

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

BY:

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DECLARATION

I hereby declare that this research project is my original work; it has not been submitted to any other institution of higher learning for academic purposes.

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

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DEDICATION

This project is dedicated to my mum Susan Njagi for her support and encouragement throughout the study.

To my family for their continuous encouragement during my study I just say thanks you and God bless you

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First I thank the Almighty God for giving me an opportunity and resources to undertake this research project. I wish to express my sincere thanks to my supervisor Mr Herrick Ondigo for his support and for having agreed to supervise this research paper. I would also like to give my sincere appreciation to my mother, my family and friends for their understanding and support during undertaking the project.

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LIST OF ABBREVIATIONS

ANOVA	:	Analysis Of Variance
GDP	:	Gross Domestic Product
LTD	:	Long Term Debt
MM	:	Modigliani and Miller
NPV	:	Net Present Value
NSE	:	Nairobi Securities Exchange
STD	:	Short Term Debt
ROA	:	Return on Asset
ROE	:	Return on Equity
ROS	;	Return on Sale

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ABSTRACT

The financing decision is one of the most important roles played by a modern financial manager as they determine value of a firm. Managers strive to maintain capital structure that maximizes the shareholders wealth while minimizing financial and business risks of the firm. The main objective of the study was to examine the relationship between capital structure and financial performance of agricultural firms listed at the NSE.

The population in the study was all the 7 firms listed in the NSE under the agricultural sector. Secondary data was used in this study. The study being descriptive in nature the quantitative method of data analysis and inferential analysis was used to analysis techniques.

From the findings on the Adjusted R squared , from the study there was variation of financial performance of agricultural firms listed in the NSE due to variations in Short term long term debt and revenue. The study revealed that Capital structure of a firm is factors influencing the financial performance of agricultural 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 brings out that, the findings form analyzed data is ideal for making a conclusion on the influence of in short term, long term debt and revenue on financial performance of agricultural firms listed at the NSE. 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.

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

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The capital structure of the firm is the choice between debt and debt equivalent source of finance and on the other hand, the issue of equity to finance the firm's activities. Hence, the capital structure decisions have great impact on the performance of firms. This study seeks to determine the measurable linkages between financial leverage (capital structure) and financial performance which can be established through analysis of return on equity, return on asset, price/earnings ratio, capitalization ratio, liquidity and return on investment.

The financing decision is one of the most important roles played by a modern financial manager as they determine value of a firm. Managers strive to maintain capital structure that maximizes the shareholders wealth while minimizing financial and business risks of the firm. A traditional view on corporate finance assert that firm strive to maintain optimal capital structure that balances the cost and value associated with varying equilibrium, this view argues that companies respond by rebalancing their level f the optimal level.

Capital structure of firm may be defined as the permanent financing represented by long-term debt, preferred stock and shareholders' equity. It can therefore be distinguished from financial structure which includes short-term in additional to other components of capital. In this regard therefore capital structure is the choice between the debt, debt equivalent source of the finance and the issue of equity financing of the firms activities.

Capital structure and related studies has been a puzzle and attracted a lot of interest from researchers since the advent of Modigliani and Miller (1958), capital structure theory. Researchers continue to analyze capital structures with an aim of trying to determine to whether optimal capital structures exist. An optimal capital structure is defined as one that will minimize a firm's cost of capital, while maximizing its value. Hence, capital structure decisions have great impact on the performance of firms. Managers find it hard to choose the amount of debt and equity in their capital structures.

In the classical theory, capital structure is irrelevant for measuring company performance, considering that in a perfectly competitive world performance is influenced only by real factors. Recent studies contradict this theory, arguing that capital structure play an important role in determining corporate performance (Kakani, Biswatosh, & Reddy, 2001). Barton & Gordon (1988) suggest that entities with higher profit rates will remain low leveraged because of their ability to finance their own sources. On the other hand, a high degree of leverage increases the risk of bankruptcy of companies.

In Kenya a developing country debt interest is tax deductible. 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. 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 and Inyang (2013). 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.

1.1.1 Capital Structure

Capital structure as the name implies is one of the most puzzling issues in corporate finance literature (Brounen & Eichholtz, 2001). Capital structure basically can be referred to as a firm's financial framework. Primarily, it is a mix of debt and equity capital maintained by a firm. It is also seen a mixture of a variety of long term sources of funds and equity shares including reserves and surpluses of an enterprise (Booth, Aivazian, Demirguc-Kunt, & Maksimovic, 2001). An optimal capital structure is usually defined as one that will minimize a firm's cost of capital, while maximizing shareholder's wealth (Niu, 2008). The capital structure of a firm is very important since it related to the ability of the firm to meet the needs of its stakeholders. The capital structure of a firm explains the ways in which a firm finances its investment and overall operations. It consists mainly of a combination of debt and equity as well as all other sources of finance such as retained earnings etc available to the firm (Margaritis & Psillaki, 2007). Therefore, proportion of debt to equity is a strategic choice of corporate managers. Financial distress, liquidation and bankruptcy are the ultimate consequences that lie ahead if any major misjudgment occurred following any financing decision of the firm's activity. Thus, firms with high leverage need to allocate an efficient mixture of capital that will finally reduce its cost.

Capital structure constitutes a substantial part of an organization and therefore is significant in a company's financial operations. More so, financing decisions of firms are very crucial for the financial wellbeing of the firm. Researchers have continued to analyze capital structures

and try to determine whether optimal capital structures exist (DeAngelo, 1980, Gupta, Srivastava & Sharma 2010). An optimal capital structure is usually defined as one that will minimize a firm's cost of capital, while maximizing shareholder's wealth. The debate of optimal capital structure has been the focal point of the finance literature for previous several decades. According to finance theory, the capital structure do affects firm's cost of capital and consequently financial performance. Cost of capital serves as the benchmark for firm's capital budgeting decisions therefore the optimal mix of debt and equity is imperative to outperform. Shareholders' wealth maximization concept also dictates that firms choose the optimal mix of debt and equity financing that best serve the ultimate objective of the firm (Uwalomwa & Uadiale, 2012).

1.1.2 Financial Performance

For a long time, financial performance has been perceived only through its ability to obtain profits. This changed over time, today the concept of performance having different meanings depending on the user perspective of financial information. A company can be categorized as global performance if it can satisfy the interests of all stakeholders: managers are interested in the welfare and to obtain profit, because their work is appreciated accordingly; owners want to maximize their wealth by increasing the company's market value (this objective can only be based on profit); current and potential shareholders perceive performance as the company's ability to distribute dividends for capital investment, given the risks they take; commercial partners look for the solvency and stability of the company; credit institutions want to be sure that the company has the necessary capacity to repay loans on time (solvency); employees want a stable job and to obtain high material benefits; the state seeks a company to be efficient, to pay its taxes, to help creating new jobs, (Valentin, 2013). Companies'

management use financial indicators to measure, report and improve its performance. It has been proved that in order to obtain a global situation of an economic entity at a specific moment it's necessary that the evaluation to be based on a balanced multidimensional system which includes both financial ratios and non-financial indicators.

Analysis of the determinants of corporate financial performance is essential for all the stakeholders, but especially for investors. The Anglo-Saxon corporate governance focuses on maximizing shareholder value. This principle provides a conceptual and operational framework for evaluating business performance. The value of shareholders, defined as market value of a company is dependent on several factors: the current profitability of the company, its risks and its economic growth essential for future company earnings (Branch & Gale, 1983). All of these are major factors influencing the market value of a company.

Other studies (Brief & Lawson, 1992) argue the opposite, that financial indicators based on accounting information are sufficient in order to determine the value for shareholders. A company's financial performance is directly influenced by its market position. Profitability can be decomposed into its main components: net turnover and net profit margin. Ross et al. (1996) argues that both can influence the profitability of a company one time. If a high turnover means better use of assets owned by the company and therefore better efficiency, a higher profit margin means that the entity has substantial market power.

Risk and growth are two other important factors influencing a firm's financial performance. Since market value is conditioned by the company's results, the level of risk exposure can cause changes in its market value (Fruhan, 1979). Economic growth is another component that

helps to achieve a better position on the financial markets, because market value also takes into consideration expected future profits (Varaiya, Kerin & Weeks, 1987).

1.1.3 Effect of Capital Structure on Financial Performance

In the developing economies (for example Kenya), the capital structure decision is crucial as such decisions becomes even more difficult in times when the economic environment in which these companies operates presents a high degree of instability. Firms can issue dozens of distinct securities in countless combinations, but it attempts to find the particular combination that maximizes its overall market value. The financial structure to be adopted by an organization is a critical decision for the management to make. These decisions are both critical and crucial because of the need to maximize returns to various organizational constituencies and the impact of such a decisions on the organization's ability to deal with its competitive environment. Although there have been a great deal of research on the subject of capital structure over the years, nevertheless there has been no consensus as to the nature of its impact on firms' performance (Barton & Gordon, 1987).

An optimal capital structure is usually defined as one that will minimize a firm's cost of capital, while maximizing shareholder's wealth (Niu, 2008). Hence, capital structure decisions have great impact on the financial performance of the firm. Exactly how firms choose the amount of debt and equity in their capital structures remains an enigma (Myers, 1984). Are firms mostly influenced by the traditional capital structures of their industries or are there other reasons behind their actions (Harris & Raviv, 1991)? The answers to these questions are very important, because the actions of managers will affect the performance of the firm, as well as will influence how investors perceive the firm. Much of the theory in corporate sector

is based on the assumption that the goal of a firm should be to maximize the wealth of its current shareholders (Petra et al, 2006). One of the major cornerstones of determining this goal is financial ratios. Financial ratios are commonly used to measure firm's performance. Generally, corporations include these in their annual reports to stakeholders. Investment analysts provide these to investors who are considering the purchase of a firm's securities (Raheel et al, 2013).

The pioneering work of Modgiliani and Miller (1958) proposed the irrelevance of capital structure to firm performance and argued that in a perfect market situation there is no link between firm value and its financing mix. The restrictive and unrealistic assumptions of this theory led to subsequent research work suggesting that the firm performance is actually affected by the amount of debt in the capital mix choices available to the firms (Jensen and Meckling, 1976). To this end therefore, this study basically attempts to examine the relationship between capital structure and financial performance of agricultural firms listed at the Nairobi Stock Exchange (NSE) in Kenya.

1.1.4 Agricultural Firms Listed at NSE

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 set up at the IPS building, before moving to the Nation Centre Nairobi in 1994. Over the past decade, the securities exchange has witnessed numerous changes, automating its trading in September 2006 and in 2007 making it possible for stockbrokers to trade remotely from their offices, doing away with the need for dealers to be physically present on the trading floor. 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.

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

Agricultural 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 agricultural firms and by extension the dividends they pay out. Data from the Nairobi bourse shows that shares of the seven listed agricultural companies — Sasini, Williamson Tea, Kakuzi, Rea Vipingo, Kapchorua, Eaagads and Limuru Tea — have been lagging behind the rest of the market since the beginning of the year, while other stocks prices have been going up.

1.2 Research Problem

Capital structure is one of the main determinants of firm performance explains that 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, profit maximizing firms when 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 (Ebaid, 2007). 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 contribute on the few empirical studies and to the debate on capital structure and financial performance on Agricultural Sector in Kenya to find out whether it influences financial performance. The study is relevant in the Kenyan context as it gives the importance role the agricultural sector is expected to play in the growth and in an attempt to achieve the government's vision 2030. Agriculture has remained the engine of Kenya's economic growth, accounting for 27 percent of real GDP, 60 percent of the total earnings and 45 percent of government revenue. Some 75 percent of Kenyans are employed in the agricultural sector. When investors are making investment decision at the NSE, they tend to evaluate various stocks and securities which they perceive will optimize their returns. One of the considerations in the investors' portfolio analysis is usually the strength of firms' Balance

Sheets as portrayed in the mode of firm financing; either equity or debt or a combination of both. More importantly, investors are usually concerned with firms' capital structure dynamics in order to create an optimal investment portfolio. On the other hand, some investors tend to ignore firms capital structure aspects which in turn end up affecting their desired returns.

As long as the choice of capital structure matters for firm value, the innovation in capital structure should also be reflected in the equity market through stock performance since equity holders get the residual claim of the firm. This issue has remained relatively untouched in NSE empirical studies. Therefore, the purpose of this study was to establish; what is the relationship between capital structure of listed agricultural firms in the NSE and financial performance? And does capital structure affect financial performance of the firms'?

1.3 Objective of the Study

To examine the relationship between capital structure and financial performance of agricultural firms listed at the NSE

1.4 Value of the Study

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

1.4.1 Investors

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 firm's 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.

1.4.2 Shareholders

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 firm's value determination.

1.4.3 Academicians and Financial Researchers

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.

1.4.4 Management of Agricultural 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 firm's 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.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the theoretical and empirical literature on the relationship between capital structure and financial performance of agricultural firms listed at the NSE. Section starts with the capital structure theories, empirical reviews, then determinant of capital structure and financial performance.

2.2 Theoretical Review

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.

2.2.1 Capital Structure Irrelevance Theory

The pioneering work of Modigliani and Miller (1958) proposed the irrelevance of capital structure to firm performance and argued that in a perfect market situation there is no link between firm value and its financing mix. The restrictive and unrealistic assumptions of this theory led to subsequent research work suggesting that the firm performance is actually affected by the amount of debt in the capital mix choices available to the firms. Not

surprisingly this debate led to contesting views on financial performance and capital structure, and the two main capital structure theories often referred to in the literature are the trade off theory and the pecking order theory of leverage (Jensen & Meckling, 1976).

Modigliani and Miller (1958) challenged the traditional theory of capital structure by developing a new theory. They did their work with certain assumptions, which include; existence of homogenous risk class, homogenous expectations, efficient capital market, riskless debt and zero growth. They concluded that capital structure of a firm is irrelevant to its value in a world without corporate taxes. The market value of a firm is determined solely by the magnitude and risk of the cash flow generated by the capital assets. The debt equity ratio merely indicate how the stream of future cash flow will be among the debt holder and shareholders. The assumption of zero tax rate was seen as a serious limiting factor and hence the need to come up with a model that incorporate taxes. In 1963 Modigliani and Miller (1963), argued that the value of the firm will increase with leverage because interest in debt is tax deductible expense, hence exist an extra benefit to the levered firm.

Since Modigliani and Miller (1963) made oversight of the impact of personal taxes, Miller (1977) made significant contribution by correcting the (1963) contention. Replying on a number of assumptions Miller (1977) introduced a model designed to show how leverage affects a firm's value. When both personal and corporate taxes were taken into account, his model suggest that in the Market equilibrium, corporation tax advantage are cancelled out by the effects of personal taxes hence capital structure irrelevance (Kiogora 2000). Miller notes further that with introduction of personal taxes the usable income available to investors reduces when dividends are paid, thus, reduces the value of the unlevered firm. Omondi

(1996) extends Millers analysis to conditions of incomplete capital markets and special costs assessment of corporate debts. He concluded that Miller finding could be upheld and capital structures are seen as perfectly rational for at least some firms.

2.2.2 Trade-off Theory of Capital Structure

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 that makes 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).

Quite a few studies have identified both advantages and costs of debt financing. Among the advantages of debt financing, tax savings is considered as a main benefit for firms while opting for debt financing. This idea is based on the assumption that interest expense incurred on debt is deducted from the pre-tax income of firms. Modigliani and Miller (1963) whereas, among the costs of debt financing bankruptcy cost is often considered as important. Since debt financing not only involves regular interest payments it also include payment of the principal amount borrowed. So, firms exceeding the appropriate level of capital mix are liable to increase the cost of debt and also the chance of default, bankruptcy and eventually liquidation

of a firm. Myers (2001) though most studies assume that bankruptcy costs of firms exist, yet it is commonly believed that such costs are negligible and the benefits of tax saving outweigh the bankruptcy costs. Miller (1977) Therefore, the trade off theory suggests that more profitable firms need to shelter their earnings and save taxes by opting for higher leverage in their capital structure.

However, the static trade off theory is applicable only to one time period trade-off between taxes saving against the deadweight cost of bankruptcy. In practice firms operate for a long period of time, therefore dynamic trade off theories are more relevant to the real world in explaining the relationship between firm's performance and leverage. The focal point of these theories is that firms pursue an optimal debt ratio and any deviations resulting from random shocks are adjusted without any time lag and transaction costs. This proposition supports the view that firms would maintain high levels of debt to avail the tax saving benefit Kane et al. (1984), Brennan & Schwartz (1984), Goldstein et al. (2001) and Strebulaev (2007). However, the assumption that firms rebalance debt ratios swiftly without any transactions cost is being questioned. It is argued that since readjustment of debt ratios involve transaction costs, firms may take time to rebalance. Rather they may let their capital structure to deviate from the optimal capital structure and will rebalance only at the upper and lower limits Fischer et al. (1989).

2.2.3 Pecking Order Theory

In comparison to the trade off theory the pecking order theory argues that pecking order behavior is adopted when firms prefer to avoid costs related to adverse selection and agency cost issues. In other words firms in the first place prefer to opt for internal source of retained

earnings; if at all it has to opt for external funds it prefers debt to equity. Myers (1984) and (Myers & Majluf, 1984) Also the issuance of equity imply involving external investors in the ownership structure, therefore when a firm issues new shares investors may believe the firm is overvalued and the managers may take advantage of this asymmetric information as he knows better about the firm's risk level than the investors. Myers (1984)

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--bonds other than equity. In case of equity issuing, firms will fall into the dilemma of either passing up positive-NPV projects or issuing stocks at a price they think is too low.

2.2.4 Agency Theory

The agency theory initially put forward by Berle and Means (1932) also contributes to the capital structure decision. According to the theory, agency conflicts arise from the possible divergence of interests between shareholders (principals) and managers (agents) of firms. The

primary duty of managers is to manage the firm in such a way that it generates returns to shareholders thereby increasing the profit figures and cash flows. However, Jensen and Meckling (1976) and Jensen and Ruback (1983) argue that managers do not always run the firm to maximize returns to shareholders. As a result of this, managers may adopt non-profitable investments, even though the outcome is likely to be losses for shareholders. They tend to use the free cash flow available to fulfill their personal interest instead of investing in positive Net Present Value projects that would benefit the shareholders. Jensen (1986) argues that the agency cost is likely to exacerbate in the presence of free cash flow in the firm.

In order to mitigate this agency conflict, Pinegar and Wilbricht (1989) argued that capital structure can be used through increasing the debt level and without causing any radical increase in agency costs. This will force the managers to invest in profitable ventures that will be of benefit to the shareholders. If they decide to invest in non-profitable projects and they are unable to pay the interest due to debt holders, the debt holders can force the firm to liquidation and managers will lose their decision rights or possibly their employment. The contribution of Agency cost theory is that leverage firms are better for shareholders as debt level can be used for monitoring the managers. Thus, higher leverage is expected to lower agency costs, reduce inefficiency and thereby lead to improvement in firm's performance (Jensen, 1986, 1988, Kochhar, 1996).

2.3 Determinants of Capital Structure

The term capital structure refers to the mix of different types of securities (long-term debt, common stock, preferred stock) issued by a company to finance its assets. A company is said to be unlevered as long as it has no debt, while a firm with debt in its capital structure is said

to be leveraged. Note that there exist two major leverage terms: operational leverage and financial leverage. While operational leverage is related to a company's fixed operating costs, financial leverage is related to fixed debt costs. Loosely speaking, operating leverage increases the business (or the operating) risk, while financial leverage increases the financial risk. Total leverage is then given by a firm's use of both fixed operating costs and debt costs, implying that a firm's total risk equals business risk plus financial risk (Brealey & Myers, 2003).

Since hundreds of articles have been written about capital structure and its determinants since the 1958 paper by MM, one must be aware of the fact that different measures of capital structure exist, and that each capital structure measure itself can be measured in different ways. Roughly, two major categories of leverage measures exist: those that are based on market value of equity defined as the market value of equity is normally defined as the number of outstanding shares multiplied by the share price of the last trading day of an accounting year, and those that are based on booked value of equity (Loof, 2003). For instance, Titman and Wessels (1988) discuss six measures of financial leverage in their study of capital structure choice: long-term, short-term, and convertible debt divided by market and book values of equity respectively. It is though rather common that due to data limitations, empirical studies must use only leverage measures in terms of book values rather than market values of equity.

When both booked and market values are available, they are both used simultaneously. The reason for this is that the information signaled in book value and market value is informative in different aspects (Loof, 2003). In contrast to this, Titman and Wessels (1988) refers to an earlier study by Bowman (1980), which demonstrated that the cross-sectional correlation

between the book value and market value of debt is very large. Furthermore, Brealey and Myers (2003) argue that it should not matter much if only book values are used, since the market value includes the value of intangible assets generated by for instance research and development, staff education, advertising, and so on. These kinds of assets cannot be sold with easiness, and in fact, if the company goes down, the value of intangible assets may disappear altogether. Hence, misspecification due to using book value measures may be fairly small, or even totally unessential.

Irrespective of market or book value, we still face the problem of choosing an appropriate leverage measure as the dependent variable. Indeed, in an important paper by Rajan and Zingales (1995), they argue that the choice of the most relevant measure depends on the objective of the analysis. Though, they conclude “the effects of past financing decisions are probably best represented by the ratio of total debt over capital (defined as total debt plus equity)”.

To complete the discussion of different leverage measures, we may consider the following statement by Harris and Raviv (1991) when we compare different empirical studies:

“The interpretation of the results must be tempered by an awareness of the difficulties involved in measuring both leverage and the explanatory variables of interest. In measuring leverage, one can include or exclude accounts payable, accounts receivable, cash, and other short-term debt. Some studies measure leverage as a ratio of book value of debt to book value of equity, others as book value of debt to market value of equity, still others as debt to market value of equity plus book value of debt. In addition to measurement problems, there are the usual problems with interpreting statistical results.”

2.4 Empirical Review

Empirical supports for the relationship between capital structure and firm performance from the agency perspective are many and in support of negative relationship. Friend, Irwin and Lang (1988) 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

Titman & Wessels, 1988), the paper analyzes the explanatory power of some of the recent theories of optimal capital structure and extended empirical work on capital structure theory. It examines a much broader set of capital structure theories, implications in regard to different types of debt instruments, the authors analyze measures of short-term, long-term, and convertible debt rather than an aggregate measure of total debt and uses a factor-analytic technique that mitigates the measurement problems encountered when working with proxy variables. The results also indicate that transaction costs may be an important determinant of capital structure choice. Short-term debt ratios were shown to be negatively related to firm size, possibly reflecting the relatively high transaction costs small firms face when issuing long-term financial instruments. Since transaction costs are generally assumed to be small relative to other determinants of capital structure, their importance in this study suggests that the various leverage-related costs and benefits may not be particularly significant. In this sense, although the results suggest that capital structures are chosen systematically, they are in line with Miller's argument that the costs and benefits associated with this decision are small.

Additional evidence relating to the importance of transaction costs is provided by the negative relation between measures of past profitability and current debt levels scaled by the market value of equity.

Long & Maltiz (1985) and Wald (1999) 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.

Majumdar and Chhibber (1997) and Rao, M-Yahyaee and Syed (2007) 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.

Wandeto (2005) also 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.

In Kenya, 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 Shyam-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.

Zeitun and Tian (2007), using 167 Jordanian companies over fifteen year period (1989-2003), found that a firm's capital structure has a significant negative impact on the firm's performance indicators, in both the accounting and market measures. The study was to investigate the effect which capital structure has had on corporate performance using a panel data sample representing of 167 Jordanian companies during 1989-2003. The results showed that a firm's capital structure had a significantly negative impact on the firm's performance measures, in both the accounting and market's measures. Also found that the short-term debt to total assets (STDTA) level has a significantly positive effect on the market performance measure (Tobin's Q). The Gulf Crisis 1990-1991 was found to have a positive impact on Jordanian corporate performance while the outbreak of Intifadah in the West Bank and Gaza in September 2000 had a negative impact on corporate performance.

Uwalomwa & Uadiale (2012) did 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 analyzed 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.

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

Maniagi et.al, (2013) in the study of the relationship between a 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 debts. From the results the total assets was positively correlated to capital structure proxies and it was significant this indicate 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.

And according to study done by Mahalang'ang'a and Ochuodho (2013) to establish the relationship between dividend payout and firm performance among listed firms in the NSE. Regression analysis was carried out to establish the relationship between dividend payout and firm performance. It therefore shows that dividend policy is relevant and therefore affects the performance of a firm hence its value contrary to theories that view dividend policy as irrelevant. Total assets and revenue are also factors that affect the performance of a firm as shown by the research findings.

2.5 Summary of Literature Review

Several 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, agency theory suggests that the free cash flow problems and being disciplined by debts are important for the corporate capital structure. Moreover, there are several related recent studies in the US such as Margaritis and Psillaki (2010).

This chapter clearly reviewed the relevant literature in relation to the research questions presented in this study. It revealed that there exists a positive relation between a firm's capital structure and its 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 and firm holds and where it sources its finances. In Kenya, few empirical studies have been done to establish the relationship between capital structure and firm performance, especially the agricultural sector which has been the backbone of the economy. This study therefore comes in to fill the void by establishing whether there is a relationship between capital structure and firm performance among listed agricultural firms' in Kenya.

CHAPTER THREE

RESEACH METHODOLOGY

3.1 Introduction

This chapter provides a discussion of the research methodology that was used in this study. It discusses the research design especially with respect to the choice of the design. It also discusses the population of study, sample and sampling techniques, data collection methods as well as data analysis and data presentation methods to be employed in the study.

3.2 Research Design

Mathoko *et al* (2007) describes a research design as a set of decision that make up the master plan specifying the methods and procedures for collecting and analyzing the needed information. The study was designed to provide information on potential relationships. This study therefore employs a descriptive research design. The study is structured on the basis of the following objectives: determining the effect of capital structure on a firm's performance, examining how change in a firm's returns affects its capital structure and assessing how change in a firm's capital structure affect the firm's value.

3.3 Population

A population is the total collection of measurements, items, or individuals that make up the total of all possible measurements within the scope of the study. The target population in the study was the 7 firms listed in the NSE under the agricultural sector (appendix 1). There was no sampling since the population is not too large and thus can be covered wholly.

3.4 Data Collection

Secondary data was used in this study. The data was obtained from past financial reports (Statement of Financial Position, Income Statement, and Cash Flow Statement) as published by the respective companies in CMA. Calculations were done to find out the changes in a quantifiable manner and show the changes. Data for these calculations was sought from financial records of these firms as published yearly; the period for consideration was between the years 2008 to 2012.

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 was used to 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 Model Specification

Variable used for the analysis include 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 to be used include:

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

Revenue was included as control variable.

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

$$\mathbf{ROE}_{it} = \beta_1 + \beta_2 \mathbf{SDA}_{it} + \beta_3 \mathbf{LDA}_{it} + \beta_4 \mathbf{REV}_{it} + e_i$$

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

\mathbf{SDA}_{it} is short-term debt divided by the market value capital for firm i in time t

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

\mathbf{REV}_{it} is the log of revenue for firm i in time t

e_i is the error term

3.5.2 Test of Significance

The model helped in determining if there is a relationship between capital structure and financial performance of Agricultural firms', collected data was subjected to the analysis tools SPSS version 20.0

The data was collected from the secondary sources to analyze the data; 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.

CHAPTER FOUR
DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter presents the research findings on the relationship between capital structure and financial performance of agricultural firms listed at the NSE. The study was conducted on agricultural firms listed at the NSE where secondary data from the period of 2008 to 2012 was used in the analysis. Regression analysis was used in analysis the data.

4.2 Regression Analysis

4.2.1 Year 2008

Table 4.1 Model Summary for year 2008

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.860 ^a	.740	.718	.608

Source, (Research Finding, 2013)

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 0.718 an indication that there was variation of 71.8% on financial performance of agricultural companies listed in the NSE due to changes in the independent variable which are short term debt, long term debt and revenue at 95% confidence interval. This shows that 71.8% changes in financial performance of agricultural companies listed in the NSE could be accounted for short term debt, long term debt and size. R is the correlation coefficient which shows the relationship between the study variable, from the

findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.860.

Table 4.2 Coefficients for 2008

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	.908	.578		1.300	.001
	Short term debt	.022	.054	.042	.410	.683
	Long term debt	-.032	.104	.037	.304	.762
	Revenue	.340	.088	.453	3.886	.000

Source, (Research Finding, 2013)

From the data in the above table the established regression equation for year 2008 was

$$Y = 0.908 + 0.022 \text{ STD} - 0.032 \text{ LTD} + 0.340 \text{ REV}$$

From the above regression equation it was revealed that holding short term debt , long term debt and revenue of agricultural companies listed in the NSE to a constant zero the financial performance of agricultural companies listed in the NSE would stand at 0.908, a unit increase in short term debt would lead to increase in financial performance of agricultural companies listed in the NSE by a factors of 0.022, unit increase in long term debt would lead to decrease in performance of agricultural companies listed in the NSE by a factor of 0.032, further unit increase in revenue of the firm would lead to increase in financial performance of agricultural companies listed in the NSE by a factor 0.340.

4.2.2 Year 2009

Table 4.3: Model Summary for 2009

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

Source, (Research Finding, 2013)

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 agricultural companies listed in the NSE due to changes in the independent variable which are short term debt, long term debt and revenue at 95% confidence interval. This shows that 75.2% changes in financial performance of agricultural companies listed in the NSE could be accounted for short term debt, long term debt and size. R is the correlation coefficient which shows the relationship between the study variable, from the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.886.

Table 4.4: Coefficients for 2009

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

Source, (Research Finding, 2013)

From the data in the above table the established regression equation for year 2009 was

$$Y = 0.307 + 0.118 \text{ STD} - 0.198 \text{ LTD} + 0.270 \text{ REV}$$

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

4.2.3 Year 2010

Table 4.5 Model Summary for 2010

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

Source, (Research Finding, 2013)

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 agricultural companies listed in the NSE due to changes in the independent variable which are short term debt, long term debt and revenue at 95% confidence interval. This shows that 65.3% changes in financial performance of agricultural companies listed in the NSE could be accounted for short term debt, long term debt and revenue. R is the correlation coefficient which shows the relationship between the study variable, from the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.832.

Table 4.6 Coefficients for 2010

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

Source, (Research Finding, 2013)

From the data in the above table the established regression equation for year 2009 was

$$Y = 0.809 + 0.012 \text{ STD} - 0.016 \text{ LTD} + 0.102 \text{ REV}$$

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

4.2.4 Year 2011

Table 4.7 Model Summary for 2011

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

Source, (Research Finding, 2013)

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 agricultural companies listed in the NSE due to changes in the independent variable which are short term debt, long term debt and revenue at 95% confidence interval. This shows that 52.7% changes in financial performance of agricultural companies listed in the NSE could be accounted for short term debt, long term debt and revenue. R is the correlation coefficient which shows the relationship between the study variable, from the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.757.

Table 4.8 Coefficients for 2011

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

Source, (Research Finding, 2013)

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

$$Y = 0.385 + 0.209 \text{ STD} - 0.069 \text{ LTD} + 0.134 \text{ REV}$$

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

4.2.5 Year 2012

Table 4.9 Model Summary for year 2012

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

Source, (Research Finding, 2013)

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 agricultural companies listed in the NSE due to changes in the independent variable which are short term debt, long term debt and revenue at 95% confidence interval. This shows that 81.5% changes in financial performance of agricultural companies listed in the NSE could be accounted for short term debt, long term debt and revenue. R is the correlation coefficient which shows the relationship between the study variable, from the findings shown in the table above there was a strong positive relationship between the study variable as shown by 0.925.

Table 4.10 Coefficients for year 2012

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

Source, (Research Finding, 2013)

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

$$Y = 0.614 + 0.263 \text{ STD} - 0.111\text{LTD} + 0.233 \text{ REV}$$

From the above regression equation it was revealed that holding short term debt , long term debt and revenue of agricultural companies listed in the NSE to a constant zero the financial performance of agricultural companies listed in the NSE would stand at 0.614, a unit increase in short term debt would lead to increase in financial performance of agricultural companies listed in the NSE by a factors of 0.263, unit increase in long term debt would lead to decrease in performance of agricultural companies listed in the NSE by a factor of 0.111, further unit increase in revenue of the firm would lead to increase in financial performance of agricultural companies listed in the NSE by a factor 0.233.

4.3 Interpretation of Findings

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

CHAPTER FIVE

SUMMARY, CONCLUSIONS 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 the relationship between capital structure and financial performance of agricultural firms listed at the NSE.

5.2 Summary of Findings

From the findings on the Adjusted R squared , the study revealed that there was variation of financial performance of agricultural firms listed in the NSE due to variations in Short term long term debt and revenue. The study revealed that short term and long term debt were the major factors influencing the financial performance of agricultural 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 analyzed data is ideal for making a conclusion on the influence of in short term, long term debt and revenue on financial performance of agricultural firms listed at the NSE. The study revealed that short term, long term debt and revenue were significantly influencing of agricultural firms listed at the NSE

The established regression analysis for year 2008 was

$$Y = 0.908 + 0.022 \text{ STD} - 0.032 \text{ LTD} + 0.340 \text{ REV}$$

The established regression analysis for year 2009 was

$$Y = 0.307 + 0.118 \text{ STD} - 0.198 \text{ LTD} + 0.270 \text{ REV}$$

The established regression analysis for year 2010 was

$$Y = 0.809 + 0.012 \text{ STD} - 0.016 \text{ LTD} + 0.102 \text{ REV}$$

The established regression analysis for year 2011 was

$$Y = 0.385 + 0.209 \text{ STD} - 0.069 \text{ LTD} + 0.134 \text{ REV}$$

The established regression equation for year 2012 was

$$Y = 0.614 + 0.263 \text{ STD} - 0.111 \text{ LTD} + 0.233 \text{ REV}$$

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

5.3 Conclusion

From the findings the study revealed short term debt, long term debt and revenue influence financial performance of agricultural firms listed at the NSE. This clearly shows that capital structure affect affect financial performance of firms listed at NSE. The study concludes that short term debt of agricultural firms listed in the NSE was positively related to financial performance of firms listed at NSE, this is attribute to the fact that the short term dent 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 short term funds.

The study concludes that long term debt affects financial performance of the firms listed in the NSE. The long term loans in these firms could lead to high interest expense hence lowering the revenue of the firm as well as reducing the 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 long-term debt and these can lead to financial crisis of the firms listed in NSE

5.4 Recommendations of Policy

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.

The study recommends that there is need firms listed in NSE to increase their size and revenue as it was revealed that revenue of the firms listed in NSE positively impacts on the financial of the firm.

The study also recommends that there is need for the firms listed in the NSE to adopt strategies that would increase their revenue 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 five year study period from the year 2008 to 2012. 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 Agricultural firms listed in the Nairobi Securities Exchange; further study should be undertaken on other firms in other sectors of the economy such as the industrial 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

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APPENDICES

Appendix 1: List of Agricultural Firms Listed at NSE as at July 2013

NO	Name of the company
1	Eaagads Limited
2	Kapchorua Tea Limited
3	Kakuzi Limited
4	Limuru Tea Limited
5	Rea Vipingo Plantations Limited
6	Sasini Limited
7	Williamson Tea Kenya Limited

Source: www.nse.or.ke

Appendix 2: Letter of Introduction

Dear sir/madam,

RE: Research on Relationship Between Capital Structure and Financial Performance of Listed Agricultural Firms at NSE

I am a postgraduate student at the faculty of commerce, university of Nairobi pursuing Msc in Finance course. As part of the requirements for my study, I intend to collect secondary data from your institution. The information requested is purely needed for academic purposes and will be treated in strict confidence, and will not be used for any other purpose other than for my research.

I would be most grateful if you would allow me access to all information relevant to my research. Any additional information you might consider necessary for this study is most welcome. Thanks in advance for your assistance in accessing the much needed information.

Yours sincerely

Catherine Njagi
Msc Finance candidate

Supervisor

Mr. Herick Ondigo
Lecturer
Department of Finance and
Accounting
University of Nairobi

Appendix 3: Data Collection Template

Company/Year	Variable	2008	2009	2010	2011	2012
	Revenue					
	STD					
	LTD					
	Capital					
	Revenue					
	STD					
	LTD					
	Capital					
	Revenue					
	STD					
	LTD					
	Capital					
	Revenue					
	STD					
	LTD					
	Capital					
	Revenue					
	STD					
	LTD					
	Capital					
	Revenue					
	STD					
	LTD					
	Capital					