

**FACTORS INFLUENCING FINANCIAL PERFORMANCE OF
AGRICULTURAL COMPANIES LISTED IN NAIROBI SECURITIES
EXCHANGE IN KENYA**

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DECLARATION

This research project is my original work and it has not been presented for degree award in any other university.

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ABBREVIATIONS AND ACRONYMS

EPS	Earnings Per Share
CBR	Central Bank Rate
CM	Capital Market
NED	Non-Executive Directors
NSE	Nairobi Securities Exchange
ROA	Return On Asset
ROE	Return On Equity
TB	Treasury Bill
SPSS	Statistical package for social sciences

ABSTRACT

This study sought to determine the factors influencing financial performance of agricultural companies listed in Nairobi Securities Exchange (NSE). The objectives of the study were to establish the target capital structure of agricultural companies listed in NSE, to ascertain the effect of turnover on financial performance of the agricultural companies listed in NSE and to assess the effect of Board Size on financial performance of the agricultural companies listed in NSE. The study adopted longitudinal research design with targeted population being the six agricultural companies listed in NSE. Secondary data was obtained from published financial statements for the period 2010-2014. Desk research instrument was used to obtain the data. Census was carried on the six companies listed in the NSE. The empirical data on factors influencing financial performance was analyzed using the Statistical Package for Social Sciences (SPSS), to establish the relationship between the variables for study. Pearson's Correlation Coefficient was determined and Multivariate Regression Analysis was used to determine the factors influencing the financial performance of the agricultural companies listed in NSE in Kenya. The findings of this study showed that an increment in debt ratio led to reduction in financial performance, and the reduction in financial performance following an increment in debt ratio would be large to guarantee a significant change in the after tax profits of the companies. An increase in turnover will led to an increment in financial performance, and the increment in financial performance following an increment in turnover will be large to guarantee a significant change in the after tax profits of the companies. Board size had no reasonable effect on financial performance. Based on the results it is therefore recommended that for better financial performance, there should be proper management of debt. It also recommend the growth of sales and focus on growth opportunities to increase revenue through sales. Board size should not be factored as it has little impact on financial performance of agricultural companies.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Financial performance is the prejudice measure that assess how effectively a firm employs its assets from the primary business to make revenue (Vedran, 2012). He highlighted that the measure of financial performance include the equity return, profitability amongst others that grant an important tool to the stakeholders to access the present position and the precedent performance of the firm. This is consistent with the goal of the firm of maximizing the wealth or value (Modigliani & Miller, 1958). The relationship between capital structure and the factors that affect the financial performance in a firm has been a focus of incredible milestone over the past decade. Investors will mainly consider financial performance in the agricultural industry based on the analysis of financial performance measures (Capital Market Authority, 2014).

In the seminal paper article, which Modigliani and Miller (1958) presented on the irrelevant theory, they affirmed the fact that capital structure is not related to the worth of the firm. In the existence of corporate income tax and the cost of capital, they concluded that the value of the market of the firm is positively correlated to amount of long term debt used in its capital structure. Financial measure is one of the tools which indicate the financial strength, Weakness opportunity and threat of a firm (Zeitun & Tian, 2007). Agriculture has been one of the foundation of modern society. By being able to grow our own crops, we effectively evolved from hunting society to self-sustaining one. Agriculture has also improved with technology and craft over the years.

Globally and particularly in United States of America (USA), agricultural companies did not share in the prosperity of the booming of 1920s (Wall Street, 2015). The report pointed that agricultural companies had been overproducing since the world war1. Herbert Hoover who was the federal government's foods administrator in that era encouraged the great amplification in the production of agricultural goods due to the war since the production of Europe was significantly affected and United states where required to supply its European partners with food.

Several companies in US expanded in that period leading to large export to European. Companies such as Dairy products of United States, Dole Food Company, Grain Company of United States grew fast. By 2000 the agricultural companies started facing competition from Argentina, South Africa and other nations. The export to other nations reduced. The company's dismal performance made it difficult to borrow to finance its operations. This resulted in financial crunch and most of them liquidated. Such companies included; Advance Thresher, Advance-Rumely, Adson Clayton & Companies, Castle & Cooke. Their liquidation was mainly caused by financial risk according to USA Capital Market (2010).

In Africa, most agricultural companies are also performing poorly (Abor, 2008). A case study in Nigeria shows most of the companies in agricultural sector are underperforming (Olekule & Oni, 2014). Although there was no recently liquidated company in Nigeria, the results of published financial performance of companies shows that companies like Folohimans Farm Ltd which offers service to cats, fish and eggs producing farmers in commercial quantities was not performing well. Also Vet Care a company specializing in provision of veterinary and medical services was not performing quite well. This has been attributed by reduced borrowing to generate revenues due to increased global competition in provision of the services. In Kenya, companies in agricultural sector have not been performing satisfactory (Capital Market

Authority, 2014). Published report in Nairobi Securities Exchange (2015) shows that there was reduced earnings per share (EPS). In 2015 sisal grower Rea Vipingo plantation was delisted from NSE. According to Nairobi Securities Exchange (2015) it was attributed to its poor financial performance.

1.2 Statement of the Problem

Firms survival in the dynamic environment of Kenya are mainly dependable on being able to generate revenue from their operation (Niv, 2005). He further asserted that their income are mainly generated mainly through sale of produce. Most underperforming companies in global, regional and even locally, their poor performance have been mainly attributed by financial risk (Wall Street, 2015). Due to this poor performance, there is need for managers to make right decisions which will steer the company in the dynamic economic environment.

According to Wall Street (2015) 75% of liquidating companies in the US have also been associated with financial risk. The companies borrow in excess hence increasing the financial risks. According to Nigerian Capital Market (2015), most of poorly performing companies are mainly in agricultural sector. Their poor performances have been attributed by inability to expand and diversify to counter competition according to that report. The result is reduced earnings per share of such companies. In Kenya, most of agricultural companies are also underperforming (Nairobi Securities Exchange, 2015). The reduced earnings per share has characterized the entire sector for the last two years. Real Vipingo one of the oldest regional sisal producers was delisted from trading in NSE in 2015. Therefore there is need to determine the aspects that affect the performance of finance in the agricultural sectors. This will be significant because agriculture remain to be the driver of economic growth and development in Kenya. The sector continues to be largest platform upon which economic growth is based

on. Therefore agriculture must grow at high rate in order to improve the economic growth of the country.

1.3 Objectives

1.3.1 General Objective

To determine the factors influencing financial performance of listed agricultural companies in NSE.

1.3.2 Specific Objectives

- i. To establish the target capital structure of agricultural companies listed in NSE.
- ii. To ascertain the effect of turnover on the financial performance of agricultural companies listed in NSE.
- iii. To assess the effect of Board size on financial performance of agricultural companies listed in NSE.

1.3.3 Research Questions

- i. What is the target capital structure of agricultural companies listed in NSE?
- ii. What is the effect of turnover on financial performance of agricultural companies listed in NSE?
- iv. What is the effect of Board size on financial performance of agricultural companies listed in NSE?

1.3.4 Research Hypothesis

H₀₁: There is no significant effect of target capital structure of agricultural companies listed in NSE.

H0₂: There is no significant effect of turnover on financial performance of agricultural companies listed in NSE

H0₃: There is no significant effect of Board Size on financial performance of agricultural companies listed in NSE.

1.4 Significance of the Study

This study seeks to establish the factors influencing financial performance of the agricultural companies that Nairobi securities exchange has listed. The output will be of major importance to the managers as they have the sole responsibility to maximize the wealth of the shareholders since they will be competent to use the output of the research to forecast the possible adjustment that may be needed in capital structure. The shareholders of companies will understand more about the capital structure, firm's value and firm's returns and how they are related and how each affects each other. This will guide them in making informed decisions. For academician researchers, the research will assist with empirical evidence to cover exhaustively areas in which have not been covered.

1.5 Scope of the Study

The study involved the analysis of the six agricultural companies listed in Nairobi securities exchange. The companies include Eaagads, Kakuzi, Kapchorua Tea, Limuru Tea Sasini and Williamson Tea. This study covered the period between 2010-2014. This is the period on which agricultural companies in Kenya have been facing financial difficulties characterized by reduced earnings per share. The study intended to determine the factors influencing the financial performance of the listed agricultural companies listed in NSE.

1.6 Limitation of the Study

The study faced the following problems;

The NSE were reluctant to give out the data because they doubted whether it will be used for research purpose. To counter the above problem the researcher obtained letter of introduction from the college to obtain data from NSE.

The data obtained from published financial statements contained some omission which occurred during the extraction of the data from those statements. The data was checked and corrected for any omission.

1.7 Organization of the Study

This study consists of five chapters; Chapter one presents the study objectives, the background of the research, the importance of the research and the encountered limitations in the execution of the research. Chapter two provides the literature review on factors influencing financial performance of agricultural companies listed in NSE and conceptual framework. While Chapter three focused on the criteria to be used in the research as Chapter four presented the research findings and their interpretation. Chapter five covers the study conclusions and its policy inference.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents analysis of the theoretical and empirical literature on the factors influencing financial performance of the agricultural companies listed in NSE. It covers the summary of literature review and research gaps. It also contains the conceptual framework.

2.2 Theoretical Review

2.2.1 Trade-Off Theory of Capital Structure

In a static trade-off argument in the company's foundation, the company is analyzed as coming up with a target debt -equity ratio and the company will slowly work to attain it. The use of debt to finance a firm has benefits as compared to the use of equity due to the basic fact that the amount of the interests paid by the firms are tax-deductible whereas the income from the equity is taxed. Contrary, the use of debt increases financial risk of the business that discourages the use of debt in financing as compared to equity. Therefore with regard to trade- off argument the decision makers being the manager consider the decision of debt-equity as a trade-off between the tax shield of the cost of debt and the financial performance.

In this aspect the managers will work in attainment of the required capital structure targets that will presumably reflect the rate of tax the business risk, profitability of the firm and the bankruptcy risk. In actual sense the firm is balancing the costs and benefits of borrowing, holding its assets and investment plan (Myers, 1984).

Not many studies which have identified the advantages and the cost of financing a firm with debts. One of the highlighted key important aspect of debt financing is the tax that is saved by the company. The basic assumption advocated by this theory is the interest incurred is an expense which is deducted from pre-tax. According to Modigliani and Miller (1958) whereas

the cost of debt financing bankruptcy cost is often considered as important. Firms not only pay the interest accrued but also pay the principal amount advanced.

In case the firm exceeds the optimal capital structure it may result in increased cost of financing the debt. This may increase the chances of default and bankruptcy, hence the chances of the firm being liquidated will be very high.

Myers (2001) in his research had an assumption that the bankruptcy cost exists, yet it is actually believed that such cost is negligible and the actual cost of saving is more than the bankruptcy cost.

2.2.2 Pecking Order Theory

Myers and Majluf (1984) advocated the theorems which suggest that there is an ideal chain of command for financial decisions in a firm. It affirms when the internal cash flow of the firm is inadequate it will borrow instead of giving out equity. Great preference is given to the employing of the internal funds before reporting any source of external finances. According to Myers (1984), in the instance where the firm has to use the external sources of finance, it has to adhere to certain criteria of finance sources which include the preferred stock, the common stock, convertible securities and debt in comparison when they could have used the internal funds it will not incur flotation costs and they will not require disclosure of the business often led to possible loss of competitive advantage of the firm. The financial manager incentives are revealed by the order in the retention of control on the firm hence the minimization of the agency costs of equity and avoidance of an unenthusiastic market reaction hence the implication of new equity issues. The firm's cumulative necessitation for external funds will be reflected by their amount of debt.

The two major assumptions in this theorem on the financial managers is the certainty that they have more knowledge about the present earnings and future opportunities of the company than

the external investors. There is a great need to confide such information proprietary. The utilization of the internal finances prohibits the managers from making public disclosures concerning the realization of probable profits and the company's investment opportunities and finally they will act for the best interest on the existing shareholders of the company. Myers and Majluf (1984) assert that the managers may at times relinquish a positive-NPV project if it may need the subject of new equity as this would be a great deal to the value of the project to the new shareholders at the expense of the existing ones.

The theory has various limitations since it does not explain on financial distress challenges, agency costs, taxes, the costs incurred on security issuance and available investment opportunities to a firm on its actual capital structure. It rather assumes the uncertainties that come up due to the managers accumulating extremely on the financial slack hence becoming immune to the market discipline. Therefore the theory can be viewed not as a substitute but relatively a complement to the traditional trade-off theory. The theory is very important because most managers of companies will have to consider when to use different components of capital structure to finance its activities.

2.2.3 Baumol's Sales Revenue Maximization Theory

Baumol (1958) finding of oligopoly firms in the US market concluded that they aimed at maximizing sales as their objective. According to Baumol (1958) the separation of ownership and the management in the recent past forced managers of the firm to bargain for higher salaries and to seek prestige by expanding the size of the company without regard of profit made. According to Baumol (1958) there exist a correlation between the sales maximization and the actual behavior of the firm

Baumol (1958) provided evidence which reveal that in short-run the revenue maximization is consistence with the long –run profit maximization. But sales maximization is viewed as the short -run as well as the long-run profit maximization of the firm. But sales maximization is not only the mean but end itself. According to him the magnitude of sales is very crucial and managers will attach a great significance. Declining sales will attract a lot of concern to decision makers. He argued that if sales of firm are declining, bank, creditors and capital market are not prepared to provide finance to it. Its own distributors and dealer might stop taking interest in it. He cites that firm will reduce its staff both at managerial position as well as non-technical staff with reduced sales. If revenue increases, the firms expand and exploits the economies of scale hence earns more profit. The salaries of workers which often depend to large extend on sales increases. Also more sales will also make the firm to give bonus and other facilities to the workers.

Upon sales maximization, Baumol (1958) argued that this will translates to revenue maximization. In his argument it's only translated to money sales as opposed to sales of large quantities of output. Sale can increase up to the level of profit maximization. In such case the marginal cost equals marginal revenue. Minimum profits refers to the amount which is less than maximum profits. Maximum profit are needed for retained earnings or for new capital. It is also required to meet other firm's financial obligation as well as dividend payment. Therefore minimum profit acts as constrain to the profit maximization of the revenue of the firm.

2.3 Theoretical and Empirical Review

This section we critically review the existing relationship between the independent and their association with dependent variable.

2.3.1 Financial Performance

The financial performance of a company may be measured by Return on Equity (ROE), Return on Asset (ROA) or Return on Investment (Niv, 2005). This study will use ROE as the measure of financial performance. The equity return is achieved through the division of the profit subsequent to tax by shareholder's funds. The return on equity shows the way the management is employing the resources of the shareholders. According to lifecycle theory proposed by James (1973) the financial performance of accompany may be different depending on different stage of the firm. The return on equity may be low at the infant stages of firm. At this stage the prospect is that it may not be easy for the company to borrow to finance its operations. Also the firm will not have accumulated substantial asset base to generate revenue. According to James (1973) as the company matures they tend to be separation of ownership from management. Managers can make crucial decision on financing since there is separation of ownership and management. The company can borrow to finance its operations.

According to Valentine (2013) a finance manager can choose a blend of distinct securities in effort to find one that increases the market value. Musyoka (2009) in his finding argued that, decision made on regard to capital structure that the company can opt for are critical and vital because of the necessity to maximize the return on diverse organizational constituencies and their impact on decisions concerning the stability of the organization on the way to deal with its competitive environment. In Kenya, Gachoka (2005) reviewed the preference to capital structure in the selection of experiment in the pecking order among the listed firms in the NSE. The research applied shy-sunder and Myser POT model to predict external financing determined by internal financial deficit. The study used 31 firms listed on the NSE for the period 1998-2003. He concluded that companies listed in NSE do not abide upon the pecking theory

of capital structure in their preference financing. Hence there is necessity to analyze further to explain alternatives in effort to establish the one to be applied by NSE firms.

The correlation between the capital structure and the Sri Lankan banks quoted in Exchange market for the year 200-2004 was studied by Velnampy and Niresh (2012). The study applied descriptive design. The profitability of the study was measured by employing of accounting measures which include the equity return, capital return employed and net profit whereas capital structure was computed through the use of debt to equity ratio and total fund. The result of the study proved that banks quoted in the Exchange market were geared because 89% of the banks were financed by debt. But study however evidenced had a negative implication correlation among debt to equity and net profit margin ratio to the total funds.

Uwalomwa and Valiele (2012) did a study to basically investigate the correlation amid the performance on finance and capital structure of companies quoted in the floor of Nigeria Stock Exchange. The study enlisted 31 quoted companies on the floor of Nigeria Stock Exchange. The end of the report for duration 2005-2009 were examined by use of year report for the duration 2005-2009 were examined by use of Ordinary Least Technique of estimation to analyze the proposition highlighted in the study. The study observed that two explanatory variables in the research which are shareholders fund and short-term debt which had a great impact on the financial performance on these firms listed in Nigeria Stock Exchange.

2.3.2 Target Capital Structure and Financial Performance

The target capital structure is simply the best debt-equity ratio for the firms that maximizes its value. The target capital structure for a firm is the one that gives a balance between the ideal debt-equity ranges as well as maximizes the firm's cost of capital.

2.3.2.1 Debt ratio

Debt ratio is computed by the total debt both long term and short term to total asset (Olekule & Oni, 2014). Myers (1984) in his pecking order theory argued that adverse selection implies that retained earnings are superior to debt while debt is also greater than equity. This ranking was facilitated motivated with reference to the Myers and Majluf (1984) adverse selection model. However the order originate from diverse sources which include taxes as well as agency conflicts. Myers (1984) argued that an industry is viewed as to follow a pecking order in preference to its external and internal financing as well as its debt to equity. If the financing external sources is required, then the firm will prefer debt than equity. So managers will tend to make decisions based on pecking order theory. In Kenya, managers prefer to utilize retained earnings since no floatation cost is involved. If retained earnings are exhausted they will go for debt since its interest is tax deductible. Floatation of the share will be there last option since it attract the floatation cost.

Modigliani and Miller (1958) analysis implies that firms are indifferent concerning method of financing if there are no corporate taxes. They however argue that firms should be financed with much debt if tax exist. The argument can be supported by the fact that interest on debt is tax allowable which tend to reduce the cost of capital. This argument however can be looked from the modern corporate finance where agency conflict may arise.

Studies form Niv (2005) affirmed that firm with considerably more debt than equity are viewed to be of high leverage. Myers (1984) in the pecking order theory argued that mangers focus on book leverage or market leverage. Managers tend to major on book leverage due to debt being supported by assets in position as opposed to its growth opportunities (Myers ,1984). Book

leverage is of great preference due to the fluctuation of financial markets and the trust of managers on market leverage as a guide to corporate financing policy.

The forecasting positive correlation among the size of the company and its leverage is depicted by Pecking order theory by Myers and Majluf (1984). The dispute arises because large companies have been approximately for a longer duration in comparison to smaller firms hence them to incur lower adverse selection problems. According to studies of Modigliani and Miller (1958) they argued that an industry's worth will amplify with its leverage since the debt interest is a deductible expense, hence exist an extra benefit to the levered firms. Miller (1963) came up with a model designed to show how leverage affect the value of a firm. He found that when both personal and corporate tax advantage are cancelled out by the effects of taxes on individuals, the usable income available to investors reduces when dividend are paid.

Fissesha (2010) affirmed that capital structure target is the preeminent debt-equity ratio for a company as it amplifies the value of the company. According to him, the target capital structure for a firm is the one that portrays out the ultimate balance and reduces the company's cost of capital. Proponents of pecking order theory Myers and Majluf (1984) focused their efforts to develop a satisfactory amount of debt that combine with equity for a firm. The theory of pecking order is realized from Myers (1984) who was considerable prejudiced by institutional literature.

Myser argued that adverse selection means that retained earnings are worth than debt while debt is greater than equity. This positioning was aggravated in relation to the Myers and Majluf (1984) adverse selection model. The classification is however stemmed from diverse sources which comprise of taxes and agency conflicts. Majority of the firms tend to hold some internal funds when raising outside finances which is evident that it is not often considered in the test

of pecking order. It is implicated that these finances are withdrawn for reasons outside the theorem which include the transaction. Whether there is the right mix that exists, the issue remains unsolved for long time but many theorists in corporate finance agree that it depend on many factors among them being the accessibility of firm to financial market.

Life cycle proponents, James (1973) argued that as long as there is right combination of debt and equity that yield optimal structure, the life stage of the firm will hold the upper hand on the capital mix of debt and equity in the capital structure. Mature firms have separation between management and ownership hence they face little adverse selection effect compared to young firms. Mature firms can borrow much as compared to small and young firms. Also mature firms have access to capital market and can float shares whenever they want to change their capital structure. From the scholar studies of Berger and Udell (2006), firm employ debt in their business since it presents them a potential in the maximization of their operation and amplification on the average return on their equity funds. Debt will only be considered effective as mode of financing in merely when the rate of return on investment is great than its cost of debt. Borrowing firm take this probability to employ debt in the anticipation that it will promote the firm to a more valuable level by amplifying the turnover and hence the maximizing the profits.

Nyaboga (2008) in his research found that the employing of debt capital amplifies agency costs among debt holders and the debt holders and shareholders. Numerous scholars have had a disagreement on the features that extensively affect the capital structure therefore the determination optimum capital structure go beyond various theorems. A number of scholars have accomplished that the institutional and economic environment in which the firms operate influence significantly the capital structure. Maniagi, Chitiavi, Alala, Musiega, and Rueben

(2012) in their study established that long term debt ratio proxy of capital structure is positively correlated to firm's performance (ROA).

An negative correlation between the asset tangibility and short-term debt ration amongst manufacturing companies listed in Bucharest stock exchange was highlighted from the studies of Vatavu (2012). Additionally the study illustrated that there is a negative relationship among asset tangibility and long-term debt. This proves that manufacturing companies can get short term debt in comparison to long term debt. A research to appraise the effect of asset tangibility on capital structure among listed firms in Nigeria was established by Olekule and Oni (2014). The study used correlation design, capital structure was defined as a ratio of fixed liabilities to total asset. The finding revealed an insignificance correlation among assets and short term to total asset. According to Fissesha (2010) the research which he conducted on the choice of capital structure on commercial bank in Ethiopia showed that there was negative insignificant correlation between the asset structure and capital structure.

According to studies conducted by Nour (2012) on the performance of the firm and the capital structure of Palestine company, the outcomes showed that the performance of the firm is positively correlated to the capital structure and numerically important with total asset to the total debt in exception of the market value of equity or the Book value of equity which was vital with the total debt to total assets & short-term debt to total assets. The relationship among the industries distinctiveness, operational performance and capital structure among a sample which comprised of 427 firms quoted on the Vietnamese stock exchange throughout the three years 2007-2009 was conducted by Ngoc-Phi-Anh and Jeremy (2011). The outcome of the study portrayed that both short term and long term debts related negatively to performance shown by the return on asset but positively with the long-term assets ratio and negatively correlated with short term ratio.

A research on small and medium enterprise (MSEs) in Ghana where it employed 160 SMEs was carried out by Abor and Biekpe (2007) where the outcome comprised the hypothesis of pecking order theory as the coefficients for performance. Profitability were negative and of great importance comparison to the capital structure alternatives ascertained by long term and short term debt. It was implied that the internal financing maximizes the profits therefore SMEs are likely to evade from debt to fund their activities. Although the greater access to debt finance by firms which are profitable, the necessity for debt finance may be lowered if the retained earnings are inadequate to suit the need.

The capital structure determinants of Ghanaian firms listed on the Ghana Stock Exchange throughout the six-year phase, 1998-2003 was studied by Abor (2008). The outcome showed that both the short term and long term debt ratios were negatively correlated in comparison to the profitability in the test groups. The study conclusions evidently conformed with the pecking order hypothesis, lucrative firms tend to rely on the less costly internal generated finances and consequently seek for external funds if supplementary finances are needed.

According to Githure and Muturi (2015) leverage is the employing of diverse financial instruments or resources that have been borrowed in order to amplify the potential return of an investment. He pointed out that financial leverage is experienced when a firm finances most of its assets through debt. However the greatest risk comes from high leverage and occurs when a company's return on asset (ROA) does not go beyond the interest on loan which significantly affects profitability (Githure & Muturi, 2015). In their investigation, they noted that long term liabilities are the most preferred source of debt financing among well-established corporate institutions. They used exponential generalized least square regression, with 100

Pakistan top companies listed in Karachi Stock Exchange for the period of four years from 2006 to 2009. Umar (2012) tested the relationship between capital structure and firm's financial performance. The result shows that long term liabilities to total asset negatively impact return on asset.

Contrary to Umar (2012) finding, Prahalathan and Ranjany (2011) assessed influence of capital structure preference on the performance of the firm for companies listed in Colombo Stock Exchange in Srilanka. They found that capital structure measured by long term debt to total asset has no significant effect on the firm's performance measured by return on asset. From above finding a conclusion can be arrived by pointing out that a highly leveraged financial firm may be prone to collapse. Managers therefore need to measure leverage level of a firm. While the risks varies positively with leverage, the risk taking can increase without increasing the leverage, so managers need to gauge the level of leverage that cannot pose financial threat to the firm.

An explanatory study by Omondi and Muturi (2013) on 29 listed firms were in operation at the NSE during the years 2006-2012 indicated that leverage negative association with financial performance. Oladeji, Ikpefan, and Olokoyo (2015) carried out a study to analyze the capital structure impact on firm performance for the petroleum companies in Nigeria. From the study conducted from the panel data analysis by the employing of fixed effect estimation, it was established that a negative relationship was in existence between the leverage and performance of the firm. The relation of capital decision through the performance of the firm of the engineering sector of Pakistan which was researched by Abdul (2012) concluded that financial leverage précised from short term debt to total assets and total debt to total assets had a considerably negative correlation with the firm performance computed by Return on Assets.

The performance of the firm and capital structure of the financial sector in Australia was studied and the outcome achieved showed that there was a significant and strong quadratic relationship among the performance of the firm and its capital structure (Vedran, 2012) .At lower leverage levels capital structure is positively interrelated to performance while at higher levels of leverage the capital structure is negatively interrelated to performance. This was endorsed to financial agony prevailing over any gains from the performance of management.

The most issue when it came to financing a firms is the amount of debt and equity that yield an optimal capital structure (Berger & Dipatti, 2006). According to them debt-equity ratio indicates how debt level a company is uses to finance its assets comparative to the amount of value represented in shareholder's equity. In their finding they come to conclusion that it should be that combination that should yield the optimal capital structure. From finding by Niv (2005) an optimal capital structure is the one that minimizes the firm's cost of capital, while maximizing the shareholder's wealth. In their analytical conclusion they remarked that debt-equity combination is very essential since it relates to firms ability to meet the needs of its stakeholders. He, stated that Creditors and lending institutions want to be assured that the company has the capacity to repay loan, the debt holder will be interested on the solvency and the stability of the company. The government wants the company to stay afloat in order to pay taxes and help in creating new jobs. The employee will want to be assured that their job are secure.

Zeitun and Tian (2007) found that companies and those in management use financial indicators so as to improve the performance of its firm. In their investigation of the effect of debt and equity financing on profitability of non-financial institution, they concluded that there is a

positive correlation on the ratio of equity and debt and the financial performance. Mahalang'ang'a and Ochuodho (2013) reveals contrasting finding on debt-equity combination on the firms. In their finding on firm's performance and capital structure, they asserted that whichever combination, a high degree of debt which is not matched with return will make the firm to be leveraged. This may increase the company's bankruptcy.

A negative and irrelevant correlation between the performance of the firm and its capital structure was listed on the stock exchange of Nigeria (Iorpev & Kwanum, 2012). The research deduced statistically, capital structure characterized debts which are short-term to total assets, debts which are long-term to total assets and total debt to equity is not the main determinant of the performance of the firm. A positive relation between the performance of the firm and its capital structure over the period 1998-2002 in the Ghanaians firms was reported (Abor, 2008).

Vatavu (2012) made a similar finding and came to conclusion that, whichever ratio of debt equity that a firm may wish to have in the capital structure there are underlying factors that need to be put in mind .One being the prevailing interest rates which represents the cost of capital. The other important element that he noted is that company's internal funding such as retained earnings and the accessibility of the firms to financial markets. From the above findings it can be concluded that debt-equity combination is very important in financial decision of a firm. The ratio will be used by different stakeholder to evaluate the present and future financial prospect of a firm. From findings of different researchers they came in to conclusion that the ratio of equity and debt should be the one that should maximize their shareholder's wealth at the same time minimizing the cost of capital.

2.3.3 Turnover and Financial Performance

Vishal and Saravanan (2007) studied the influence of the company's size and the inventory turnover for retail companies in the United States. The study revealed that the stock turnover varies across the companies for that period under study. Data for 353 public listed US retailers for the period 1995-2003. With respect to sale, the study found that a strong evidence of diminishing return to scale.

Papadogonas, Voulgaris, and Agiomirgianakis (2007) carried an analysis of 3035 Greek manufacturing firm for the duration 1995-1995. He used 3035 manufacturing companies quoted in the securities exchange. After classifying the companies into classes based on their turnover, he used regression analysis which exposed that for each class, company's the financial performance is certainly affected by the turnover of the company. Upon control for supplementary variables that affect company's performance, he concluded that larger firms are seen to be more profitable but made less sales for that given period. The finding was consistent with that of Pervan and Visic (2012), in their study in Croatia which claimed that the influence company's size and profitability is influenced by concept of the economies of the scale. According to economies of scale it may due to; technical, financial and organizational reasons. In relation to this concept, there is an existence of a relationship among the profits of the firm and its turnover. Vijayakumar and Tamizhselvan (2010) affirmed that a positive correlation exists between the turnover of the company and its profitability. The research was carried out through a semi-logarithmic specification of model, the researchers used different measures of the total assets and sales while the profitability which include profit margin and profit on total assets.

According to Niv (2005) there are different ways of measuring size of company. The approaches which can be used the log of asset number of employee, sales and log of market capitalization. In his research he used sales as measure of company's financial performance. The study pointed out that large firm are associated with ability to exploit the economies of scale and tend to be formalized in the procedures. They are also diversified in their operation. These features are all aimed toward enhancing operations effective so as to enable company improve the performance. Choi (2008) argued that increase turnover lead to inferior performance due formalized procedures. He also observed that large companies attract exemplary human resource that likely to influence the sales volume of the company.

2.3.4 Board Size and Financial Performance

According to corporate governance size of board is measured by the number of members serving in serving's board of company. Board size and composition is critical as it influences firm performance. Due to that fact many mixed view have been raised over whether it affects the firm's performance positively or negatively. Board acts in behalf of shareholders and is the key decision making organ in the organization.

The traditional understanding of board composition is through the paradigm and fairness both through programs such as affirmative action. Attempting to select from under presented groups and through a number based approach where statistic are the most important tool (Thomas and Ely 1996).As looked at earlier in the study however , there are several other aspect that need to be considered in assessing board composition and size. They include; Board gender, age, ethnic composition and board independence.

The gender composition in the top management and in the boardroom have been of great concern to academic researchers, corporate strategist as well as government consideration for

close than a decade with mix and interesting results. Previous research put emphasis on social issue as well as issue of image. The gender issue have of the recent past considered as value-driver in corporate governance and strategy by organization. That why many researchers have that there is increased productivity where the boardroom has more number of women.

According to Marionava (2000) there is positive relationship between the firm's performance and the composition and gender of the boardroom member.

An examination of the relationship between women and minority of the directors in a company and the value of the firm ,a positive significant was realized .Dwyer (2003) did research focusing on the moderating role company's strategic attention and cultural of organization .He analyzed 535 banks in US. He realized that focused on growth had a positive performance and is influenced by gender composition. In his study he also concluded that a positive associated to some degree in clan culture which was more characterized core value namely; participation and teamwork. However, the performance had a negative effect to the gender with the company setting up of adhocracy culture characterized by focus on individuality and completion.

More negative results were seen in recent study of public US firms, where Dezso (2008) revealed that having a female CEO have negative effect on performance of the firm. On the same, he realized that the CEO level was positively related to performance of firms having intensive innovative strategy. In the America study focusing on value of gender composition on company's performance a predominantly positive, it is mixed results in Europe. Rose (2007) for instance focused attention on the Danish firm quoted on Copenhagen Stock Exchange for the period between 1998 and 2001. He found that female board representative had no influence on financial performance of a firm.

Smith (2006) did a study of 2500 of the Danish largest firm. He used panel data for the period 2000-2005. The finding showed that women among the top executive and director in the board had significant positive relationship and it affect firm's performance. The results also reveals that more females were accounted for having university degree.

Senbet (1998) argued out that if board consists of non-executive directors (NED) it tend to be independent. As to how this affect company's performance the result have not be inclusive. It is often argued that the executive being the insider are familiar with the activities of the company and therefore they should be elevated to the top management of the company. Other has argued that NED may simply act as professional referee and this may stimulate the action of the insiders hence stimulating their action which may often in line of shareholder value maximization (Fatuma ,200).He also supports the view of the key role of outsider in attempting to protect the shareholders interest in decision making process. Other study have found that there is no significant relationship between the number of NED and company's performance (Black ,2002).

Kalemlı-Ozcan, Sorensen, and Yesiltas (2012) scrutinized the association between size of the board and firms profitability in the insurance industry in US. He used a sample of 59 publicly traded insurance firms. He used financial and corporate governance data from between 1999 to 2001 in US. Among other control variables used by researcher included size measured by market value of the equity and leverage which was measured by total debt to total equity. The firm's profitability was measured by variables; market to book ratio, pre-tax return on revenue and operating ratio. The research applied multivariate regression analysis, the research revealed that leverage is inversely related to all three measure of financial performance.

According to Adams, Hermalin, and Weisbach (2009) the most important part of the debate on corporate governance is the board size, its composition and board independence. There is first the question of enhancing the independent of director as an important arrangement in monitoring the influence of directors. The study put the influence of board independence on corporate performance. The major concern was the issue of limited availability of trained independent directors who are well versed with the procedures, task and responsibilities expected of them. Regarding the board size, the study recommends small boards as opposed to having large number of board members. It lastly suggested to bring few with required knowledge and expertise to effectively run the company.

2.4 Summary of Literature and Research Gaps

The theory of pecking order initiated by Myers (1984) recommends that the financing order of a firm, which include the debt, retained earnings and equity are of great significance for the corporate capital structure which have effect on financial performance of firm. Most theories predict different relationship between turnover and Board size factors affecting the financial performance of firms. In Kenya several studies have investigated the aspects influencing the financial performance of listed companies in NSE and concluded that target capital structure and the board size have significant effect of company's financial performance.

Most empirical work reviewed in relation to research question presented for study reveals that there exist a positive relation between composition of Board and financial performance of the company. However most of the research which have been done mainly centered on the factors influence financial performance of companies listed in NSE. Very few research have been carried on specific companies listed in NSE in the agricultural sector in Kenya. Also very few studies considered the Board size and capital structure target as factors influencing financial

performance. Agricultural sector being unique is currently facing economic difficulties due to adverse weather conditions and competition of its products from imported commodities mainly from South Africa and Asian countries. Therefore there is need to research on the factors influencing the financial performance of the agricultural companies listed in NSE.

2.5 Conceptual Framework

The conceptual framework is a methodical variation and context. It focuses on capturing an actual thing and hence this makes it easy for remembrance (Orodho, 2009). Subsequent to cautious study of literature review, the following conceptual framework on factors influencing financial performance can be formulated

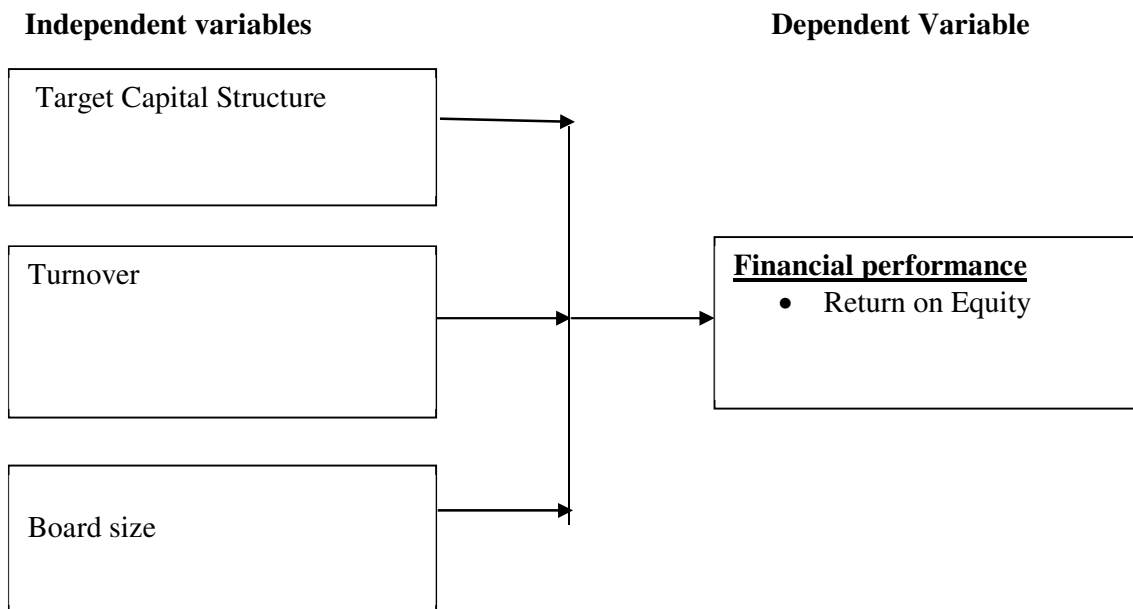


Figure 2.1: Conceptual framework

Source: Researcher (2018)

The independent variable in the study are target capital structure, turnover and the board size.

The independent variable on the on the hand is financial performance. The target capital

structure is measured by the debt ratio, turnover measured by sales while board size measured by the number of members serving in board.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter covered the design of research, target population, design of the samples and the instruments for data collection. The procedure for data collection, its analysis and presentation were also entailed in the study.

3.2 Research Design

Mugenda and Mugenda (2009) describes research design as the process the investigator follows from inception to completion of the study. The study used longitudinal research design. Longitudinal research design is appropriate since it follows the sample overtime and makes repeated observation. It also describes patterns of changes and help to establish the direction and magnitude of casual relationships (Orodho, 2009). The measurement of variables were taken over distinct time period (2010-2014). This allow the changes of the variable to be measured.

3.2.1 Research philosophy

Research philosophy engages of a wide framework which consists of the beliefs, perceptions and the understanding of various theorems and practices that are employed to conduct the study (Cohen, Manion, & Marrison, 2007). They described philosophy to comprise of diverse features which include a person's mental model, the way he perceives things from various perceptions and perception of things towards actuality.

In the research on factors influencing financial performance of agricultural companies listed in NSE, the research mainly adopted pragmatic research philosophy. According to pragmatic philosophy, research question is the significant determinant of research philosophy. Pragmatic can combine mutually interpretivism and positivist within a single research according to the nature of the question of research. Pragmatism research can also incorporate more than one research methodology and research strategies within the same study. Many different methods in collecting, analyzing as well as presenting data were adopted in the research. Also different methods of examining the relationship of variables were used.

3.3 Empirical Model

Empirical model are those that are based on entirely on data (Orodho, 2012). He noted that these assumptions concern the relationship between variables and are not based on physical principles. Multivariate linear regression analysis was conceded to establish the effect of capital structure target, turnover and the effect of Board size on financial performance of the agricultural companies quoted in the NSE. The approach used for modeling the correlation among a scalar dependent variable and a more explanatory variable is referred to as the linear regression. Where there are one variable, the process is referred as multiple linear regression.

In linear regression, the relationship is modeled using linear predictor functions estimated from the data where unknown model parameters are estimated from the data. Therefore capital structure target, turnover and Board Size are the independent variable and the financial performance is the dependent variable. From the independent and dependent variable the following relationship can be built.

Financial performance of agricultural companies depends on capital structure target, turnover and moderating effect of Board Size. It can be expressed as follows;

$$P=f(CSM).$$

Where p=financial performance

C= Target Capital Structure

S=Turnover

M=Board Size

Therefore the regression model can be expressed in the following manner;

$$ROE = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + \varepsilon_t$$

Where a_0 is intercept coefficient of regression

a_1 , a_2 , and a_3 are regression coefficients

X_1 is Target Capital Structure

X_2 is Turnover

X_3 is Board Size.

ε_t is the error term

3.3.1 Operationalization and Measurement of Variables

Independent variables are; Target Capital structure, Turnover and Board Size.

Dependent variables, financial performance was measured by return on equity which was obtained by dividing profit after tax to shareholders fund (capital employed).

Table 3.1: Operationalization and Measurement of Variables

Variable	Type	Measurement	Research Question
Financial performance	Dependent	ROE	
Target Capital Structure	Independent	<ul style="list-style-type: none"> Debt ratio 	What is the target capital structure of agricultural companies listed in NSE?
Turnover	Independent	$\frac{\text{Sales}}{\text{Total asset}}$	What is the effect of Turnover on financial performance of agricultural companies listed in NSE?
The Board Size	Independent	<ul style="list-style-type: none"> Number of members serving in a board 	What is the effect of Board Size on financial performance of agricultural companies listed in NSE?

3.4 Target Population

The targeted population was the six agricultural companies listed in the NSE. This included; Eaagads, Kakuzi, Kapchorua Tea, Sasini and Williamson Tea.

3.5 Sample

This study carried census on all listed Agricultural companies in the NSE.

3.6 Data Collection Instruments

Data for this study was obtained using secondary method from NSE for the period 2010-2014. The researcher used desk research instrument since the information already exist in the published financial statement. The information was synthesized to obtain quantitative data

3.7 Data and Data Collection Procedure

The data collected was obtained from secondary data from published financial statement in the listed companies in the NSE. Secondary data is data which is available from documents, record and report of others (Mugenda & Mugenda, 2009). The researcher obtained permission from college to carry out the research. A permit was acquired from National Council for Science and Technology and Innovation to carry out the study. Finally the researcher obtained permission from NSE for data collection. The information collected was checked for any omission. A pilot-testing was carried on data to test the validity of the instrument.

3.8 Data Analysis and Presentation

Quantitative research approach was employed for the research findings. Due to the use of numerical and secondary data, quantitative approached was considered to be an appropriate approach for the study. According to Orodho (2009) the analysis on statistics are used to depict

an account for the variability experimented in the data. This involves thorough analysis of the data collected. Therefore the aim of statistics is to recapitulate and give answers to the questions in the study.

Longitudinal research design was employed to illustrate and review the behavior of variables of the study. The large numbers of observations was minimized to interpretable numbers such as averages, medium or mode. They were recorded in a table to make it easy for interpretation. Person's correlation coefficient was carried out to determine the relationship of the variables. Multivariate regression analysis was used to determine the factors influencing financial performance of agricultural companies listed in NSE.

CHAPTER FOUR

RESULTS PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter provides an analysis, presentation, interpretation and discussions of the findings of the study. Descriptive analysis technique was utilized which involved use of descriptive statistics and tabulations. Descriptive statistics used included frequencies, percentages and Tables. The analysis of data and discussion of results is based on the study objectives. The chapter is outlined as follows: section 4.2 gives the summary statistics; 4.3 the correlations matrix; section 4.4 rationalizes the choice of the model; and section 4.5 addresses the target capital structure of agricultural companies listed in NSE ; while section 4.6 presents the effect of turnover on the financial performance of agricultural companies listed in NSE. Finally the effect of Board Size on financial performance of agricultural companies in NSE is presented in section 4.7.

4.2 Descriptive Statistics

Table 4.2 presents the summary statistics in form of descriptive. The table shows that the financial performance indicator was on average 12% with the minimum being -15% and the maximum is 63%. The debt ratio has an average value of 18% with the minimum of 11% and a maximum of 22%.

Table 4.1: Descriptive statistics (Over 2010-2014)

Variable	Obs	Mean	Std. Dev	Min	Max
Financial performance indicator	30	0.12	0.14	-0.15	0.63
Debt ratio	30	0.18	0.03	0.11	0.22
Turnover	30	0.09	0.10	-0.12	0.47
Board size	30	6.40	2.21	3.00	10.00

Table 4.1 further shows that the mean turnover is 9% with the minimum of -12% and a maximum of 47%. The average board size was 6 with the minimum of 3 and maximum of 10.

4.3 Target Capital Structure of Agricultural Companies listed in NSE

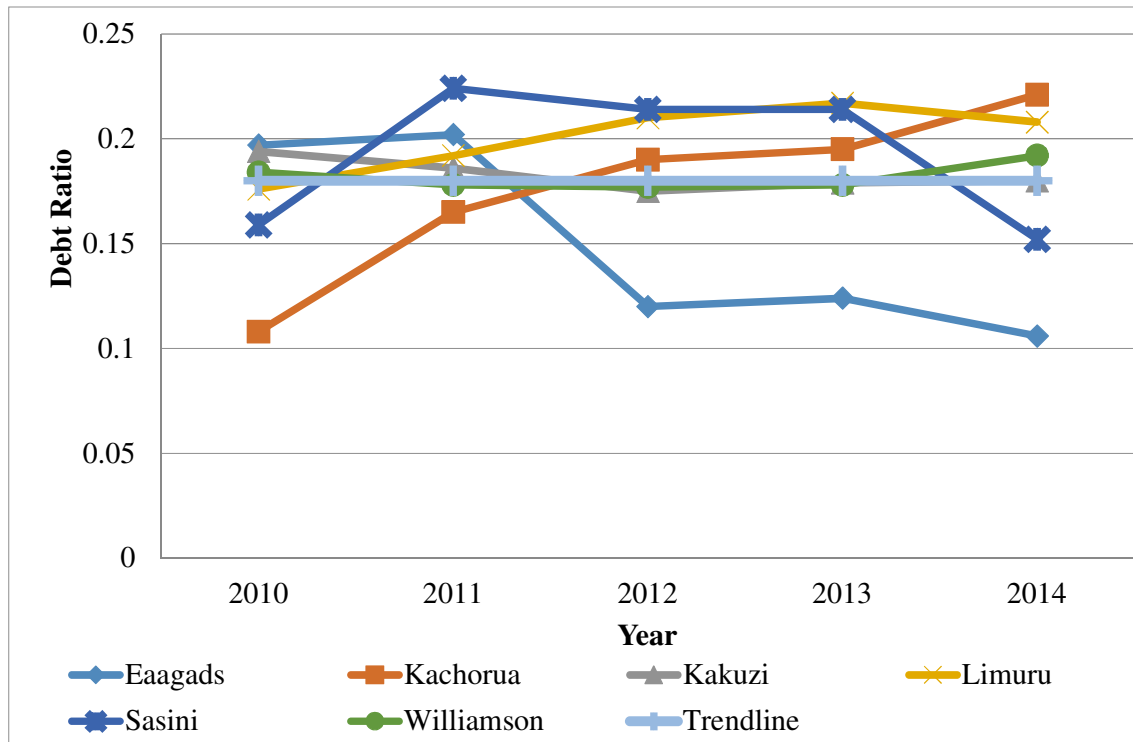


Figure 4.1: Debt ratio (%) for the Agricultural firms from 2010-2014

Source: Research Data 2014

Figure 4.1 gives the debt ratio for the six agricultural firms considered in this study. The figure shows that debt ratio for Eaagads has been declining over the period under consideration, whereas Kapchorua and Limuru firms have been experiencing an increasing debt ratio from 2010 to 2014. The debt ratio for Williamson and Kakuzi firms has been somehow constant over the period in the study. As shown by trend line, agricultural companies maintained the average debt ratio of 0.18 with a maximum of 0.22 and a minimum of 0.11 for the period under consideration.

4.4 Effect of Turnover on agricultural companies listed in NSE

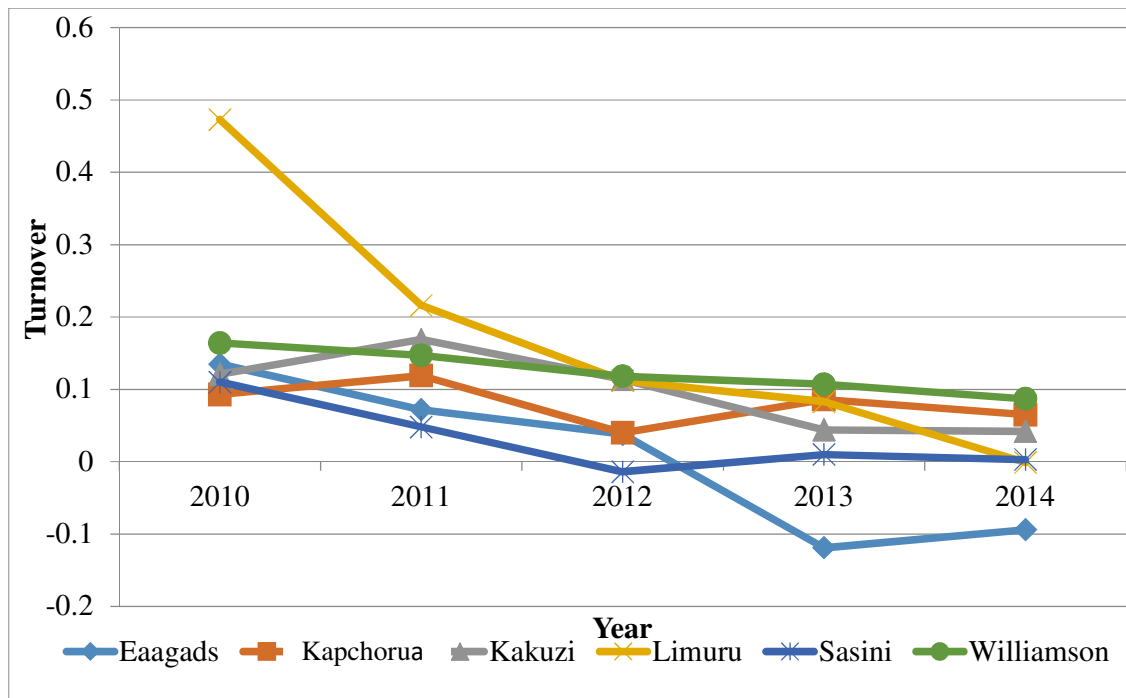


Figure 4.2: Turnover (%) for the Agricultural firms from 2010-2014

Source: Research Data 2014

Figure 4.2 illustrates the turnover for the six agricultural firms considered in this study. The figure depicts that turnover for Eaagads and Limuru has been declining over the period under consideration, whereas Kapchorua, Kakuzi and Sasini firms have been experiencing an oscillatory turnover from 2010 to 2014. The turnover for Williamson firm has been somehow declining over the period in the study but not steadily as the evidenced in the case of Eaagads and Limuru.

4.4.1 Correlations Matrix

Correlation analysis was done to ascertain how the variables associate with each other using Pearson correlation index. The variables considered were Turnover and Board size as

independent variables and financial performance as the dependent variable as shown in Table 4.2.

Table 4.2: Correlations Matrix

	financial performance indicator	debt ratio	Turnover	Board size
financial performance indicator	1			
Turnover	0.9947*	0.1989	1	
Board size	0.3865*	0.4698*	0.4151*	1
	0.0000	0.2920	0.0226	
	0.0349	0.0088		

*** indicates 5% level of significance**

The average turnover measured by sales for agricultural companies was 0.009 with a maximum of 0.47 and a minimum of -0.12. The correlation matrix indicates that a positive coefficient of 0.995 turnover to financial performance was realized which was statistically significant at 0.05 level. This shows that there exist a positive relationship between turnover and financial performance.

4.4.2 Rationalizing the choice of model

The study used data which was panel in nature. Both random effects model and fixed effects model were applied as the two distinct models of regression analysis. For fixed regression effects, the study aimed to manage those variables that were stable within a period of time that were omitted between 2010 and 2014. However among the variables deemed omitted may vary within firms but remain constant over a period of time and also other variables may be fixed amongst the firms but differ from time. Both the types of variables which differ among the firms also over time by the use of random effect can be included.

Fixed effect model estimation is rationale in panel data estimation according to statistics. It give consistent outcomes such that the sample size enlarges indefinitely, the estimated parameters converge to their true values. The fixed effect model is also the most effective

model since it has a minimum variance to run. Its consistency ensures that the surveyed symbolizes the reality of what is in occurrence in the whole population while efficiency guarantees there is minimal variations among the observed features under investigation. Random effects will provide enhanced P-values that is the high chances of the finding that a range of policy options greatly affect the economic growth due to them being a more efficient estimator, hence one ought to run random effects if it is statistically justifiable to do so.

Table 4.3: Hausman Test for fixed effects and random effects models

Economic Growth	Fixed Effects Model	Random Effects Model	Difference
Debt ratio	-0.1803	-0.1590	-0.0213
Turnover	1.3202	1.3321	-0.0118
Board size	-0.0097	-0.0008	-0.0089
Chi-Square Statistic	0.12	P-Value	0.9892

4.4.3 Hausman Test for fixed effects and random effects models

The null hypothesis is that the coefficients estimated by the efficient random effects estimator are similar to the ones estimated by the consistent fixed effects estimator as from the test of Hausman (1978). The test hence verifies a more competent model against a lesser efficient but consistent model so as to be more accurate, the more competent a model is makes gives consistent results. A synopsis of the test results are presented in Table 4.3.

The test results illustrate that, the Chi-square statistics for the difference were 0.12 with p-value of 0.9892. Since the p-value was larger than the critical value of 0.05, we cannot reject the hypothesis that the coefficients are the same. This means that, mutually the fixed effects and random effects models produce the same coefficients. Hence, we can choose the random effects

model as the preferred model. Hence the experimental results on hypothesis testing obtainable in thereafter are founded on the random effects model.

Table 4.4: Regression Model

Random-effects GLS regression	Model 1
Financial performance indicator	Coefficient (P-Value)
Turnover	1.3321* (0.000)
Board size	-0.0008 (0.639)
Constant	0.040* (0.007)
R-squared: Within	0.9943
Between	0.9848
Overall	0.9908
Chi-square statistic	3637.44* (0.0000)

Table 4.2 also indicates that a positive coefficient of 0.995 on turnover to financial performance was realized with a p-value of 0.000 which was statistically significant at the 0.05 level. This shows that there exists a positive relationship between turnover and financial performance of agricultural companies other things held constant. The findings which concurs with those by Vijayakumar and Tamizhselvan (2010) that there is a positive relationship between firm's size measured by turnover and profitability.

Upon controlling for other independent variables in the regression model a positive coefficient of 1.3321 on turnover was realized with a p-value of 0.000 which was statistically significant at the 0.05 level. Hence we reject the hypothesis that, no significant effect of turnover on financial performance of agricultural companies listed in NSE. This indicates that, turnover has

an affirmative and a statistically major effect on the performance of finance of the company. This indicates that as turnover increase this will lead to an increment in financial performance, and the increment in financial performance following an increment in turnover will be large to guarantee a significant change in the after tax profits of the companies. The finding was consistent with that of Papadogonas *et al.* (2007) company's profitability is positively influenced by company's size.

4.5 Board Size on Financial Performance of Agricultural Companies in NSE

The agricultural companies maintained in average 6 board members, a maximum of 10 and a minimum of 3 members.

To examining the effect of Board Size on financial performance of Kenyan listed agricultural companies, multiple regression model was used to determine these relationships. The following model for testing the effect of the variable as proposed by Sobel (1982) was used to test hypothesis three:

$$Y_2 = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_1 X_2 + \varepsilon$$

Where:

Y_2 is financial performance indicator

α_0 is the regression constant – intercept

α_i are the regression coefficients

X_1 is turn over while X_2 is effect of Board size, ε - is the random error term

This entailed testing the main effects of the independent variables, the variable board size and the interaction terms between explanatory variables and the board size on the dependent variable (financial performance). "In order to create an interaction term, each of the explanatory variables and the board size, the creation of a new variable by multiplying the scores of each

of the explanatory variables and the board size risks creating a multicollinearity problem. To tackle the multicollinearity problem, which can have an effect on the estimation of the regression coefficients for the major effects, the factors that were interactive were converted to standardized (Z) scores that have mean zero and standard deviation one. The standardized variables (each of the explanatory variables and the board size) were then multiplied to create the interaction variable.

The results of hierarchical multiple regressions are reported in model 1a and 1b. In the second step (1b), the interaction terms between the explanatory variables and the measure of factor was entered into the regression equation and tests of the slope was performed as reported in tables 1a and 1b.

Table 4.5: Board Size on Financial Performance

Random-effects GLS regression	Model 1a	Model 1b
Financial performance indicator	Coefficient (P-Value)	Coefficient (P-Value)
Turnover	1.3321* (0.000)	1.3737* (0.000)
Board size	-0.0008 (0.639)	-0.0011 (0.481)
Normalized(board size) Normalized(Turnover)* Normalized(board size)		-0.004 (0.101)
Constant	0.040* (0.007)	0.045* (0.020)
R-squared: Within	0.9943	0.9936
Between	0.9848	0.9893
Overall	0.9908	0.9919
Chi-square statistic	3637.44* (0.0000)	2934.30* (0.0000)

* represents 5% level of significance

Table 4.5 shows that board size was not statistically significant in model and the interactive terms involving the board size were all not statistically significant showing that board size has no effect on the relationship on between turnover and financial performance. This implies that board size is an independent variable which ought not to be factored in ascertaining the financial performance of agricultural firms.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The summary, conclusion and recommendations for additional research is pre-determined in this chapter.

5.2 Summary

The aim of this research is to ascertain the factors influencing financial performance of the agricultural companies listed in NSE. Three research objectives that facilitated the research included; i) to establish the target capital structure of the agricultural companies that are listed in the NSE; ii) to ascertain the effect of turnover on the performance of finance of the agricultural companies in NSE; and iii) assess effect of Board size on financial performance of agricultural companies in NSE. The study employed a descriptive analysis technique. Data was analyzed by table of correlations and regression model.

5.3 Key Findings of the Study

5.3.1 Target Capital Structure of Agricultural Companies

The first aim was to establish target capital structure of agricultural companies listed in NSE. It has been observed that agricultural companies maintained average debt ratio of 18% with a maximum of 22% and a minimum of 11% for the period of study.

5.3.2 Turnover on Financial Performance of Agricultural Companies listed in NSE

The subsequent aim of the research was to ascertain the consequence of turnover on financial performance of agricultural of listed companies in NSE. It can be concluded that the average turnover measured by sales for agricultural companies was 9% with a maximum of 47% and a

minimum of 12%. The correlation matrix indicates that a positive coefficient of 0.995 turnover to financial performance was realized which was statistically significant at the 0.05 level. This shows that there exists a positive relationship between turnover and financial performance. Upon the scheming of supplementary independent variables in the regression model a positive coefficient of 0.000 which was statistically significant at the 0.05 level. This indicates that, turnover has a positive and statistically significant effect on financial performance. Hence as turnover increase this will lead to an increment in financial performance, and the increment in financial performance following an increment in turnover will be large to guarantee a significant change in the after tax profits of the companies.

5.3.3 Board Size on Financial Performance of Agricultural Companies listed in NSE

The agricultural companies maintained in average 6 board members, a maximum of 10 and a minimum of 3 members.

The Board size was not statistically significant in model 1b, and the interactive terms involving the board size were all not statistically significant showing that board size has no reasonable effect on the correlation among the turnover and financial performance. This implies that board size is an independent variable which ought not to be factored in ascertaining the financial performance of agricultural firms.

5.4 Conclusions

Based on the findings of the study, it was concluded that;

The agricultural companies listed in NSE maintained a target capital structure measured by debt ratio of 18%.The industry financial performance was at maximum at 63% with average being 12%.

An increment in debt ratio will lead to reduction in financial performance, and the reduction in financial performance following an increment in debt ratio will be large to guarantee a significant change in the after tax profits of the companies. An increase in turnover will lead to an increment in financial performance, and the increment in financial performance following an increment in turnover will be large to guarantee a significant change in the after tax profits of the companies. Board size is an independent variable which ought not to be factored in ascertaining the financial performance of agricultural firms as it has no reasonable effect on the correlation among the turnover and financial performance.

5.4.1 Recommendations of the Study

The study aimed at finding the factors influencing financial performance of the agricultural companies listed in NSE. Based on the findings the study recommends the following;

There should be proper management of debt when financing the companies. It also recommends the growth of sales and broad focus on growth opportunities to increase revenue through sales. Board size should not be factored as it has little impact on financial performance of the companies.

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APPENDICES

APPENDIX I: List of agricultural firms listed at NSE as at January 2016

No	Name of the company
1	Kapchorua Tea limited
2	Eaagads limited
3	Kakuzi limited
4	Limuru Tea limited
5	Sasini limited
6	Williamson tea Kenya limited

APPENDIX II: Desk research

Target Capital Structure

What is the Debt ratio for the companies in the year of study?

	Company	2010	2011	2012	2013	2014
1	Eaagads					
2	Kapchorua tea					
3	Limuru tea					
4	Williamson tea Kenya					
5	Kakuzi					
6	Sasini					

Turnover

What is the Turnover for the companies in the year of study?

	Company	2010	2011	2012	2013	2014
1	Eaagads					
2	Kapchorua tea					
3	Limuru tea.					
4	Sasini					
5	Williamson Tea					
6	Kakuzi					

Board sizes

What are the number of members serving in Board for companies under period of study?

	Company	2010	2011	2012	2013	2014
1	Eaagads					
2	Kapchorua tea					
3	Limuru tea					
4	Sasini					
5	Williamson Tea					
6	Kakuzi					

APPENDIX III: Letter of Introduction

Dear Sir/Madam

**RE: RESEARCH ON THE EFFECT OF CAPITAL STRUCTURE COMPONENTS ON
FINANCIAL PERFORMANCE ON LISTED AGRICULTURAL COMPANIES IN
NAIROBI SECURITIES EXCHANGE, KENYA.**

I am a postgraduate student in the school of Business and Economic Machakos University College pursuing Masters in Business administration (Finance). I intend to collect data from your institution which will form basis of my research.

The information which will be obtained will be used for the purpose of academic research only.

I would be grateful if you allow me access all relevant information for my research.

Yours Sincerely,

MASAVI JUSTUS

MBA Candidate

APPENDIX IV: Research Permit