for evaluating capital investments (Klammer, 2011). Inadequate evaluation and decision tools risk the possibility of applying scarce resources to areas, which promote a return less than the cost of capital.

The limitations on financial statements in explaining firm value underline the fact that the source of economic value is no longer the production of material goods, but the creation of intellectual capital. Intellectual capital includes human capital and structural capital wrapped up in customers, processes, databases, brands, and systems (Modigliani and Miller, 2003), and has been playing an increasingly important role in creating corporate sustainable competitive advantages. The use of financial ratios for business analysis is common, and hence, almost cliché. Ratio analysis techniques can be considered a business analysis paradigm as an established point of view (Kennerley, 2002). Considering these facts, encouraging industry operators to apply the techniques of ratio analysis to assess their performance requires a simple framework that compresses a large amount of data into a small set of performance indicators. These performance indicators must include intangible, non-financial elements that are often critically important to operators.

The firm's debt ratio is the proportion of the firm's debt in relation to the total equity finance in the company's capital structure (Michael, 1992). This key ratio is famously known as an indicator of the company's long term solvency position and 8 also indicator of the financial risk position of the company. It's obtained by dividing the total company debt with the total shareholders' funds. Gross profit is the difference between revenue and cost of goods sold. Gross Margin is the ratio of gross profit to revenue. Depends on situation or decision analysed both or one of these two performance indicators can be more suitable. For merchandising decisions in company with large assortment of products gross profit expressed in money terms needs to be used when measuring financial result on the level of all product assortments or on the level of big product group (Block and McMillan, 2005). This allows seeing what the overall financial result without digging into details is.

Gross profits are the cleanest accounting measure of true economic profitability. The farther down the income statement one goes, the more polluted profitability measures become, and the less related they are to true economic profitability (Pandey, 2005). For example, a firm that has both lower production costs and higher sales than its competitors is unambiguously more profitable. Even so, it can easily have lower earnings than its competitors. The Return on Assets

ratio (ROA), also called return on investment, is an important profitability ratio because it measures the efficiency with which the company is managing its investment in assets and using them to generate profit. It measures the amount of profit earned relative to the firm's level of investment in total assets. The return on assets ratio is related to the asset management category of financial ratios. The calculation for the return on assets ratio is: Net Income/Total Assets. In MIX definition the return on asset ratio is: (Net Operating Income – Taxes) / Average Assets. The higher the percentage, the better, as a high percentage means that the company is succeeding in using its assets to generate sales (Pandey, 2006).

1.1.3 Relationship between Capital Structure and Financial Performance

Hutchinson (1995) in his scholarly works argued that, financial leverage had a positive effect on the firm's return on equity provided that earnings' power of the firm's assets exceeds the average interest cost of debt to the firm. Tong and Ning (2004) also found significantly positive relationship between debt ratio and measures of profitability. Donaldson (2005) also identified positive association between debt and profitability but for industries. In their study of leveraged buyouts, Brigham and Houston (2005) established a significantly positive relation between profitability and total debt as a percentage of the total buyout-financing package.

The capital structure theory is premised on the idea that the interests of the company's managers and its shareholders are not perfectly aligned. According to Majumdar (2009) emphasis is placed on the importance of the agency costs of equity in corporate finance arising from the separation of ownership and control of firms whereby managers tend to maximize their own utility rather than the value of the firm. Agency costs can also exist from conflicts between debt and equity investors. These conflicts arise when there is a risk of default. The risk of default may create what Short (2002) referred to as an "underinvestment" or "debt overhang" problem. In this case, debt will have a negative effect on the value of the firm.

Alternatively, there may be instances where managers have incentives to take excessive risks as part of risk shifting investment strategies. This leads us to Zeckhauser and Pound (1990) free cash flow theory where as stated by Kester (2006) the problem is how to motivate managers to disgorge the cash rather than investing it below the cost of capital or wasting it on organizational inefficiencies. Thus a higher level of leverage may be used as a disciplinary device to reduce managerial cash flow waste through the threat of liquidation or through pressure to generate cash flows to service debt (Short et al., 2002). In these situations, debt will have a positive effect on the value of the firm.

John and Williams (2005) develops a model in which debt financing is shown to mitigate overinvestment problems but aggravate the underinvestment problem. This model predicts that debt can have both a positive and a negative effect on firm performance and presumably both effects are present in all firms. According to McConnell and Servaes (1995) the common element in the models of Myers, Jensen and Stulz is their focus on the link between the firm's investment opportunity set and the effects of debt on the value of the firm. Thus a reasonable conjecture will be that for firms with few growth opportunities the positive effect of debt on firm performance will be more dominant whereas the opposite effect will apply for firms with high growth opportunities (Stewart, 2011).But firm performance may also affect the capital structure choice. This reverse causality effect is in essence a feature of theories linking agency costs, corporate control issues, and in particular, asymmetric information and taxation with the value of the firm.

1.1.4 Investment Firms Listed at Nairobi Securities Exchange

The Nairobi Securities Exchange formerly Nairobi Stock Exchange was constituted as a voluntary association of stock brokers under the society act. In 1990, a trading floor and secretariat was setup at the IPS building, before moving to the Nation Centre Nairobi in 1994 (Gachoka, 2005). Over the past decade, the securities exchange has witnessed numerous changes, automating its trading in September2006 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. Trading hours were also increased from two to six. Moving to Westlands in the environs of Nairobi symbolically marked the end of an era where the market was owned and run by stockbrokers (Ruto and Rueben, 2010).

Nairobi Securities Exchange aims at supporting trading clearing settlement of equities debt derivatives and other associated instruments (Owolabi and Inyang, 2013). It is mandated to list companies on the securities exchange and enables investor's to trade in securities of companies thus its charged with the health of Securities Exchange. It's regulated by Capital Markets Authority.

Over the years the investment companies have continued to play a critical role in Kenya's economic growth. Investment stocks are projected to continue lag in performance at the NSE with most investors expected to continue going after liquid counters, whose business is not affected by uncontrollable factors like the weather. External factors such as the fluctuation of

the local currency, economic downturns in export markets, and high costs of inputs affect the profits of investment firms and by extension the dividends they pay out (Gachoka, 2005).

In Kenya, the establishment and licensing of Investment Companies is done by the Capital Markets Authority (CMA). These firms are registered as Collective Investment Schemes (CIS) each mandated to operate investment based on the license granted. Kenya represents over 50% of the economic power of the East African countries, with the most active securities exchange, Nairobi Securities Exchange (Ruto and Rueben, 2010). Even with the growth in the number of investment firms, the uptake of these investment opportunities has been wanting. The volume of funds channelled to funds in comparison to other securities, questions the knowledge of the operations of funds, investor confidence and knowledge of the different investment vehicles available. The listed collective schemes are managed by investment companies. In Kenya there are three investment companies listed in the Nairobi Securities Exchange. This indicates that such investments are professionally managed and the returns derived should mimic the market trends. The Investment companies listed at are Centum Investment, Olympia Capital Holdings and Trans Century Ltd.

The three investment firms are considered among the largest listed Investment Companies in the East African region and together with their subsidiaries are engaged in the business of investment across private equity, construction industry and infrastructure and quoted private equity asset classes. The Nairobi Securities Exchange has also enabled the investment companies to engage local participation in their equity, thereby giving Kenyans a chance to own shares. Companies can also raise extra finance essential for expansion and development. To raise funds, a new issuer publishes a prospectus, which gives all pertinent particulars about the operations and future prospects and states the price of the issue. NSE also enhances the inflow of international capital. They can also be useful tools for privatization programmes. It is generally accepted that investment firms declaring stock distributions of 25 per cent or greater consider them as stock splits which, therefore, have no effect on retained earnings. Stock distributions of less than 25 per cent are considered as stock dividends that reduce the retained earnings account (Owolabi and Inyang, 2013).

1.2 Research Problem

Financial managers find it difficult to exactly determine the optimal capital structure (Noreen, 2013). A firm has to issue various securities in a countless mixture to come across particular

combinations that can maximise its overall value which means optimal capital structure. If a wrong mix of finance is employed; the performance and survival of the business enterprise may be seriously affected. Survival and growth needs resources but financing of these resources has limitation. The investment sector is expected to play a key role in the growth and in an attempt to achieve the government's vision 2030. Investment has remained important to the Kenya's economic growth, accounting for 27% of real GDP, 40% of the total earnings and 45% of government revenue. Some 45% of Kenyans are employed in the investment sector (Kitaka, 2013). When institutional investors are making investment decisions, they tend to evaluate various stocks and securities which they perceive will optimize their returns.

Capital structure is one of the main determinants of firm performance. The tax benefit of debt financing lead firms to borrow excessively. In doing so firms very often ignore the bankruptcy costs stemming from declining returns to excessive debt. Therefore, when profit maximizing firms diverge from an appropriate capital structure their bankruptcy or financing costs outweigh the tax benefits related with the trade-off between debt and equity. Zeitun and Tian (2007) finds that capital structure has a significant and negative impact on firm's performance and underestimation of bankruptcy costs may lead firms to borrow excessively and carry high debt in their capital structure. However, others find mixed results regarding the impact of capital structure on firm's performance (Abor, 2007).

The government and the private sector have invested heavily in creating an enabling environment for doing business in Kenya and, indeed, some companies have performed exceedingly well as a result this companies include Equity Bank and Safaricom limited. Several companies, however, are experiencing declining performance and some have even been delisted from the NSE in the last decade CMC motors and Access Kenya. Momentous efforts to revive the ailing and liquidating companies have focused on financial restructuring. However managers and practitioners still lack adequate guidance for attaining optimal financing decisions (Hall et al., 2008) yet many of the problems experienced by the companies put under statutory management were largely attributed to financing (Michaelas, Chittenden and Poutziouris, 2009). This situation has led to loss of investors' wealth and confidence in the stock market. Studies on the relationship between various financing decisions and performance have produced mixed results. It is against this background that this study was carried out.

Locally, many researchers have reviewed various aspects of capital structure in the Kenyan context Gachoki (2005) reviewed the capital structure choice in the empirical testing of the

pecking order theory among firms quoted on the NSE, Wandeto (2005) carried out an empirical investigation of the relationship between dividend changes and earnings, cash flows and capital structure for the firms listed in the NSE, while Nyaboga (2008) researched on the relationship between capital structure and agency cost. This study attempts to answer; is there a relationship between capital structure and financial performance of investment firms listed at the Nairobi Securities Exchange?

1.3 Objective of the Study

To investigate the relationship between capital structure and financial performance of investment firms listed at the Nairobi Securities Exchange.

1.4 Value of the Study

The findings of this study will benefit Investors in the listed investment firms, shareholders of the listed investment firms, academicians and financial researchers and the management of investment firms.

The more the knowledge about a phenomena one has the better equipped they are to face the challenges of the future. Effects of capital structure, how it is affected by a firms return and how a change on it can affect the firm's value will be a welcome weapon to facing the challenges of better management, capital appreciation and shareholder wealth maximization.

Current and prospective investors in these firms will be able to understand better the capital structure of the firms they have invested in or seek to invest in and its impact on the firm's financial performance, how its change impacts on the firm's value and if the firms return can cause it to change its capital structure and what the consequences of such a choice would be.

This will further inform their investment decisions lowering the risks of investing blindly. The researcher hopes that the findings from the study shall be useful to the business community since it will throw more light on the role that capital structure has in determining financial performance.

Shareholders will understand more about the capital structure, firm's value and firm's returns and how they are related and in turn affect each other. This will help them in making informed decisions at the Annual General Meetings while being faced with issues of capital structure changes and firms value determination.

Capital structure is a wide study where a lot of research had been done. Yet, there is no empirical evidence that it has been exhaustively covered and that all options that relate to it have been researched and reviewed. Thus, additional information based on concrete evidence will be a welcome additive to the existing scope of knowledge.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review on the relationship between capital structure and financial performance. It summarized the information from other researchers who have studied the field. The review covered both the theoretical and empirical reviews of the existing literature. The theoretical review helps in understanding of the current body of knowledge on the research topic while the empirical review helped in understanding what other related studies found and suggested. The reviews were used to develop a conceptual frame work.

2.2 Theoretical Review

This study was underpinned on three theories that are relevant to capital structure and financial performance. These theories were Modigliani Miller Theory, Trade off Theory and Pecking Order Theory and are described below;

2.2.1 Modigliani Miller Capital Structure Theory

Modigilliani and Miller (1963) theorem is considered the greatest breakthrough in theory of optimal capital structure. The theorem specifies the financial decisions by firms that are irrelevant to the firm's value. Its prepositions include; the value of a firm is the same regardless of whether it finances itself with debt or equity. The weighted average cost of capital is constant. The assumptions of Modigliani- Miller theorem are; Perfect and frictionless markets, no transaction costs, no default risk, no taxation, both firms and investors can borrow at the same interest rate; there is homogeneous expectation homogeneous risk and equal access to all of relevant information.

The rate of return on equity grows linearly with the debt ratio implying that the higher the debt equity ratio the higher the expected return on equity. The distribution of dividends does not change the firm's market value it only changes the mix of Equity and Debt in the financing of the firm. In order to decide an investment, a firm should expect a rate of return at least equal to cost of capital no matter where the finance would come from (Mahrt, 2005). Hence the marginal cost of capital should be equal to the average cost of capital. The constant cost of capital is sometimes called the "hurdle rate" (the rate required for capital investment). In

summary the theory states that the value of a firm is invariant with respect to its leverage policy in an arbitrage-free market when there is no corporate income tax and no bankruptcy cost: whether firm is financed through debt or equity, its value remains the same (Wald, 1999).

2.2.2 Trade off Theory

According to Elliott (1972), the firm is viewed as setting a target debt-equity ratio and gradually moving towards it. The firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. In particular, capital structure moves towards targets that reflect tax rates, assets type, business risk, profitability and bankruptcy costs. The firm is balancing the costs and benefits of borrowings, holding its assets and investment plans constant (Adedeji, 1995). The firm's optimal capital structure will involve the trade-off between the tax advantage of debt and various leverage-related costs. Due to the distinctions in firm-specific characteristics, target leverage ratios will vary from firm to firm. Institutional differences, such as different financial systems, tax rate and bankruptcy law etc., will also lead the target ratio to differ across countries.

The theory predicts that firms with more tangible assets and more taxable income to shield should have high debt ratios (Elliott, 1972). Firms with more intangible assets, whose value will disappear in case of liquidation, should 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, thus a higher debt ratio will be anticipated. Under trade-off theory, the firms with high growth opportunities should borrow less because they are more likely to lose value in financial distress.

2.2.3 Pecking Order Theory

Pecking order theory of capital structure by Myers (1984) states that, firms have a preferred hierarchy for financing decisions. Firms will borrow instead of issuing equity when internal cash flow is not sufficient to fund capital expenditure. The highest preference is to use internal financing before resorting to any form of external funds. Internal funds incur no floatation costs and require no additional disclosure of financial information that may lead to a possible loss of competitive advantage. If a firm must use external funds, the preference is to follow a certain order of financing sources: debt, convertible securities, preferred stock, and common stock, (Miller, 1977). This order reflects the motivations of the financial manager to retain control of the firm, reduce the agency costs of equity, and avoid negative market reaction to an

announcement of a new equity issue. The amount of debt will reflect the firms' cumulative need for external funds. The theory has two key assumptions about financial managers. The first of these is the likelihood that a firm's managers know more about the company's current earnings and future growth opportunities than outside investors. There is a strong desire to keep such information proprietary. The use of internal funds prevents managers from having to make public disclosures about the company's investment opportunities and potential profits to be realized from investing in them.

The second assumption is that managers will act in the best interests of the company's existing shareholders. The managers may even forgo a positive-NPV project if it would require the issue of new equity, since this would give much of the project's value to new shareholders at the expense of the old, (Fischer, Heinkel and Zechner, 2009). However the theory has some limitations since it does not explain the influence of taxes, financial distress, security issuance costs, agency costs, or the set of investment opportunities available to a firm upon that firm's actual capital structure. It ignores the problems that can arise when a firm's managers accumulate so much financial slack that they become immune to market discipline. As such the theory is offered as a complement to, rather than a substitution for, the traditional trade-off model.

2.3 Determinants of Financial Performance

This section presents the financial performance determinants which includes; capital structure, leverage, profitability, risk management, growth options, firm size, financial constraints and their relationship is discussed below;

2.3.1 Capital Structure

Bhaduri (2002) suggests that if a firm can credibly signal its quality to outsiders, it can avoid an information premium and so may gain access to external sources of funds, mainly the equity market. John and Williams (2005) argue that a firm with a reputation for paying a constant stream of dividends face less asymmetric information when entering the equity market. Thus, if dividend payments represent a signal of sound financial health and hence of higher debt-issuing capacity, one would expect a positive relationship between dividend payments and leverage. In addition, firms with a reputation for paying a stream of dividends will be monitored by the capital market (Short et al., 2002).

Institutional ownership may act as alternative monitoring device, and so this will reduce the need for capital markets as external monitoring system (Zeckhauser and Pound, 1990). Thus, according to Modigliani Miller theory, there is a positive relationship between dividend payments and institutional ownership. However, the existence of institutional ownership mitigates the need for dividends to signal good performance (Short, 2002). Therefore, Trade off theory suggests a trade-off between dividends and institutional ownership, i.e. a negative relationship. According to the pecking order theory in the presence of asymmetric information, a firm would prefer internal finance over other sources of funds, but would issue debt if internal finance was exhausted. The least attractive alternative for the firm would be to issue new equity. Profitable firms are likely to have more retained earnings. Thus, a negative relationship is expected between leverage and past profitability (Donaldson, 2005).

Institutional investors prefer to invest in profitable firms. This is because the more profitable the firm is, the lower the likelihood of default and of having to face financial difficulties and bankruptcy. Therefore, a positive relationship is expected between profitability and institutional ownership. However, Tong and Ning (2004) find that there is limited evidence that institutional investors prefer to invest in profitable firms. They find that profitability (measured as the return on equity) is negatively related to average shares held by institutional investors. The return on equity is used as an index for firm profitability in this study (return on equity ratio (ROE).

Business risk is considered to be one of the key factors that can affect the capital structure of the firm. Bhaduri (2002) states that: Since debt involves a commitment of periodic payment, highly leveraged firms are prone to financial distress costs. Therefore, firms with volatile incomes are likely to be less leveraged (Bhaduri, 2002). Thus, according to the Trade-off theory, there is a negative relationship between business risk and capital structure. Institutional investors tend to invest in firms with low business risks because firms with high volatility in their returns are likely to have a high probability to default and to become bankrupt. Therefore, a negative relationship is expected between firm's business risk and the firm's institutional ownership.

According to the pecking order theory, the shareholders of a leveraged firm have an incentive to invest sub-optimally (Titman and Wessels, 2008). However, the more tangible the firm's assets are, the more such assets can be used as collateral. Collateralized assets can restrict such opportunistic behaviour. Therefore, a positive relationship between tangible assets and debt is

expected. In addition, Modigliani Miller theory suggests that the optimal capital and ownership structures may be used to minimize agency costs (Jensen, 2006). Thus, a negative relationship between asset tangibility and ownership structure is expected. This is because tangible assets can act as collateral for higher levels of debt. Therefore, institutional investors prefer to invest in firms with low tangible assets. The current study uses the fixed assets to total assets ratio as indicator of firms' tangibility (TANG).

Liquidity ratios have both a positive and a negative effect on the capital structure decision, and so the net effect is unknown (Long and Malitz, 2005). First, firms with high liquidity ratios may have relatively higher debt ratios due to their greater ability to meet short-term obligations. This argument suggests a positive relationship between a firm's liquidity and its debt ratio. Alternatively, firms with more liquid assets may use such assets as sources of finance to fund future investment opportunities. Thus, a firm's liquidity position would have a negative impact on its leverage ratio.

2.3.2 Leverage

Higher financial leverage, generally associated with high asset base, means lower average cost of capital and hence higher performance (Kiogora, 2000). As such businesses can command a respectable price if a cash flow lender can be found, or if the Seller is willing to finance the transaction. Business with low financial leverage (generally associated with a low asset base, or an asset base with low borrowing capacity, or a tight lending market) will command a lower price due to lack of low cost borrowing. If there is a tax shield with relation to the payment of interest, or the debt soothes the dispute between shareholders manager and creditor, the impact is positive. If an increase in the leverage presents an increase in the likelihood of incurring payment of bankruptcy costs, the impact is negative (Omondi, 1995).

According to free cash flow hypothesis, debt decreases the amount of cash available to managers, hence reducing their possibilities for wasting corporate resources (Myers, 1998). In such way leverage serves as a commitment and incentive mechanism it induces managers to pay out cash to firm's investors and basically minimizes agency costs of external equity (consumption of perquisites, shirking from duties and undertaking negative NPV projects). Eventually, issuing debt instead of equity lowers agency costs and therefore increases firm performance (Mahrt, 2005).

2.3.3 Profitability

According to pecking order theory, more profitable companies are likely to have low debt levels because they generate cash internally. Consequently, the relationship between debt and profitability will be negative as concluded by (Tufano, 2005). Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. Profitability results from the excess of income over expenses. A firm that is highly profitable has the ability to reward its owners with a large return on their investment. The firms therefore trade at a premium and are likely to generate a higher valuation (Hovakimian et al., 2004).

Financial leverage has a positive effect on the firm's profitability. Omondi (1995) found a positive relationship between capital structure and profitability of the firm. In addition, Hamilton (2010) found a positive relationship between profitability and total debt. Klammer (2011) describes that the use of leverage is one way to improve the performance of the firm. Kennerley (2002) argue that companies prefer debt financing because they anticipate higher returns.

2.3.4 Risk Management

Risk management entails assessing and managing the corporation's exposure to various sources of risk through the use of financial derivatives, insurance and other activities. Business risks can impact a company's cash flows as well as its general health (Tong and Ning, 2004). In the event of corporations successfully managing its foreign exchange risks the benefits received from such effective execution will have a long-term positive impact in creating value for the corporations' shareholders.

Management of foreign exchange risk increases shareholders value through enhanced business performance and the reduction of the firms' cost of capital. Since market value is conditioned by the company results, the level of risk exposure can cause changes in its market value (Bhaduri, 2002).

2.3.5 Growth Options

Rajan (2008) argued that future investment affect firm performance. A firm with higher growth options will have a higher performance as it's favourable to investors who have higher prospects of recovering their investment. If a firm has lower growth options it is likely to be erased by competitors leading to eventual collapse hence lower performance.

Growth opportunities may be considered assets that add value to a firm, but cannot be collateralized and are not subject to taxable income. The agency problem suggests a negative relationship between capital structure and a firm's growth. Hutchinson (1995) argued that high-growth firms might have more options for future investment than low-growth firms. Thus, highly leveraged firms are more likely to pass up profitable investment opportunities, because such an investment will effectively transfer wealth from the firm's owners to its debt holders. As a result, firms with high growth opportunities may not issue debt in the first place, and leverage is expected to be negatively related to growth opportunities.

2.3.6 Firm Size

Although no clear definition of firm size can be found, it can be measured by the size of corporate book value or the amount of revenue. It is believed there is a high correlation between firm size and cash flow which is the foundation for calculating market capitalization (Majumdar, 2009). The size of a company can have a positive effect on financial performance because larger firms can use that advantage to get some financial benefits in business relations.

Large organizations can obtain cheap funding hence a lower rate of capital. This generates a higher market capitalization rate. Kester (2006) observed that ERM usage is positively related to firm size. The larger the organization, the more complex its operations will probably be and the more its exposure to threatening events.

2.3.7 Financial Constraints

Firms facing financial constraints are unlikely to meet their investment obligations. The firm may be paying out more than it is receiving and more likely to go bankrupt (Stewart, 2011). This implies that in the long run the chances of survival of the company are low and this would yield a lower valuation. On the contrary firms with adequate cash flow are likely to meet their financial obligations on time and hence improved performance.

Noreen (2013) indicates that because small sized firms bear high costs of new equity and long term debt issuance, they may prefer to rely on short term debt and more leverage than larger sized firms. Owolabi and Inyang (2013) argue that larger firms tend to disclose more information to outsiders, operate under less asymmetric information and may tend to use more equity than debt. Overall, these arguments suggest a negative relationship between leverage and firm size.

2.4 Empirical Review

This section reviews the study variable as studied by other scholars in other parts of world. The findings helped to compare their findings and the current study findings. The section presents contains both the international evidence and the local evidence.

2.4.1 International Evidence

Empirical supports for the relationship between capital structure and firm performance from the agency perspective are many and in support of negative relationship. Majumdar and Chhibber (1999) also confirm negative relationship between financial leverage and performance. Their results further suggest that liquidity, age and capital intensity have significant influences on financial performance. Many determinants of the corporate capital structure were nominated and empirically examined in the US.

Maksimovic (2001) discuss role of managerial self-interest in making capital structure decisions. They find that there exist negative relationship between leverage ratio and management's shareholding. This indicates that in the absence of any outsider principal stockholder the tendency of low debt to equity ratio will continue which will lead to higher non diversifiable risk of debt to management.

Long and Maltiz (2005) observed that the financial leverage of firms is positively related to a firm's profitability. Given that a firm must seek an outside source of funds, its choice between debt and equity will depend in part on the magnitude of potential agency costs of debt.

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 analyse 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.

Uwalomwa and Uadiale (2012) did a study to basically investigate the relationship between capital structure and the financial performance of listed firms in Nigeria. The study considered a total sample of 31 listed firms on the floor of the Nigerian stock exchange. The annual reports for the period 2005-2009 were analysed using the Ordinary Least Squares (OLS) technique of model estimation to test the research propositions stated in this study. The study observed that two of the explanatory variables in the study (i.e. short-term debt and shareholders' funds) have a significant positive impact on the financial performance of listed firms in Nigeria. In addition, the study observed that long-term debt has a significant negative impact on the financial performance of firms. The study concludes that employing high proportion of long-term debt in firms' capital structure will invariably result in a low financial performance of a firm.

2.4.2 Local Evidence

Gachoki (2005) reviewed the capital structure choice in the empirical testing of the pecking order theory among firms quoted on the NSE, The study used shy am-sunder and Myers (1999) POT model, to test whether firms listed on NSE follow the pecking order theory of capital structure in their financing choices. The POT model predicts external debt financing driven by the internal financing deficit. The study used 31 firms listed on NSE for the period between 1998 and 2003. He concluded that NSE firms do not follow the pecking theory of capital structure in their financing choices. There is therefore, a need to test other theories explaining financing choices in an attempt to determine the one applicable to NSE firms.

Wandeto (2005) carried out an empirical investigation of the relationship between dividend changes and earnings, cash flows and capital structure for the firms listed in the NSE, The study was carried out with the aim of examining the presence and strength of the relationship between dividends changes with variables such as earnings, cash flows and capital structure (leverage) among firms listed in the Nairobi Stock Exchange (NSE). A sample of 43 Firms was used to bring out the relationship between dividends and certain variables namely earnings cash flows and capital structure or leverage. A regression of dividends against the three variables indicates

that earnings were the most important variable among the studied variables. The conclusion was that dividend change is most sensitive to Earnings, then cash flows from operating from operating activities and finally to debt in that order. Those firms with high debt to equity ratios pay low amounts of dividends.

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 was 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 firms capital structure and performance among a sample of 30 companies listed on NSE whose data for 5yrs 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.

2.5 Summary of Literature Review

The studied theories predict different relations between the corporate profitability and its capital structure. 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.

This chapter clearly reviewed the relevant literature in relation to the research question presented in this study. It revealed that there exists a positive relation between a firm's capital structure and its financial performance. However the firm's profitability may not have a direct impact to change the capital structure due largely to information asymmetry and the agency conflicts. On the other hand, it has shown that the capital structure can help in upping or bringing down the firm value due to the kind of leverage the firm holds and where it sources its finances. In Kenya, few empirical studies have been done to establish the relationship between capital structure and financial performance. 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 sets out various stages and phases that were followed in completing the study. It involves a blueprint used for the collection, measurement and analysis of data. The research identified the procedures and techniques that were used in the collection, processing and analysis of data. Specifically the following subsections of research methodology were included; research design, target population, sample, data collection instruments and procedures and finally data analysis.

3.2 Research Design

A descriptive survey research design was employed in this study. Descriptive research is the investigation in which quantitative data is collected and analysed in order to describe the specific phenomenon in its current trends, current events and linkages between different factors at the current time. Descriptive research design has been chosen because it will enable the researcher to generalize the findings to a larger population. Kyereboah -Coleman (2007) and Bogan (2008) used similar designs successfully in their studies on performance of firms listed in the stock exchange in Ghana and across six continents respectively.

3.3 Target Population

The target population of the study comprised of the three investment companies which were listed under the investment sector of the market segment of the Nairobi Securities Exchange (NSE) as at June 2014 (Appendix I). A census approach method was used in the study where the three companies were selected without sampling.

3.4 Data Collection

The study utilised panel data which consist of time series and cross-sections. The data for all the variables in the study were extracted from published reports and financial statements of the listed investment companies in the NSE covering the years 2010 to 2013 where quarterly reports were used. Earning data were obtained from the NSE hand books for the period of reference. The Secondary Data which include size of the firm, total debt, long-term debt were

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extracted from the income statement, statement of financial position, and notes to the accounts using a document review guide.

3.5 Data Analysis

This study used Statistical Package for Social Science (SPSS Version 20.0) program. The study being descriptive in nature, the quantitative method of data analysis and inferential analysis were used as analysis techniques. The data collected was run through various models so as to clearly bring out the effect of change in capital structure on firms financial performance.

3.5.1 Analytical Model

Panel data Methodology was used which involved pooling of observation on the firms over several times periods. A general model for panel data that allowed the study to be estimated using panel data with great flexibility and formulate the difference in the behaviour of the cross-section elements was adopted. The relationship between debt and profitability performance was estimated using the following regression model:

$$\mathbf{ROE}i_t = \beta_1 + \beta_2\mathbf{LDA}_{it} + \beta_3\mathbf{DA}_{it} + \beta_4\mathbf{Size}_{it} + e_i$$

$\mathbf{ROE}_{it}$ is Earning (EBIT) divided by Equity for firm i in time t

$\mathbf{LDA}_{it}$ is long-term debt divided by the market value capital of Equity for firm i in time t

$\mathbf{DA}_{it}$ is total debt divided by the market value capital of Equity for firm i in time t

$\mathbf{Size}_{it}$ is natural logarithm of firms' total assets

e_i is the error term

Variable used for the analysis included profitability and leverage ratios. Performance used accounting-based measure; profitability measures as the ration of earnings before interest and taxes (EBIT) to Equity. The leverage ratios used included:

a) Long-term debt to total capital and
b) Total debt to total capital

Size was included as control variable.

3.5.2 Test of Significance

The model helped in determining if there was a relationship between capital structure and financial performance of the investment firms. Collected data was subjected to the analysis tools SPSS version 20.0.

The data was collected from the secondary sources and analysis done; the ANOVA test was used to determine the impact independent variables have on the dependent variable in a regression analysis. ANOVA provides a statistical test of whether or not the means of several groups are equal. ANOVAs are useful in comparing (testing) three or more means (groups or variables) for statistical significance.

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the research findings to investigate the relationship between capital structure and financial performance. The study was conducted on investment firms listed at the NSE where secondary quarterly data from the period of 2010 to 2013 was used in the analysis. Regression analysis was used in analysis the data.

4.2 Regression Analysis

4.2.1 Year 2010

Table 4.1: Model Summary for 2010

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.886a	.785	.752	.632

Source: Research Findings

Adjusted R squared is coefficient of determination which tell us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.752 an indication that there was variation of 75.2% on financial performance of investment companies listed in the NSE due to changes in the independent variables which are long-term debt, total debt and size at 95% confidence interval. This shows that 75.2% of changes in financial performance of investment companies listed in the NSE could be attributed to their long-term debt, total debt and size. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.886.

Table 4.2: Coefficients for 2010

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	Constant	.327	.134		1.227	.000
	Long term debt	.118	.077	.164	1.519	.133
	Total debt	-.198	.099	-.237	-2.011	.048
	Size	.271	.130	.278	2.083	.040

Source: Research Findings

From the data in the above table the established regression equation for year 2010 was

Y = 0.327 + 0.118 LDA - 0.198 DA + 0.270 Size

From the above regression equation it was revealed that holding long term debt, total debt and size of investment companies listed in the NSE to a constant zero the financial performance of investment companies listed in the NSE would stand at 0.327, a unit increase in long term debt would lead to increase in financial performance of investment companies listed in the NSE by a factors of 0.118, unit increase in total debt would lead to decrease in performance of investment companies listed in the NSE by a factor of 0.198, further unit increase in size of the firm would lead to increase in financial performance of investment companies listed in the NSE by a factor 0.270.

4.2.2 Year 2011

Table 4.3 Model Summary for 2011

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.832a	.692	.653	.583

Source: Research Findings

Adjusted R squared is coefficient of determination which tell us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.653 an indication that there was variation of 65.3% on financial performance of investment companies listed in the NSE due to changes in the

independent variables which are long term debt, total debt and size at 95% CI. This shows that 65.3% of changes in financial performance of investment companies listed in the NSE could be attributed to their long term debt, total debt and size. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.832.

Table 4.4 Coefficients for 2011

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	Constant	.809	.519		1.414	.000
	Long term debt	.012	.049	.026	.256	.799
	Total debt	-.016	.099	-.024	-.166	.868
	Size	.102	.078	.164	1.301	.197

Source: Research Findings

From the data in the above table the established regression equation for year 2011 was

Y = 0.809 + 0.012 LDA - 0.016 DA + 0.102 Size

From the above regression equation it was revealed that holding long term debt, total debt and size of investment companies listed in the NSE to a constant zero the financial performance of investment companies listed in the NSE would stand at 0.809, a unit increase in long term debt would lead to increase in financial performance of investment companies listed in the NSE by a factors of 0.012, unit increase in total debt would lead to decrease in performance of investment companies listed in the NSE by a factor of 0.016, further unit increase in size of the firm would lead to increase in financial performance of investment companies listed in the NSE by a factor 0.102.

4.2.3 Year 2012

Table 4.5 Model Summary for 2012

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.757a	.573	.526	.805

Source: Research Findings

Adjusted R squared is coefficient of determination which tell us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.526 an indication that there was variation of 52.6% on financial performance of investment companies listed in the NSE due to changes in the independent variables which are long term debt, total debt and size at 95% confidence interval. This shows that 52.7% of changes in financial performance of investment companies listed in the NSE could be attributed to long term debt, total debt and size. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.757.

Table 4.6 Coefficients for 2012

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	Constant	.385	.108		3.944	.348
	Long term debt	.209	.089	.222	2.347	.021
	Total debt	-.069	.095	-.080	-.732	.466
	Size	.134	.097	.135	1.375	.173

Source: Research Findings

From the data in the above table the established regression equation for year 2012 was

Y = 0.385 + 0.209 LDA - 0.069DA + 0.134 Size

From the above regression equation it was revealed that holding long term debt, total debt and size of investment companies listed in the NSE to a constant zero the financial performance of investment companies listed in the NSE would stand at 0.385, a unit increase in long term debt would lead to increase in financial performance of investment companies listed in the NSE by a factors of 0.209, unit increase in total debt would lead to decrease in performance of investment companies listed in the NSE by a factor of 0.069, further unit increase in size of the firm would lead to increase in financial performance of investment companies listed in the NSE by a factor 0.134.

4.2.4 Year 2013

Table 4.7 Model Summary for year 2013

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.925a	.855	.815	.535

Source: Research Findings

Adjusted R squared is coefficient of determination which tell us the variation in the dependent variable due to changes in the independent variable, from the findings in the above table the value of adjusted R squared was 0.815 an indication that there was variation of 81.5% on financial performance of investment companies listed in the NSE due to changes in the independent variables which are long term debt, total debt and size at 95% confidence interval. This shows that 81.5% of changes in financial performance of investment companies listed in the NSE could be attributed to long term debt, total debt and size. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.925.

Table 4.8 Coefficients for year 2013

	Model	Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	Constant	.614	.394		2.098	.000
	Long term debt	.263	.067	.385	3.911	.000
	Total debt	-.111	.056	-.207	-1.991	.050
	Size	.233	.079	.317	2.940	.004

Source: Research Findings

From the data in the above table the established regression equation for year 2013 was

Y = 0.614 + 0.263 LDA - 0.111DA + 0.233 Size

From the above regression equation it was revealed that holding long term debt, total debt and size of investment companies listed in the NSE to a constant zero the financial performance of investment companies listed in the NSE would stand at 0.614, a unit increase in long term debt

would lead to increase in financial performance of investment companies listed in the NSE by a factors of 0.263, unit increase in total debt would lead to decrease in performance of investment companies listed in the NSE by a factor of 0.111, further unit increase in size of the firm would lead to increase in financial performance of investment companies listed in the NSE by a factor 0.233.

4.3 Regression Results

A multiple regression analysis was conducted to study the relationship between independent variables and the dependent variable. Regression method is useful for its ability to test the nature of influence of independent variables on a dependent variable. Regression is able to estimate the coefficients of the linear equation, involving one or more independent variables, which best predicted the value of the dependent variable. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (profitability indicated by ROE) that is explained by all the three independent variables (long-term debt, total debt and size). The study sought to establish the relationship between capital structure and financial performance of investment firms listed at the Nairobi Securities Exchange.

Table 4.9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.902	0.813604	0.754	0.157

Source: Research Findings

The three independent variables (profitability factors) that were studied, explain only 81.4% of the profitability of investment firms listed at the Nairobi Securities Exchange as represented by the adjusted R^2. This therefore means the three profitability factors (long-term debt, total debt and size) explains 81.4% of liquidity factors influencing profitability of investment firms listed at the Nairobi Securities Exchange, while other factors not studied in this research contributes 18.6% of profitability of investment firms listed at the Nairobi Securities Exchange. Therefore, further research should be conducted to investigate the other (18.6%) factors influencing profitability of investment firms listed at the Nairobi Securities Exchange.

Table 4.10 ANOVA Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.652	1	.204	8.752	.009
	Residual	1.239	2	.008		
	Total	3.891	3			

Source: Research Findings

The significance value is 0.009 which is less than 0.05 thus the model is statistically significant in predicting how long-term debt, total debt and log of natural logarithm of assets influences profitability of investment firms listed at the Nairobi Securities Exchange. The F critical at 5% level of significance was 2.46568. Since F calculated (value = 8.752) is greater than the F critical (2.46568) this shows that the overall model was significant.

Table 4.11 Coefficients of Determination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.732	0.864		2.089	0.035
	Long-term debt	0.550	0.110	0.376	3.539	0.016
	Total debt	-0.633	0.958	-0.398	-3.461	0.025
	Size	0.387	0.736	0.267	2.886	0.033
Dependent Variable: ROE						

Source: Research Findings

The coefficient of regression in table 4.11 above was used in coming up with the model below:

ROE=0.732+ 0.550 LDA-0.633 DA+ 0.387 SIZE

Where ROE is Earning (EBIT) divided by Equity, LDA is long-term debt & DA is total debt both divided by market value capital of Equity, while SIZE is natural logarithm of assets. The study established that all the variables were significant as their significance value was less than 0.05. The three variables (long-term debt, total debt, size) were correlated with profitability of investment firms listed at the Nairobi Securities Exchange. With long-term debt and natural logarithm of assets having a positive correlation and total debt having a negative correlation.

From the regression model, taking all factors (long-term debt, total debt, and size) constant at zero, profitability of investment firms listed at the Nairobi Securities Exchange was 0.732. The data findings analysed also shows that taking all other independent variables at zero, a unit increase in long-term debt will lead to a 0.550 increase in profitability of investment firms listed at the Nairobi Securities Exchange, a unit increase in total debt will lead to a 0.633 decrease in profitability of investment firms listed at the Nairobi Securities Exchange, while a unit increase in log of natural logarithm of assets will lead to a 0.387 increase in profitability of investment firms listed at the Nairobi Securities Exchange. This infers that total debt influences the profitability of investment firms listed at the Nairobi Securities Exchange the most.

4.5 Non-parametric Correlation

A Spearman correlation is used when one or both of the variables are not assumed to be normally distributed. The values of the variables were converted in ranks and then correlated. The study correlated ROE, LDA, DA and the firm size under the assumption that these variables are normal.

Table 4.12 Correlations

			ROE	LDA	DA	Firm size
Spearman's rho	ROE	Correlation Coefficient Sig. (2-tailed) N	1.000 . 3	.617 .000 3	.547 .000 3	.667 .000 3
	LDA	Correlation Coefficient Sig. (2-tailed) N	.617 .000 3	1.000 . 3	.437 .000 3	.235 .001 3
	DA	Correlation Coefficient Sig. (2-tailed) N	.547 .000 3	.437 .000 3	1.000 . 3	.441 .002 3
	Firm size	Correlation Coefficient Sig. (2-tailed) N	.667 .000 3	.235 .000 3	.441 .000 3	1.000 . 3

Source: Research Findings

The results suggest that the relationship between ROE and LDA (rho = 0.617, p = 0.000) is statistically significant. ROE and DA had a rho of 0.547 and a p value of 0.000 therefore denoting statistical significance. Similarly, the ROE and firm size posted a rho of 0.667 with a p value of 0.000 therefore providing a statistical significance. LDA and DA had a rho of 0.437, p=0.000 further pointing to a statistical significance. On the same note, the LDA and the firm size correlated at rho=0.235 and p=0.001. This therefore is statistically significant. Finally, the DA and organization firm size at a correlation of rho=0.441 and p= 0.002 revealing statistical significance.

4.4 Interpretation of the Findings

From the finding on the Adjusted R squared the study revealed that there was variation of financial performance of investment companies listed in the NSE due to changes in the independent variables which are long term debt, total debt and size. This shows that changes in financial performance of investment companies listed in the NSE could be accounted for long term debt, total debt and size. The study found that there was a strong relationship between financial performances of investment companies listed in the NSE and long term debt, total debt and size. The study found that there was a positive relationship between long term debt, size of investment companies listed in the NSE and financial performance of investment companies listed in the NSE. The study found that there was a negative relationship between total debt and financial performance of investment companies listed in the NSE.

The findings of the study were found to be statistically significance since the significance values was found to be close to 0.000 which was less than 0.05. This is an indication that the error rate on making conclusions using the model derived from the findings was low and therefore the recommendations from these findings would enhance the financial performance of investment companies listed in the NSE.

According to the study findings long term, total debt and size were significantly influencing financial performance of investment firms listed at the NSE. These findings correlated with Tong and Ning (2004) who asserts that in the event of corporations successfully managing its foreign exchange risks the benefits received from such effective execution will have a long-term positive impact in creating value for the company hence increasing finance performance.

The study found that the coefficients of the long term debt and size were positive an indication that a unit change in these variables would lead to an increase in financial performance of the

investment companies listed in the NSE. There was a strong relationship between financial performances of investment companies listed in the NSE and long term debt, total debt and size. These findings were similar with a study done by Rajan (2008) who found that future investment prospects affect firm performance. A firm with higher growth options will have a higher performance as it's favourable to investors who have higher prospects of recovering their investment. If a firm has lower growth options it's likely to be erased by competitors leading to eventual collapse hence lower performance.

From the findings the study revealed long term debt, total debt and size influence financial performance of investment firms listed at the NSE. This clearly shows that capital structure affect financial performance of firms listed at NSE. The total loans in these firms could lead to high interest expense hence lowering the size of the firm as well as reduced shareholders wealth. The shareholders can decide to withdraw their investment in terms of shares in the company if the managers make decision to continue increasing the total debt and these can lead to financial crisis of the firms listed in NSE. The same findings concurred with Hutchinson (1995) as well as Wandeto (2005) who found that high-growth firms might have more options for future investment than low-growth firms. Thus, highly leveraged firms are more likely to pass up profitable investment opportunities, because such an investment will effectively transfer wealth from the firm's owners to its debt holders. As a result, firms with high growth opportunities may not issue debt in the first place, and leverage is expected to be negatively related to growth opportunities.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusion and recommendations were made. The responses were based on the objectives of the study. The researcher had intended to determine the relationship between capital structure and financial performance of investment firms listed at the NSE.

5.2 Summary

From the findings on the Adjusted R squared, the study revealed that there was variation of financial performance of investment firms listed in the NSE due to variations in long term debt, total debt and size. The study revealed that long term and total debt were the major factors influencing the financial performance of investment firms listed in the NSE. From the findings on the correlation analysis the study revealed that there was a strong relationship between capital structure and financial performance.

The study further revealed that the analysed data is ideal for making a conclusion on the influence of long term debt, total debt and size on financial performance of investment firms listed at the NSE. The study revealed that long term debt, total debt and size were significantly influencing the financial performance of investment firms listed at the NSE

The study found that the coefficients of the long term debt and size were positive an indication that a unit change in these variables would lead to an increase in financial performance of the investment companies listed in the NSE. There was a strong relationship between financial performance of investment companies listed in the NSE and long term debt, total debt and size. The coefficient on total debt was negative an indication that there existed a negative relationship between total debt and financial performance of investment companies listed in the NSE. An increase in the total debt would therefore lead to a decrease in the financial performance of investment companies listed in the NSE

5.3 Conclusion

From the findings the study revealed long term debt, total debt and size influence financial performance of investment firms listed at the NSE. This clearly shows that capital structure affect financial performance of firms listed at NSE. The study concludes that long term debt of investment firms listed in the NSE is positively related to financial performance of firms listed at NSE, this is attributed to the fact that the long term debt is utilized to run the operations of these companies and by doing so reduce the losses that the firm would have undergone if there was shortage of the long term funds.

The study concludes that total debt affects financial performance of the firms listed in the NSE. 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.

5.4 Recommendations for Policy

It is critical for the Chief Executive Officers and Chief Finance Officers of the Investment 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.

There is need for the firms listed in the NSE to have a strong capital structure which provides them strength to withstand financial crises and offers shareholders a better safety net in times of depressions. In addition the capital market analysts as well investment analysts should advise the investment firms on the optimal capital structure based on capital structure analysis.

The study recommends that there is need for the firms to increase their size by growing their assets as it was revealed that size positively impacts on the financial performance of the firms.

The study also recommends that there is need for the firms to adopt strategies that would increase their size base and utilize the profits generated from the operations to acquire more assets and improve their financial performance.

5.5 Limitations of the Study

There were challenges uncounted during the study. Some companies had not submitted their annual financial result to CMA and managers of this firm were reluctant to release information required for the study. That reluctance delayed the completion of the data collection.

All the data was collected from secondary sources and any error in the original data could not be avoided however all data was from reliable source only.

The study was based on a four year study period from the year 2010 to 2013 since some of the firms like TransCentury listed in 2011. A longer duration of the study will have captured periods of various economic significances such as booms and recessions. This may have probably given a longer time focus hence given a broader dimension to the problem.

5.6 Areas for Further Research

The study recommends that a study should be undertaken on the factors affecting the size of firms listed in the NSE.

The study was confined to Investment firms listed in the Nairobi Securities Exchange; further study should be undertaken on other firms in other sectors of the economy such as; industrial, banking, manufacturing and other sectors.

A study should also be undertaken on the effect of capital structure on the other companies which have not yet been listed in the NSE.

REFERENCES

Abor, J. (2007). Debt policy and performance of SMEs. *Journal of Risk Finance, 8*(4), 364-379.

Bhaduri, S. (2002), Determinants of corporate borrowing: some evidence from the Indian corporate structure, *Journal of Economic and Finance*, 26, 200-15.

Block, Z. & McMillan, D. (2005), "Milestone for Successful Planning", Harvard Business Review, 63, 5, 184-196 *Business Journal*, 30, 301-313.

Brigham, E. & Houston, F. (2005), Fundamentals of Financial Management, 9th ed., Harcourt Brace College, San Diego, CA.

Brigham, E. (2007). *Fundamentals of financial management*: Cengage Learning.

Chen, C. (2004). Managerial ownership and agency conflicts: a nonlinear simultaneous equation analysis of managerial ownership, risk taking, debt policy, and dividend policy, *Financial Review*, 34, 119-36.

Donaldson, K. (2005). Delay of ripening of 'Pedro Sato' guava with1-methylcyclopropene. Postharvest Biology and Technology 35: 303–308.

Fischer, O., Heinkel, R. & Zechner, J. (2009). Dynamic capital structure choice: Theory and tests. *Journal of Finance 44*(1), 19-40.

Gachoka K. (2005). *Capital structure choice*, an empirical testing of the pecking order theory among firms quoted on the NSE, unpublished MBA project, University of Nairobi.

Gachoki, B. (2005).The Relationship between Financial Structure and Performance of Micro and Small Interprises in Nairobi. Unpublished MBA project, University of Nairobi.

Gachoki, F. (2005). Th*e* Relationship between dividend payout and firm performance: a study of listed companies in Kenya, *European Scientific Journal*, edition (8).

Hall, C., Hutchinson, J. & Michaelas, N. (2008). Determinants of the capital structures of European Stock Market. *Journal of Business Finance and Accounting, 31*(5-6), 711-728.

Hamilton, B. (2010), Does entrepreneurship pay? An empirical analysis of the returns to self-employment, *Journal of Political Economy*, 108, 604-31.

Holmes, S. 2003). "Capital structure and financing of SMEs: Australian evidence". *Journal of Accounting and Finance,* (43), 123–147.

Hovakimian, A., Hovakimian, G. & Tehranian, H. (2004). Determinants of target capital structure: The case of dual debt and equity issues* 1. *Journal of Financial Research, 71*(3), 517-540.

Hutchinson, P. (1995). Small firm growth, access to capital markets and financial structure: review of issues and an empirical investigation. *8*(1), 59-67.

Jensen, M. (2006). *Agency Cost of Free Cash Flow, Corporate Finance and Takeovers*, American Economic Review, Papers and Proceedings, vol.76 (1).

John, K. & Williams, J. (2005), Dividends, dilution, and taxes: a signalling equilibrium *The Journal of Finance*, Vol. 40, pp. 1053-70.

Kennerley, M. (2002). The Performance Prism: *The Scorecard for Measuring and Managing Business Success*, Financial Times/Prentice Hall, London.

Kester, W. (2006). *Capital and ownership structure: a comparison of United States and Japanese manufacturing corporations*, Financial Management.

Kitaka, P. (2013)A survey of use of Financial Performance Indicators By Microfinance Institutions in Kenya, Unpublished MBA project, University of Nairobi

Klammer, T. (2003). *The Association of Capital Budgeting Techniques with Firm Performance*; The Accounting Review, 48, 353-364.

Kochhar, R. (2006). Explaining firm capital structure*: the role of agency theory vs transaction cost economics, *Strategic Management Journal* (17).

Long, M. & Malitz, B. (2005). The investment-financing nexus: Some empirical evidence. Midland *Corporate Finance Journal* (3).

Mahrt, J. (2005), The interaction of capital structure and ownership structure, *The Journal of Business*, Vol. 78 pp. 787-816.

Majumdar, S. & Chhibber, P. (1999). Capital *structure and performance: evidence from a transition economy on an aspect of corporate governance*. Public Choice 98,

Majumdar, S. (2009). Capital *structure and performance: evidence from a transition economy on an aspect of corporate governance*.

Maksimovic, V. (2001). Capital Structures in Developing Countries. *The Journal of Finance*, 56

Musienga, Maniagi G. et al. (2013) Corporate Governance, Dividend Policy and Performance. *International Journal of Innovative Research and Development*, 25

Michael, P. (1992). Financial policy and capital structure choice in UK SMEs: empirical evidence from company panel data, Small Business Economics, Vol. 12, pp. 113-30.

Michaelas, N., Chittenden, F., &Poutziouris, P. (2009). Financial policy and capital structure choice in UK SMEs: empirical evidence from company panel data. *Small Business Economics, 12*(2), 113-130.

Modigliani, F. & Miller, M. (2003). *Corporate income taxes and the cost of capital*: a correction, American Economic Review, 53, 433-43.

Modigliani, F., & Miller, M. H. (1963). Corporate income taxes and the cost of capital: A correction. *53*(3), 433-443.

Myers, S. (1998). *The capital structure puzzle*. Journal of Finance, Vol.39

Narayanan, M. (2008). *Debt versus equity under asymmetric information*. Journal of Financial and Quantitative Analysis Vol. 2, No.6

Noreen, K. (2013), *Capital Structure and Financial Performance:* Evidence from Pakistan (Kse 100 Index), Journal of Basic and Applied Scientific Research, Vol. 3(4)

Nyaboga E. (2008). *Relationship between capital structure and agency cost,* unpublished MBA project, University of Nairobi.

Okoth, V., Ongore, N. & Gemechu, B. (2013). *Determinants of Financial Performance of Commercial Banks in Kenya,* International Journal of Economics and Financial Issues, (3).

Omondi W. (1995). *A study of Capital structure in Kenya*. Unpublished MBA project, University of Nairobi

Owolabi, S. & Inyang, U. (2013). *International Pragmatic Review and Assessment of Capital Structure Determinants*. Kuwait Chapter of Arabian Journal of Business and Management Review.

Pandey, I. (2005). *Financial Management* (Vol. Ninth Edition): Vikas Publishing HousePVT LTD.

Rajan, R. (2008), The paradox of liquidity, Quarterly *Journal of   Economics*, Vol. 113, pp. 733-71.

Ruto, G. & Rueben, K. (2013). *Capital Structure and Performance:* Evidence from Listed Non-Financial Firms on Nairobi Securities Exchange (NSE) Kenya", *International Journal for Management Science and Technology* (IJMST).

Short, H. (2002), 'Ownership, Control, Financial Structure and Performance of Firms', *Journal of Economic Surveys*, vol. 8, pp.209-249.

Stewart, G. (2011). *The Quest for Value*: A Guide for Senior Managers, First Ed., New York: Harper Business.

Titman, S. & Wessels, R. (2008). The determinants of capital structure choice. *Journal of Finance*, (43).

Tong, S. &Ning, Y. (2004), Does capital structure affect institutional investor choices?, *The Journal of Investing*, Vol. 28, pp. 53-66.

Tufano, P. (2005). Securities innovations: a historical and functional perspective, *Journal of Applied Corporate Finance*, 7, 90-113.

Uwalomwa, U. & Olayinka M. (2012). An Empirical Examination of the Relationship between Capital Structure and the Financial Performance of Firms in Nigeria, *Euro Economica Journal Issue* 1(31)

Varaiya, N. Kerin, R., Weeks, R. (2007). *The Relationship between Growth, Profitability, and Company Value*", Strategic Management Journal, 44- 98.

Wald, J. (2009). How firm characteristics affect capital structure: an international comparison. *Journal of Financial Research 22*(2), 161.

Wandeto P. (2005). *An empirical investigation of the relationship between dividend changes & earning, cash flows& capital structure for firms listed in the NSE*. Unpublished MBA project University of Nairobi

Zeckhauser, R. & Pound, J. (1990). Are large shareholders effective monitors? An investigation of share ownership and corporate performance, in Hubbard, R.G. (Ed.), Asymmetric Information, Corporate Finance and Investment, University of Chicago Press, Chicago, IL, pp. 149-80.

Zeitun, R. & Tian, G. (2007). Capital Structure and Firm Performance: Evidence from Jordan, Australia. *Accounting Business and Finance Journal* 1 (4).

APPENDICES

Appendix I: Investment Firms listed at the NSE as at 30th June 2014

No.	Firm	Year Listed
1.	Centum Investment	1967
2.	Olympia Capital Holdings	1976
3.	Trans Century Ltd	2009

Source; NSE Hand book

Appendix II: Data Collection Template

Company/Year	Variable	2010	2011	2012	2013
	Revenue				
	LTD				
	TD				
	Capital				
	Revenue				
	LTD				
	TD				
	Capital				
	Revenue				
	LTD				
	TD				
	Capital				

Source: Author (2014)

Appendix III: Work Plan

The table below shows the schedule of all the events, it indicates the month each particular activity took place.

ACTIVITY	PERIOD				
	Jun	Jul	Aug	Sep	Oct
Preliminary literature review	■				
Consultations with supervisor	■	■			
Thesis proposal writing		■	■		
Developing instruments			■	■	
Thesis proposal defence				■	
Data Collection, Analysis and thesis completion					■

Source: Author (2014)