

**RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND
CORPORATE GOVERNANCE OF COMPANIES LISTED AT THE
NAIROBI SECURITIES EXCHANGE**

BY

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DECLARATION

This is my original work and has not been presented in any other university or college for examination purpose.

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Supervisor's Declaration

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

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It's been a long and arduous journey since I started this in May 2014, and I thank the Almighty father for guiding me this far. Lord you are always true to your promises as long as we don't give up hope but believe and trust.

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DEDICATION

I dedicate this research project and my MBA in general to the world's best parents! My dad Charles and mom Magdalene for their unending love, patience, prayers and strong hope and belief in me even when I had doubts in myself.

ABSTRACT

This paper examines the relationship between capital structure and corporate governance of companies listed at the Nairobi Securities Exchange, Kenya. The population of the study consists of 61 active companies listed at the NSE. A sample of 33 companies whose data for 5 years from 2008-2012 was selected. Analysis was done using multivariate regression in a panel data framework. The result shows that board size is negatively related with debt to equity ratio, the percentage of independent directors is negatively related to capital structure. Government ownership is positively related to capital structure. However, managerial ownership is negatively related to capital structure which indicates that increased managerial ownership align the interest of manager with the interest of outside shareholders and reduces the role of debt as a tool to mitigate the agency problems.

The positive relationship between institutional shareholding and debt to equity ratio indicate that firms with larger percentage of institutional shareholding use debt as a tool to reduce agency problem and, are also able to negotiate more debt at a lower cost. It can also be argued that institutional investors enforce good corporate governance structure hence they get better recognition from the debt market. Firms with large percentage of government shareholding are viewed as less risky by the debt providers and in the event of financial distress, they normally have state bail out and therefore they will continue to get more external recognition from debt providers.

Firms with larger board size, more independent directors and managerial shareholding have a negative relationship between debts to equity ratio, this is because as the board size, percentage of independent director and managerial shareholding increases, they tend to bring down a firms debt to reduce risk and bankruptcy cost. Therefore it can be expected that listed companies striving to lower their debt to equity ratio can use board size, percentage of independent directors and managerial shareholding as a tool to achieve the objective. The study recommends that future research could also be undertaken on large un-listed companies in Kenya and also on the listed financial institutions so as to understand how corporate governance and capital structure relate to each other in the whole economic set-up.

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LIST OF ABBREVIATIONS

ANOVA-Analysis of Variance

CBK-Central Bank of Kenya

CDSC-Central Depository and Settlement Corporation

CEO-Chief Executive Officer

CMA-Capital Markets Authority

CMC - Cooper Motor Corporation

EAC-East Africa Community

ISS-Institutional Shareholder Services

NSE- Nairobi Securities Exchange

POT-Pecking Order Theory

ROA-Return On Assets

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

According to Kyereboah-Coleman (2007), capital structure refers to the amount of equity and debt that is utilized to finance the organization's operations. There is need to comprehend the different funding sources for organizations and what affects the decision on the capital structure that a firm should select. Adam & Mehran, (2003) argued that corporate governance is an operation that involves structures and processes which lead to the creation of shareholder's value by managing the corporate affairs. The corporate affairs should be managed to ensure protection of the collective and individual interest of the company's stakeholders. The decisions on capital structure are one of the most imperative issues that the management of firms has to tackle. The organization's capital structure is dependent on the decision of the board of director. The board of directors should adhere to the code of best practices in corporate governance. Various studies by (Berger et al., 1997; Abor, 2007; Wen et al., 2002; Friend and Lang, 1988) have identified that corporate governance has an impact on the firm's capital structure decisions. The role of the board of directors is to manage the overall operations of the organization.

The 1958 Modigliani and Miller model has been identified as a pioneer of the theories that encompass the corporate governance of the organization. Pagano (2005) carried out a research based on the Modigliani and Miller model and identified the relevance of the model to-date. According to Bradley et al (1984), it was identified that capital structure is one of the controversial issues in the finance theories. Myers (2001) found that there is no universal theory based on debt-equity choices and, therefore, there should be no reason to expect any theory. The point of interest from the previous research is what forms the basis of arguments of corporate structure research. The theories include; Agency theory (Berle and Means, 1932), Free cash flow theory (Jensen, 1986), and the Peckin order theory (Myers and Majluf, 1984

In Kenya, the Capital Markets Authority, controls the operations of the Nairobi Securities Exchange is overseen and like most of the developing countries the CMA has implemented a corporate governance code. According to (Musikali, 2008), the Centre for Corporate Governance developed code of best practices which were later adopted by CMA in the year 2002. The statutory law that governs corporate governance in Kenya's public listed companies and is manifested in the companies Act of 1962. The statutory law is aimed at protecting the shareholders and governing the duties of the directors. The NSE regulations and Capital Market Act 2002 are other regulations that govern corporate governance in Kenya.

1.1.1 Corporate Governance

Corporate governance is a system of processes, practices, and laws that are used by a company to direct and control its operations. According to a definition adopted by Malaysia's Finance Committee (2004), corporate governance refers to the structure and process utilized to manage and direct the affairs and business of a firm towards ensuring corporate accountability and business prosperity. The main objective of corporate governance is to realize long- term value of the shareholder together with the interest of stakeholders of the firm. Tricker (2010) found that corporate governance is a complex subject matter with many facets and that involves not only regulation and legislative but also good practices, which entails mind-set, corporate culture, and education. In addition, corporate governance focuses on the way power is exercised over the entities that are corporate. Firms that have a corporate structure require proper governance; be they wholly owned subsidiaries, listed companies, family companies, not-for-profit firms, joint ventures, and any other.

Corporate Governance involves holding a balance between social and economic goals and between communal and individual goals. The framework of corporate governance is aimed at encouraging the efficient utilization of resources and, therefore, it requires accountability to safeguard the resources of the firm. The proper governance of organizations is as essential as the proper governance of a country. The purpose of corporate governance is to align as much as possible the individuals' interest, society's interests, and corporations' interest (Gatamah, 2004).

To analyze the impact effects that corporate governance has on the different corporate performance measures, commercial providers and academics have utilized variables such as ownership structure, and board independence or have tried to construct various measures of the practices of corporate governance. Despite considerable efforts, sophisticated methods, and measures, the results that have been achieved are surprisingly quite contradictory and misleading (Bhaghat et al., 2008). Most importantly, it has been difficult to prove that the measures used by companies to determine the quality corporate governance are capable of predicting the future performance of the business.

1.1.2 Capital Structure

Capital structure refers to the combination of equity and debt capital that is utilized by organizations to finance the long-term operations. According to Brealey and Myers (2003) capital structure is the combination of various securities that are used to finance a firm's investment. Also, Brealey and Myers (2003) observed that an organization can give various security using different combinations but the best combination is the one that maximizes the value of the market. Akram and Ahmad (2010) argued that capital structure of the company includes the debt and equity component used to finance the business. Equity financing is usually provided by the people who buy the shares of the firm. The holders of equity finance have a stake in the firm which is denominated by the number of shares. The shareholders of the firm share the risk involved in carrying out the business and also entitled to the share of business profit. The value of the company is dependent on the streams of expected earnings and the rate that is utilized to discount the earnings. The required rate of return and the cost of capital are utilized to discount the earnings of the company. The decision on the firm's capital structure can have an impact on the value of the entity by either changing cost of capital or the expected earnings (Pandey, 2002).

Pandey (2002) found that the optimal capital structure can be obtained by combining the equity and debt in a way that maximizes the value of the firm. The total value of the company is the combination of the debt value and equity value. The optimal structure is also aimed at ensuring

that the weighted cost of capital has been maintained at a lower level. Capital structure refers is the combination of financial resources that are made available to ensure business success (Myers, 2003). Capital structure of the entity was also defined as the components of debt and equity that are used as sources of financing (Brockington, 1990).

The theoretical framework on the relationship between performance and capital should be considered while determining the components of the capital structure. The relationship between performance and capital depends on the leverage market values. The leverage market value is difficult to achieve and, therefore, the accounting measures are essential in determining the value. The choice of the measure used by firms is dependent on the objectives of the analysis (Rajan and Zingales, 1995). A case in point, the ratio of firm's total liabilities to total assets should be used to determine the value of shareholders after the firm has been liquidated. However, the ratio is not a good measure of identifying the risk of default in the future. The amount of leverage can also be overstated since the total liabilities of the firm include the accounts payable that are not considered as sources of financing. According to Pandey (2002), the measure of identifying risk can be enhanced by subtracting the liabilities and accounts payable from total assets of the firm. The research will utilize the debt to equity ratio to measure the capital structure of an organization.

1.1.3 Relationship between Capital Structure and Corporate Governance

The choice of capital structure of a firm is an imperative factor in the practices of corporate governance. The company's financial policies are mainly the real issues in the process of making decisions. The company's financial policies of a firm remain a subject of interest among many organizations across the globe. Also, the capital structure of corporate firms is one of the controversies in the modern theories of corporate finance. Most of the debates are mainly focused on achieving a capital structure that is optimum even though individual firms may not consider the relevance of optimum capital structure. Chevalier & Rokhim (2006) found that the target ratio is not considered by individual firms as important. Since information asymmetry is found in capital markets, companies prefer the retained earnings to debt as a source of funding

the long-term investments. Chevalier & Rokhim (2006) argued that some of the renowned theories that dominate the capital structure of the entity are; the pecking-order analysis, free cash-flow theory, and the agency theory.

According to Lipton and Lorsch (1992), a significant relationship exists between the size of the board and the capital structure of the firm. Berger and Lubrano (2006) argued that companies that have a large membership in the board have low debt ratio or leverage. The assumptions are that board sizes that are large in size instill more pressure for the managers to use less debt while financing the long-term investments of the firm. The findings of Berger and Lubrano (2006), indicated that are highly monitored use more debt to finance the business to raise the value of the business. Berger et al (1997) suggest that companies that have a higher debt ratio have many directors in the board while companies that have a low debt ratio have lower debt ratio.

The company's capital structure depends on the decision of the board of directors and the company's compliance of best practices stipulated in the code of corporate governance. According to Hart (1995), a negative relationship exists between the capital structure and the board size of the firm. Also, there exists a positive relationship between the duality of CEO and leverage since the CEO adopts a high debt policy since he is the board's chairman. Jensen (1986) explains the relevance of debt in minimizing the free cash flow cost in instances where the company. However, if a firm generates huge free cash flows there exist a conflict of interest between the managers and the shareholder of the firm. Use of debt acts as a bond since it reduces the level of cash flow that is available to the managers of a firm. The level of debt increases the efficiency of managers since managers are required to perform to get enough funds to repay debts. It was also observed that the CEOs who are entrenched tend to avoid debt financing for long-term projects (Berger et al., 1997).

If the managers do not have discipline that results from control mechanism and corporate governance, managers prefer low leverage since they do not prefer the pressure that results from repaying debts and interest. Some of the mechanism that instills discipline to the managers include threats of dismissal, monitoring by the board, and performance based compensation.

Berger (1997) found that companies that have many board of directors lower debt than equity in their capital structure. A large board of directors has more pressure set upon the managers to perform and lower the gearing level of the firm. According to Abor (2007), the relationship between capital structure and corporate governance was examined for Small and Medium Enterprises (SME) in Ghana by utilizing multivariate regression analysis. The results of the analysis indicated that there exist a negative relationship between the leverage ratios and the size of the board. Also, the SMEs that have a larger board have a gearing level that is low.

1.1.4 Nairobi Securities Exchange

The Nairobi Stock Exchange was founded in the year 1954 with an objective of facilitating the resource mobilization for financial investments that require long-term financing. The Nairobi Stock Exchange was formed through an association of brokers (NSE, 2011). The NSE has strict requirements of listing that promote higher standards of accountability, transparency in business management, and management of resources. According to (CMA, 2011), the NSE is overseen by Capital Markets Authority which enhances compliance to regulations through continuous surveillance. The NSE has been lobbying for a policy framework to growth in the economy, the private sector, and the market that deals with stock exchange (Ngugi, 2005).

The NSE has received support from the Central Depository and Settlement Corporation (CDSC) which enhances delivery, clearing, and the settlement of securities that are traded in the exchange market. The NSE oversees the Central Depository Agents' conduct. Some of the CDSC agents include investment banks and stockbrokers who are the members and custodians of NSE (CDSC, 2004). The framework of regulation ensures that there is efficient and cogent allocation of capital to allow for price discovery through market forces by creating a strong stock market exchange. In the year 2011, the name of Nairobi Stock Exchange Limited was changed to the Nairobi Securities Exchange Limited. The name was changed to reflect the strategic plan of the NSE which was aimed at evolving into an entire a service securities exchange that supports clearing, trading, and settlement of debt, equities, derivatives, and other securities.

In Kenya, companies that have listed their shares with Nairobi Securities Exchange are required to disclose the annual report on an annual basis. The directors of public companies are required to disclose a statement that outlines the compliance of the company to the guidelines of corporate governance. The requirements were effected in the year 2002 as per the requirements of Securities, Public Offers, Listing and Disclosures Regulations. The company's Board of directors has the obligation of fulfilling their duties to the shareholders by maintaining control over the financial, strategic, compliance and operational issues. The board is required to provide guidance and direction on the general and strategic policies. The responsibility of the board of directors is delegated to the CEO or the managing director of the firm in the day-to-day operation of the business. The board of directors comprises of the chairman, independent directors, and the non-executive directors.

1.2 Research Problem

The relationship between corporate governance and capital structure is imperative when considering the role the two principles play in generation and distribution of value (Bhagat and Jefferis, 2002). The capital structure is capable of creating value through the interaction of corporate governance instruments, by creating ways in which the value that has been generated can be distributed (Zingales, 1998).

Firms listed in Nairobi Securities Exchange have increasingly used debt especially after the pursuit of expansion policies by the government of Kenya since the year 2002. At the same time, corporate governance has also received increased attention from both policy makers and practitioners. However, some listed firms also show poor corporate governance such as CMC motors which was delisted because of board wars, suspension of Imperial bank by the CMA due to fraud by the board. Others have issued corporate bonds e.g. Safaricom, Consolidated bank and KENGEN. It may be important to investigate whether the trends in corporate governance influences the trends in capital structure.

Studies conducted about corporate governance and capital structures have ended up with mixed results. Rehman and Raoof (2010) carried out a research to determine the relationship between capital structure and corporate governance of 19 banks in Pakistan from the year 2005 to the year 2006. It was found out that there exist a positive relationship between the corporate structure and capital governance. The same positive relationship was identified by Rajendran (2012) in the study carried out for the manufacturing firms in Sri Lanka. However, Saad (2010) reported contradictory findings by indicating that there is a negative relationship between corporate governance and capital structure in a study that included 126 public listed companies in Malaysia.

Fosberg (2004) argued that firms that have a separate CEO and chairman use the optimal debt level in the capital structure. Therefore, it was identified that companies that have different CEO and chairman have a high financial leverage. According to Abor and Biekpe (2004), evidence revealed that there exist a positive relationship between the duality of the CEO and the gearing level of the firm. In addition, according to Wen (2002), there exist a positive relationship between the structure of capital and the size of the board. He argued that boards of directors that are large have a high level of gearing which is aimed at enhancing the value of the company. On the other hand, Berger et al, (1997) argued that companies with large board of directors have a low level of gearing. Berger et al, (1997) also found that a large boards exerts more pressure on the managers since they are required to enhance the firms performance while maintaining lower level of gearing.

Friend et al, (1988) identified a negative relationship between leverage ratio and management's shareholding. Jensen (1986) found that the company's managers may increase the gearing level of the company if they use debt for personal gain. Pfeffer and Salancick (1978) found that if the non-executive directors have a higher representation in the board, then the firm would have higher debt levels. However, Wen (2002) provided evidence that shows the existence of a negative relationship the representation of non-executive directors and the gearing level. The main reason for the negative relationship is because the non-executive directors are capable of

monitoring the managers in a more effective and efficiently and, therefore, managers are forced to adopt lower levels of gearing while achieving superior results.

In Kenya previous studies have examined corporate governance issue and capital structure determinants. However, the findings are mixed as indicated by Odinga (2003) who used local data available at the NSE to investigate the variable that affect the capital structure decision. He identified non-debt tax shield and profitability and are imperative variables used to determine the leverage of the firm. Musila (2005) set out to determine the factors that motivate industrial firms' management in choosing their capital structure; and it was found that industrial firms are likely to adhere to financing hierarchy rather than maintaining the target debt to equity ratio. A recent study by Nyakundi, (2009) in which he set out to examine the choice of capital structure of the firm that is listed in the NSE using Board Size and Board Independence as variables concluded that larger firms are more highly levered than small firms.

It is for those studies and gaps thereon that the study wished to address the following research question: what is the relationship between corporate governance and the firm's capital structure for companies that are listed at the Nairobi Securities Exchange?

1.3.1 Objective of the Study

The study aims investigating the relationship between structure of capital and corporate governance of firms listed at the Nairobi securities exchange.

1.4 Value of the Study

The financial policy choice is one of the critical decisions that a firm is supposed to make. It consists of the decision to choose the optimal capital structure of the firm. This research proposal would help in knowing if firms listed at the NSE accept that capital structure is determined by the firm's corporate governance.

This study would be useful to the managers in guiding them towards making financing decisions that are in line with shareholders wealth maximization and would help manager's to know if their firms have been reducing their interest-bearing liabilities. It would also help firms to establish their credit worthiness and help investors to increase their investment opportunities and beat the market undervalued securities and selling them later when market has correctly priced them or selling over valued shares and buying them later when the price is down hence making abnormal profits.

Academicians can use the findings of the research to expand their wealth of knowledge and gain a firm foundation for further research in the area of study. The study would guide other researchers who are willing to conduct a similar research in the other African countries securities markets since they have many similarities.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature on the relationship between capital structure and corporate governance of a firm. The chapter focuses on studies undertaken by various scholars and theories that reflect corporate governance and capital structure decisions. First a theoretical review on corporate governance and capital structure is presented followed by an empirical review; lastly, a summary chapter is presented where research gap is identified.

2.2 Theoretical Review

This section contains review of theories relevant to the study. A theoretical review on corporate governance and capital structure is presented by an explanation of three theories that help us understand how capital structure and corporate governance of a given entity relate to each other. The three theories narrated here are; the Agency theory, the Pecking order theory and the Free cash flow theory.

2.2.1 Agency Theory

Agency theory is the fundamental reference in corporate governance as the ownership structure of an organization will have an impact on the governance structure adopted. This ‘Berle-Means Hypothesis’ developed in the 1930’s was based on studies done on the development of the modern corporation which lead to the separation of ownership and management (Berle and Means, 1932). In the 1970’s, work carried out by Jensen and Meckling (1976) resulted in a theory for understanding the implications of the separation of ownership from control. This separation of ownership and management led to the development of agency theory. The owners contract agents to manage the business on their behalf.

Kyereboah-Coleman (2007) interrogates the identification of an optimal capital structure and its explanatory variables. The author starts by asking what motivates the selection of a debt and equity mix. As a result, the agency theory is proposed and explained as when managers have the information regarding the prospects of the company, use that information for their own interests which are different from those of shareholders. Subsequently, firms use more debt in their capital structure especially when management is pressurized by the shareholders to use funds efficiently so as to be able to pay out future cash flows (for example dividends) (Kyereboah-Coleman, 2007).

In summary, agency theory suggests that there are several ways in which debt can help mitigate agency conflicts between shareholders and managers. Holding constant the manager's absolute investment in the firm, increase in the fraction of the firm financed by debt increases the managers share of the equity, there by bringing the manager's and shareholders interest into better alignment. Moreover, Jensen (1986) argued that since debt commits the firm to pay out cash, it reduces the amount of free cash flow available to managers to engage in excessive perquisite consumption. Corporate governance is put in place specifically to ensure that managers act in the best interest of shareholders.

2.2.2 Pecking Order Theory

Pecking Order Theory, states that capital structure is driven by firm's desire to finance new investments, first internally, then with low-risk debt, and finally if all fails, with equity. Therefore, the firms prefer internal financing to external financing (Myers and Majluf, 1984). This theory is applicable for large firms as well as small firms. Since the quality of small firms' financial statements vary, small firms usually have higher levels of asymmetric information. Even though investors may prefer audited financial statements, small firms may want to avoid these costs (Pettit and Singer, 1985). Therefore, when issuing new capital, those costs are very high, but for internal funds, costs can be considered as none. For debt, the interest costs are also high. As a result, firms prefer first internal financing (retained earnings), then debt and they choose equity as a last resort (Pettit and Singer, 1985).

Myers & Majluf (1984) contrasting the static trade-off theory, discusses the rationale of the Pecking Order model (POT) of corporate leverage, which was later supported by amongst others Chen (2004). The model is explained by what has been observed in companies, which is the tendency of not issuing stock (shares) and instead, holding large cash reserves. Myers & Majluf conclude that this is unnecessarily holding financial slack as a consequence of possible conflict of interest by managers as well as between old and new shareholders. Chen's (2004) view is that only when forced by circumstances, do companies resort to external financing, using debt before equity.

Kyereboah-Coleman (2007) explains the pecking order theory to be suggesting that the profitability of a firm does influence its financing decisions. The study elaborates the contention that firms which have not predetermined their debt and equity mix prefer internal to external financing. An observation is that the pecking order framework tends to overlap the asymmetric information and the agency cost theories.

2.2.3 Free Cash Flow Theory

According to free cash flow theory of capital structure innovated by Jensen (1986), leverage itself can also act as a monitoring mechanism and thereby reduces the agency problem hence increasing firm value, by reducing the agency costs of free cash flow. There are some consequences derived if a firm is employing higher leverage level. Managers of such firms will not be able to invest in non-profitable new projects, as doing so, the new projects might not be able to generate cash flows to the firm, hence managers might fail in paying the fixed amount of interest on the debt or the principal when it's due. It also might cause in the inability to generate profit in a certain financial year that may result in failing to pay dividends to firm shareholders.

Furthermore, in employing more leverage, managers are forced to distribute the cash flows, including future cash flows to the debt holders as they are bonded in doing so at a fixed amount and in a specified period of time. If managers fail in fulfilling this obligation, debt holders might take the firm into bankruptcy case. This risk may further motivate managers to decrease their consumption of perks and increase their efficiency (Grossman and Hart, 1982).

This statement has been supported by Jensen (1986) which states that from the agency view, the higher the degree of moral hazard, the higher the leverage of the firm should be as managers will have to pay for the fixed obligation resulting from the debt. Hence, it will reduce managers' perquisites. Extensive research suggests that debt can act as a self-enforcing governance mechanism; that is, issuing debt holds managers' "feet to the fire" by forcing them to generate cash to meet interest and principle obligations (Gillan, 2006).

2.3 Determinants of Capital Structure

The relation between capital structure and corporate governance becomes extremely important when considering its fundamental role in value generation and distribution (Bhagat and Jefferis, 2002). Capital structure has become an instrument of corporate governance; not only the mix between debt and equity and their well-known consequences as far as taxes go must be taken into consideration. Through its interaction with other instruments of corporate governance, firm capital structure becomes capable of protecting an efficient value creation process, by establishing the ways in which the generated value is later distributed (Zingales, 1998).

2.3.1 Risk

The volatility in income is a measure of operating risk that has been argued by several authors to have a negative impact on firm leverage (Myers, 1984; Wald, 1999; Fama and French, 2002). Myers (1984) argues that, *ceteris paribus*, risky firms ought to borrow less since a higher variance rate in net income increases the probability of default. Firms with volatile earnings are given incentives not to fully utilize the tax benefits of debt since they are more likely to be exposed to agency and bankruptcy costs. On the other hand, several counter-hypotheses have been presented (e.g. Castanias and DeAngelo, 1981; Jaffe and Westerfield, 1984; Bradley et al., 1984). Empirical evidence by Titman and Wessels (1988) and Cassar and Holmes (2003) fail to find a statistical relationship for neither SMEs nor large firms. In addition, Wald (1999) finds contradictory results since the impact seems to be country-dependent. More surprisingly, the

limited research on SMEs rather suggests a positive relationship between risk and leverage (Jordan et al., 1998; Michaelas et al., 1999).

2.3.2 Size of the firm

A substantial number of authors have suggested a positive relationship between firm size and leverage (Fama and French, 2002). Warner (1977) and Ang et al. (1982) argue that as the value of the firm increases, the ratio of direct bankruptcy costs to the firm value decreases. The impact of these expected bankruptcy costs might be negligible for large firms' borrowing decisions, which enable them to take on more leverage (Rajan and Zingales, 1995). Smaller firms on the other hand face a different reality in procuring long-term debt. This is not mainly due to information asymmetry, but to the strong negative correlation between firm size and the probability of bankruptcy (Berryman, 1982; Hall et al., 2004). A possible explanation is that relatively large firms tend to be more diversified and consequently are less prone to insolvency (Titman and Wessels, 1988). However, Fama and Jensen (1983) suggest that transaction costs for large firms are reduced since they struggle with less asymmetric information problems. This should increase larger firms' preference for equity relative to debt compared to smaller firms.

Smaller firms often find it relatively more costly to disperse asymmetric information and as a consequence are offered less or significantly more expensive capital from financiers and lenders (Ferri and Jones, 1979).

2.3.3 Age of the firm

Age should affect capital structure both in the context of the static trade-off theory and the pecking order theory. According to the former, an older firm has a track record on which long-term lenders can base their lending decisions on. As a result young firms, which are typically SMEs and not large firms, will have to depend on short-term financing (Johnsen and McMahon, 2005). The pecking order theory lends support to this hypothesis since an older firm is more likely to have accumulated internally generated funds, thus reducing the need for external lending in the short-term (Petersen and Rajan, 1994).

Since the marginal effect of an additional year of track record should decline with age, we use the natural logarithm of age to control for the possibility of non-linearity. Based on the preceding arguments, we expect age to be positively related to long-term debt and negatively related to short-term debt.

2.3.4 Asset Structure

The type of assets owned by a firm should be an important determinant of capital structure according to most capital structure theories. Depending on the extent to which a firm's assets are tangible and generic, the liquidation value of the firm will be affected (Titman and Wessels, 1988; Harris and Raviv, 1991). A relatively larger proportion of tangible assets will increase the liquidation value of the firm since the values of the tangible assets can be assessed more easily. As a result, tangible assets are more likely to be accepted as collateral compared to intangible assets.

By collateralizing debt, funds provided to the borrower are restricted to a specific project. If no such guarantee exists for a project, the creditors may require more favorable terms, potentially forcing the firm to use equity financing instead. Using tangible assets as collateral also prevents risk shifting since the firm will find it difficult to shift investments to riskier projects (Myers, 1977). Therefore, a relatively larger fraction of tangible assets should increase the willingness to supply financing by lenders and increase firm leverage (Rajan and Zingales, 1995). This conclusion seems to be the general consensus and is supported by a number of authors (Jensen and Meckling, 1976; Storey, 1994; Berger and Udell, 1998).

For large firms, the theoretical arguments in favor of a positive relationship between asset structure and firm leverage are supported by empirical evidence (e.g. Rajan and Zingales, 1995). The much less comprehensive research on SMEs suggests, while not conclusive, that there might be a similar positive relationship between asset structure and firm leverage. On a decomposed leverage level the relationship between asset structure and long-term debt still shows signs of a positive relationship while there seems to be a negative relationship to short-term debt (Van der Wijst and Thurik, 1993; Chittenden et al., 1996; Jordan et al., 1998; Michaelas et al., 1999).

2.3.5 Profitability

Myers and Majluf (1984) states in their pecking order theory that firms prefer internal financing over debt, and debt over equity. Since a more profitable firm has access to more internal finance it will use less external financing to fund its operations and investment opportunities, *ceteris paribus*. The negative relationship between profitability and leverage has been tested empirically by several authors and remains almost unambiguously uncontested both for SMEs and large firms (Friend and Lang, 1988; Jordan et al., 1998; Coleman and Cohn, 1999; Mishra and McConaughy, 1999; Michaelas et al., 1999; Fama and French, 2002). In fact, Wald (1999) finds that profitability has the single largest negative effect on a firm's debt to asset ratio.

On the other hand, there are a few conflicting theoretical predictions on the effect of profitability on firm leverage (Jensen, 1986; Williamson, 1988). Jensen (1986) presents a model where firms with high profitability, will likely be subjects of takeovers and increased leverage. As a result, profitable firms which have been acquired should have higher debt to assets ratio, implying a positive relationship between profitability and firm leverage.

2.4 Empirical Literature Review

Decisions on capital structure are one of the most important issues considered by financial managers. Maina and Sakwa (2012) conducted a study on understanding financial distress among listed firms in Nairobi stock exchange and took a quantitative approach using the z-score multi-discriminate financial analysis model. The results clearly indicated that the financial health of the listed companies needed to be improved. In addition, a disjoint was noted in the correlation between what is expected of the listed companies in terms of financial performance and the benefits to be accrued from CMA surveillance on them.

Wambua (2011) conducted a study on the effects of corporate governance on savings and credit co-operatives (Sacco's) financial performance in Kenya and found that good corporate governance aims at increasing profitability and efficiency of organizations and their enhanced ability to create wealth for shareholders, increased employment opportunities with better terms for workers and benefits to stakeholders. Indicators of Good Corporate Governance identified in the study include; independent directors, independence of committees, board size, split chairman/CEO roles and the board meetings. He concluded that better corporate governance is correlated with better operating performance and market valuation. Corporate governance mechanisms assure investors in corporations that they will receive adequate returns on their investments. Evidence suggests that corporate governance has a positive influence over corporate performance.

Mang'anyi (2011) conducted a study on ownership structure and corporate governance and its Effects on Performance and took a Case of Selected Banks in Kenya. The study revealed that there was no significant difference between type of ownership and financial performance, and between banks ownership structure and corporate governance practices. This study recommends that corporate entities should promote corporate governance to send a positive signal to potential investors. The Central Bank of Kenya (CBK) should continue enforcing and encouraging firms to adhere to good corporate governance for financial institutions for efficiency and effectiveness. Finally, regulatory agencies including the government should promote and socialize corporate governance and its relationship to firm performance across industries.

Ebaid (2009) in his study on the emerging market economy of Egypt find that the selection of capital structure mix has a very weak relationship with the performance. He found that the relation among capital structure variables including short term, long term and total debt to total assets has insignificant relationship with performance measured by ROE (return on equity). Whereas, the relation of short term debt and total debt to total assets is negative and statistically significant with the performance. A negative insignificant relation exists for the long term debt with return on assets. Further, the relation of the capital structure with performance measured by the gross profit margin is also insignificant.

Seppa (2008) found that the Estonian firms follow Peking Order hypothesis in deciding about the optimal capital structure. Estonian firms first utilize internal funds to finance opportunities then move towards external source of financing. Further, large size firms also employ more external funds when internal funds are insufficient to finance opportunities. Large firms obtain funds easily and with less collateral compared to small firms. The choice of capital structure in Estonian firms is also largely influenced by industry specific and country specific factors.

Zeitun and Tian (2007) in his study on the Jordanian firms found a highly negative relation between the firm performance by employing both market and accounting based variables. Whereas the relation among capital structure variables and firm performance varies across industries. The relation is insignificant between capital structure variables and performance variables in the engineering sector firms. Accounting based variables of capital structure were debt (short term, long term and total debt) to total assets and total debt to total equity whereas accounting based measure for performance was ROA. The accounting based measure ROE (return on equity) has an insignificant relation with capital structure in all forms in Jordanian firms. Further, the market based measures for performance was Tobin's Q and price earnings ratio.

Banjeree et al. (2004) did a study on the dynamics of capital structure. They used a dynamic adjustment model and panel data methodology on a sample of UK and US firms to specifically establish the determinants of a time-varying optimal capital structure. They concluded that firms typically have capital structure that are not at the target and that they adjust very slowly towards the target market. Baner (2004) examined the capital structure of listed companies in Visegrad countries (Czech Republic, Hungary, Poland and Slovak Republic) during the period from 2000 to 2001. The results are based on the database, which assembles financial reports of listed firms. In his study, six potential determinants of capital structure are analyzed size, profitability, tangibility, growth opportunities, non-debt tax shields and volatility. According to his findings, leverage of listed firms in Visegrad countries is positively correlated with size. Leverage is negatively correlated with profitability. This finding is consistent with the pecking-order

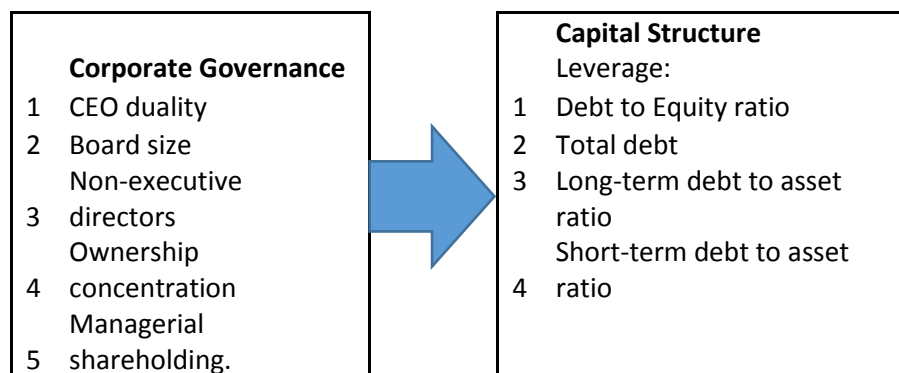
hypothesis rather than with static trade-off models. Also, leverage is negatively correlated with tangibility and non-debt tax shields. There is a negative relationship between leverage measured in market value and growth opportunities.

Modigliani and Miller (1958) suggest that under certain assumptions, including perfect competitive market, lack of income tax, lack of bankruptcy expenses, lack of agency expenses and information asymmetry among participants in capital market, directors may not alter firm's value due to making change in financial resources. In other words, firm's value is independent of its capital structure.

2.5 Conceptual framework

The study uses five corporate governance proxies: Board size, CEO duality, Proportion of Non-executive directors, Managerial Shareholding measured as a percentage of shares held by members of the board, Ownership concentration broken down into government and institutional shareholding, as independent variables. The dependent variable is Leverage or ratio of total debt to total equity and can be broken down into: Long term debt to asset ratio, Short term debt to asset ratio, Debt equity ratio, and Total debt to asset ratio.

Figure 2.5: Conceptual framework



2.6 Summary of Literature Review

Studies conducted about capital structure and corporate governance have ended up with mixed results. Rehman and Raoof (2010) investigated the relationship between corporate governance and capital structure of randomly selected 19 banks of Pakistan from 2005-2006 and found a positive relationship. Similar positive relation was reported by Rajendran (2012) in his study of Sri-lanka manufacturing firms. Local studies such as Musyoka (2009) ; Mang'unyi (2011) ; Wambua (2011); Maina and Sakwa (2012) focused on the effect of corporate governance structure on capital structure and ignored the fact that capital structure may also influence the corporate governance mechanisms employed. Contradictory findings are reported by Saad (2010) who studied 126 Malaysian publically listed companies and results showed a negative relationship. Due to such mixed findings, there is need for a Kenyan specific study in order to establish which school of thought is supported by the Kenyan phenomena.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter contains review of literature of research design, population, sample and data analysis. Research methodology is the architecture or the layout of the research framework. According to Polit and Hungler (2003) methodology refers to ways of obtaining, organizing and analyzing data.

3.2 Research Design

This study employed descriptive survey design. Descriptive survey is conducted to describe the present situation, what people currently believe, what people are doing at the moment and so forth (Baumgartner, Strong and Hensley, 2002). According to Kothari (2004), descriptive survey design includes surveys and fact finding enquiries of different kinds. The major purpose of descriptive research design is description of the state of affairs as it exists at present (Kothari, 2004).

3.3 Population

Burns and Grove (2003) and Mugenda and Mugenda (2003) describe population as all the elements that meet the criteria for inclusion in a study. Population is therefore the entire group of individuals, events or objects having a common observable characteristic. The population of the study consists of 61 active companies listed at the NSE.

3.4 Sampling technique

According to Polit and Beck (2003), a sample is a proportion of population to be researched, while Kothari (2004) defines a sample as the selected respondents representing the population.

Purposive sampling technique was used to select the sample firms. The sample size for this study is made up of 33 listed companies (Appendix 1) excluding the financial companies, Investment and Insurance companies due to their peculiar nature of capital structure and regulation by the Central Bank. The sample period is from the year 2008-2012.

3.5 Measures of Corporate Governance

To measure corporate governance quality, the study employed the governance standards provided by the Institutional Shareholder Services (ISS). The ISS governance standards include 51 factors encompassing eight corporate governance categories: audit, board of directors, charter/bylaws, director education, executive and director compensation, ownership, progressive practices, and state of incorporation.

The ISS governance standards are the most all-inclusive data on corporate governance ever collected. Corporate governance has been identified in previous studies (Berger et al., 1997; Friend and Lang, 1988; Wen et al., 2002; Abor, 2007) to influence the capital structure decisions of firms. The existing literature identified the main feature of corporate governance to include board size, board composition, board independence and CEO duality. The board of directors is charged with the responsibility of managing the firm and its operations.

3.6 Measures of Capital Structure

This research applied two measures of Capital structure: Total Debt to Total Assets, Total Debt to Equity. Further, the first selected measure of capital structure was broken down and also used Short Term Debt to Total Assets and Long Term Debt to Total Assets. The choice of these as measures of capital structure was motivated by four main drivers. Firstly, was the recommendation from literature (Rajan and Zingales, 1995) that Total Debt to Capital ratio is probably the best representation of past financing decisions. Secondly, was the fact that Total Debt to Total Assets ratios was the second best (Rajan and Zingales, 1995). Thirdly, was the fact that this information was readily available whilst the information for the other measures of capital structure was not readily available. Lastly, the reason for breaking down further Total

Debt to both Short Term Debt and Long Term Debt comes from the fact that developing countries tend to shun away from Long Term Debt and favour Short Term Debt as observed by Diamond (1991) and Caprio and Demirguc-Kunt (1998).

3.7 Data Collection

The study mainly depended on secondary data which was collected from the Nairobi Securities Exchange Handbooks, the IPO prospectuses as well as Annual Accounts. Another advantage available to me is that I work for the leading multi-media organization in East and Central Africa, Nation Media Group, who own, the 2008 winner of the Diageo Business Reporting Award for Africa, the Business Daily newspaper. Through the Business Daily the study used critical data on all the companies listed on the NSE through its Reuters Business software.

Long term debt to asset ratio (LTDA), Short term debt to asset ratio (STDA), Debt equity ratio (DE), and Total debt to asset ratio (TD) as dependent variables. Data on the leverage, board size, size of the firm, liquidity of firm, proportion of non-executive directors, CEO-duality, board independence, institutional shareholding, as well as managerial shareholding, was sourced from the general information about the company's directors, chairman, chief executive officer and company's annual financial reports for the year 2008-2012.

3.8 Diagnostic tests

The evaluation of diagnostic tests comprises a very broad and complex set of research questions and considerations. This is used to determine the frequency with which something occurs or with which it is associated with something else. After fitting a regression model, it is important to determine whether all the necessary model assumptions are valid before performing inference. If there are any violations, subsequent inferential procedures may be invalid resulting in faulty conclusions. Therefore, it is crucial to perform appropriate model diagnostics. In constructing the regression model, the assumption is that the response y to the explanatory variables are linear in

the β parameters and that the errors are independent and identically distributed normal random variables with mean 0 and constant variance σ^2 .

Model diagnostic procedures involve both graphical methods and formal statistical tests. These procedures allow to explore whether the assumptions of the regression model are valid and decide whether subsequent inference results can be trusted. The tests for the linear regression assumptions include: Test for linearity, homoscedasticity test, multicollinearity test and testing for normality. An important assumption for this multiple regression model is that independent variables are not perfectly multicollinear.

3.9 Data Analysis

This study employed a multivariate regression analysis in a panel data framework to measure the dependence of capital structure on corporate governance variables. The panel data analysis helps to explore cross-sectional and time series data simultaneously. Pooled regression was used with an assumption of constant coefficients. Constant coefficient model assumes intercept and slope terms are constant. The Significance of beta values at 5% was interpreted using the T-test of significance. In addition, the model was tested for significance using the F statistic. Coefficient of determination (R) derived from the regression analysis was used to show the amount of variation explained by the independent variable.

3.9.1 Analytical Model

The general form of model is given as:

$$LEV_{it} = \beta + \beta_1(\text{Log BZ})_{it} + \beta_2(\% \text{ NED})_{it} + \beta_3(\% \text{ INSTSH})_{it} + \beta_4(\text{MANGSH})_{it} + \beta_5(\text{DUALITY})_{it} + \beta_6(\% \text{ GOVTSH})_{it} + \epsilon_{it}$$

Where LEV= Ratio of total debts to total Equity

BZ = Board size

NED= Non-Executive Directors calculated as the proportion of non-executive directors to total number of directors.

INSTSH = Institutional Shareholding measured as percentage of shares held by institutions

MANGSH = Managerial Shareholding measured as percentage of shares held by members of board disclosed in annual financial reports

DUALITY= CEO/Chair Duality taken as 1 if CEO is chairman; otherwise it is taken as 0

GOVTSH = Government Shareholding measured as percentage of shares held by government

ϵ = Error Term

β_0 = Intercept of the equation

β_i = marginal effect of variable on debt to equity ratio.

3.9.2 Tests of significance

This study employed t-test to determine if betas β_1 , β_2 , β_3 β_6 were individually significant and f-tests to test whether the whole model was significant. Analysis of variance (ANOVA) for the regression model was also used to determine whether the model was statistically significant.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis and interpretation of the results. Section 4.2 provides the descriptive statistics, section 4.3 provides the analysis of variance for the regression model and the multivariate regression analysis, section 4.4 provides correlation Matrix and Section 4.5 the interpretation of the findings.

4.2 Descriptive Statistics

The descriptive statistics for the outcome variable and the predictors were as shown in table 1 below.

Table 1: Descriptive Statistics for Predictors Ratio of Total Debts to Total Equity

	Mean	Standard Deviation
Leverage	1.051326	0.8568544
Proportion of Non-Executive Directors	0.7823	0.12107
% of Institutional Shareholding	59.8551	26.40432
Managerial Shareholding	7.7320	15.33598
% of Government shareholding	13.58421	22.3213
Board size	8.6503	2.34426

Results reveal that average size of the board in Kenya listed non-financial companies is 8.65.

Non-executive directors constitute 78.2% of the board which shows on average listed non-financial companies complies with the CMA requirement on board composition. However, for most companies, it is not clearly stated in their annual report whether all the non-executive directors are also all independent directors or what percentage of Non-executive directors constitute independent directors.

The average institutional shareholding stands at 59.85% implying that a greater percentage of shareholding in listed companies are under both local and foreign institution. The average government shareholding is at 13.59% and management shareholding is at 7.73%. The lower level of average government shareholding is due to the fact that even though the government shareholding is high in the few companies that they control, majority of the listed companies do not have government shareholding.

4.3 ANOVA for the regression model

Table 2: ANOVA for the regression model.

Model	Sum of Squares	Degree of Freedom	Mean Square	F-statistic	Significance
Regression	17.131	5	3.426	5.566	0
Residual	70.788	115	0.616		
Total	87.919	120			

From the ANOVA table it can be concluded that overall the model was significant as shown by the .000 value in the significance column which is below .05

4.4 Correlation Matrix

The strength of correlation between the dependent variable and each predictor variable was tested using Pearson's moment correlation coefficient. The results were as summarized in table 4 below.

Table 4: Correlations between Variables in the Regression Model

	LEV	% NED	% of INSTSH	% of MANGSH	% GOVTSH	Board size (BZ)
Leverage	1.000					
% NED	-0.192	1.000				
% of INSTSH	0.258	-0.347	1.000			
% of MANGSH	-0.146	0.096	-0.053	1.000		
% of GOVTSH	0.051	0.217	-0.112	0.254	1.000	
Board size (BZ)	-0.287	0.365	-0.180	0.067	0.378	1.000

4.5 Multivariate Regression Analysis

Table 3 presents a summary of the regression model that includes the four predictors namely proportion of non-executive directors to total number of directors, percentage of shares held by institutions, percentage of shares held by board members, percentage of shares held by government and board size as well as the outcome variable which was ratio of total debts to total equity.

The model for the predicator variable will thus be:

$$LEV_{it} = 2.888 - 2.193(Log\ BZ)_{it} - 0.330(\% \ NED)_{it} + 0.005(\%INSTSH)_{it} - .008(MANGSH)_{it} + .010(\%GOVTSH)_{it} + \epsilon_{it}$$

Table 3: Standard Multiple Regression for Predictors of Capital Structure.

Model	Unstandardized coefficients		Standardized Coefficient	T-Statistic	Significance
	Beta	Standard error	Beta		
Constant	2.888	0.730		3.903	0
proportion of NED	-0.330	0.666	-0.048	-0.508	0.613
% of INSTSH	0.005	0.0025	0.198	2.208	0.029
% of MANGSH	-0.008	0.005	-0.164	-1.892	0.061
% of GOVTSH	0.010	0.004	0.255	2.711	0.008
Log of BZ	-2.193	0.640	-0.328	-3.428	0.001

4.6 Interpretation of the Findings

The study shows that the relationship between Non-executive directors and the ratio of debt to equity is negative; this is partly because a higher percentage of external directors on the board lead to lower leverage, due to their superior control, monitoring and also due to the fact most listed companies have a higher percentage of institutional shareholding and that external directors are generally representative of the institutional shareholders. The result of the finding is consistent with Wen et al. 2002. However, the relationship between government shareholding and the ratio between debt to equity is positive indicating that firm with higher percentage of government ownership have the ability to force management to use optimal level of debt and

also, they reinforce recognition from external stakeholders thereby enhancing the ability of company to raise external funds. The weak correlation could be due to the fact that the number of government owned firms as a percentage of all the listed companies is relatively lower. This relationship is significant at $\alpha = 0.05$

There is a negative relationship between managerial shareholding and debt to equity ratio, this is because as managers shareholding increases they tend to bring down the size of the firms debt to reduce risk and the cost of bankruptcy, the negative correlation can also be explained by the fact that increased managerial ownership align the interest of manager with the interest of outside shareholders and reduces the role of debt as a tool to mitigate the agency problems. This observation is consistent with the findings in Friend and Lang (1988). Board size is also found to be negatively correlated with debt to equity ratio indicating that larger board size generally translates into strong pressure from the corporate board to make managers pursue lower leverage to increase firm performance. This relationship is significant at $\alpha = 0.05$.

CEO/Chairman duality was removed from the model because in Kenya, the CMA requires that all listed companies have the position of the chairman separated from that of the CEO of the company. All the companies surveyed complied with this requirement and hence this variable remained zero and constant throughout the observation.

The study shows that ownership structure defined by institutional shareholding, government shareholding and management shareholding produces mixed results. Higher institutional shareholding bears a positive relationship with the level of debt used by firms. The higher the percentage of institutional investor shareholding, the higher the level of debt, this result is in line with the findings of some of the earlier studies. Jiraporn et al., (2008) and Fosberg (2004), the positive relationship could be because institutional shareholders, due to their large economic stake, have a strong desire to watch over management closely, making sure that management do not engage in activities that are detrimental to the wealth of the shareholders and thus would mostly likely push management to employ more debt to maximize the value of the firm and reduce agency problem. This relationship is significant at $\alpha = 0.05$

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides various sections, Section 5.2 include summary of the study, section 5.3 includes conclusion, section 5.4 presents the limitation of the study and finally section 5.5 presents recommendations for further research

5.2 Summary

The study found out that board size negatively correlated with debt ratio suggesting that larger boards translates into strong pressure from the corporate board to make managers pursue lower leverage to increase firm performance. Managerial ownership is negatively related to the long term debt ratio.

The negative relation between Non- executive directors and capital structure indicate that board with more independent directors take on less debt on favorable terms due to effective monitoring and superior control. It is also worth noting that most listed companies have a higher level of institutional shareholding and therefore most of the non-executive directors are expected to be their representatives

Government ownership is positively related to capital structure indicating that firms with higher percentage of government ownership have the ability to force management to use more debt than equity and also, they reinforce recognition from external stakeholders thereby enhancing the ability of the company to raise funds. However, managerial ownership is negatively related to capital structure which indicates that increased managerial ownership align the interest of manager with the interest of outside shareholders and reduces the role of debt as a tool to mitigate the agency problems. The percentage of Institutional shareholding is positively correlated with debt to equity ratio.

5.3 Conclusions from the Study

The study analyzed the relationship between capital structures and corporate governance of companies listed on the Nairobi securities exchange for the period 2008 – 2012 by using multivariate regression analysis.

Board size and Non-executive directors is negatively correlated with debt level and in overall board independence and managerial shareholding are not important factors in determining choice of financial mix. However most listed firms with government ownership however few they seems to be, tend to have a higher level of debt than equity. This could be because higher government shareholding imposes confidence from external stakeholders to grant debt to the listed firms.

The negative relation between Non- executive directors and capital structure indicate that boards with more independent directors take on less debt on favorable terms due to effective monitoring and superior control. Managerial shareholding has a negative relationship with the debt indicating that concentration of ownership induces managers to lower the gearing level; however the relationship is statistically insignificant. Institutional shareholding is positively correlated with debt level this may be due to the fact that in Kenya, the larger proportion of firms' shareholding are under institution and therefore institutional shareholder may be putting management under pressure to utilize more debt to maximize firm value and also reduce free cash flow problems. Another possible reason could be, firms with larger institutional shareholding have more confidence from debt providers than firms with more individual shareholdings.

5.4 Limitations of the Study

One of the major limitation of the study is the un availability of data on all the variables for the five years for all the listed companies, secondly some listed companies do not clearly disclose the distinction between independent executive directors and non-executive directors on their

annual report and therefore it is very difficult to determine among the executive directors, what proportion is independent.

Another limitation is that not all data has been extracted from one source. Where there were gaps, these have had to be filled from other sources or estimated or inferred using different ratios. This therefore means that for some firms, data has not been uniformly sourced and that therefore there may be issues of uniformity. Additional biases may be created by accounting non-compliance. The search for data from more than one source may skew the results as such data depends on the integrity and intentions from the different data sources.

Additionally the 33 companies sampled do not represent all Kenyan companies, but since no data is publicly available for the other majority of firms in Kenya, I was forced to use the companies listed in the Nairobi Stock Exchange. This is a common problem experienced by other studies on determinants of capital structure in developing countries including in Booth et al., (2001)

The study had also intended to investigate the effect of CEO/Chairman duality on capital structure of firms; however the variable was removed from the model because it remained constant throughout the observation and added no value to the model.

5.5 Suggestions for Further Research

The study covered firms actively and consistently listed on the Nairobi Stock Exchange for the period 2008-2012. Looking at Board size, proportion of non-executive directors, proportion of Institutional Shareholding, percentage of Managerial Shareholding, CEO/Chair Duality and percentage of Government Shareholding, However, although negative relationship was found between institutional shareholding and capital structure, a further study can also be done separating foreign institutional shareholding and local shareholding in the model.

Secondly the study could also be undertaken for the same period but using large un-quoted firms in Kenya and finally a study can also be done but separating data from multiple sectors of the

listed firms of the Nairobi Securities Exchange and comparing the results and findings among the sectors. This may provide evidence on the influence of Industry on debt to equity ratio.

REFERENCES

- Abor, J. & Biekpe, N. (2007). Corporate governance, ownership structure and performance of SMEs in Ghana: implications for financing opportunities, *Corporate Governance*, Volume 7, Number. 3, pp. 288-300.
- Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana, *Journal of Risk Finance*, Vol. 6, pp.438-4
- Adelegan, O. J, (2009). *Can a Regional Approach Accelerate Stock Market Development?* Empirical Evidence from Sub-Saharan Africa, IMF Working Paper 08/281(Washington: International Monetary Fund).
- Aguilera, R. V., Filatotchev, I., Gospel, H. & Jackson, G. (2008). *An Organizational Approach to Comparative Corporate Governance: Costs, Contingencies, and Complementarities*, *Organization Science*, 19, 475–492.
- Akram, B. & Ahmad, A. (2010). *The Effect of Corporate Governance and Ownership Structure on Capital Structure of Iranian Listed Companies*^{7th} International Conference on Enterprise Systems, Accounting and Logistics, Rhodes Island, Greece
- Bajaj, M. Chan, Y., & Dasgupta, S. (1998). The relationship between ownership, financing decisions and firm performance: A signaling model', *International Economic Review*, vol. 39, no. 3, pp. 723-44.
- Baner, P. (2004). Capital structure of listed companies in visegrad countries. Research Seminar Paper Presented at Seminar for Comparative Economics, LMU, Munich
- Banjeree, S., Heshmati, A. & Wihlborg, C. (2004). The dynamics of capital structure, *Research in Banking and Finance*, 4, 275–97.

- Baumgartner, T.A., Strong, C.H., & Hensley, L.D. (2002). *Conducting and reading research in health and human performance* (3rd ed.). New York, NY: McGraw-Hill.
- Berle, A. & Means, G. (1932). *The Modern Corporation and private property*. McMillan, New York.
- Bhagat, S., & Jefferis, R. (2002). *The econometrics of corporate governance studies*, Massachusetts Institute of Technology
- Brealey, R.A., & Myers, S.C. (2003). *Principles of corporate finance*. Boston: McGraw-Hill Irwin
- Burns, N. & Grove, K. (2003). *Understanding nursing research*. Retrieved from: <http://books.google.com/>
- Business Roundtable (2005). *Principles of Corporate Governance, A White Paper* by, www.businessroundtable.org/, Last Access at January, 8, 2007
- CDSC. (2004). *Legal and Regulatory Framework*. Retrieved August 1st, 2011, from Central Depository Clearing System: <http://www.cdskenya.com/legal-framework/legal-and-regulatory-framework/>
- Chevalier, A., Prasetyantoko, A., & Rokhim, R. (2006), 'Foreign Ownership and Corporate Governance Practices in Indonesia', Paper presented in Globalization, Public policy and Multi-Jurisdiction Governance: The Need for a Common Approach, Paris, France, Accessed 26. August 2008 <http://www.dauphine.fr/globalisation/prasetyantoko.pdf>.
- CMA. (2011). *Establishment of the Capital Markets Authority*. Retrieved August 1st, 2011, from Capital Markets Authority: http://www.cma.or.ke/index.php?option=com_content&task=view&id=16&Itemid=36
- Contingencies, and Complementarities, *Organization Science*, 19, 3, 2008, pp. 475–492.
- Demsetz, H., & Lehn, K. (2005). 'The structure of corporate ownership: Causes and consequences', *The Journal of Political Economy*, vol. 93, no. 6, pp. 1155-77.

- Ebaid, I. E. (2009), "The impact of capital-structure choice on firm performance: empirical evidence from Egypt", *The Journal of Risk Finance*, Vol. 10 No. 5, pp. 477-487.
- Gillan, S. (2006). Recent Developments in Corporate Governance: An Overview, *Journal of Corporate Finance*, vol. 12, no. 3, pp. 381-402.
- Goergen, M. & Renneboog, L. (2001). Investment policy, internal financing and ownership concentration in the UK, *Journal of Corporate Finance*, vol. 7, no. 3, pp. 257-84
- Grossman, S., & Hart, D.(1982).Corporate financial structure and managerial incentives, *National Bureau of Economic Research (NBER) Working Paper No. R0398*, pp. 107-40
- Hayat R, Safdar, A. S., Amara. U, Khalid R, & Ahmed, I. (2010). Soil beneficial bacteria and their role in plant growth promotion: a review. *Ann Micro biol* 60:579–598
- Jensen, M. C. & Meckling, W. (1976).Theory of the Firm, Managerial Behavior, agency Costs and ownership Structure. *Journal of Financial Economics*, (3), 305- 360.
- Jensen, M. C. (1986).Agency Costs of Free Cash Flow, Corporate Finance and Takeovers. *American Economic Review* (76), 323-339.
- Kothari, C. R. (2004). Research Methodology. Methods and Techniques.2nd Edition. *New age International (P) Limited*, publisher.
- Kumar, S. (2004). Capital Structure and Corporate Governance .Xavier Institute of Management Bhubaneswar, India 75.10.13.Laboratory <http://ies.lbl.gov/iespubs/59773Rev.pdf>
- Lemmon, N., Michael L., & Jaime F. Z, (2001). *Looking under the Lamppost: An Empirical Examination of the Determinants of Capital Structure*, Working paper, University of Utah

- Majluf, N. S. (1984). Corporate Financing and Investment Decisions When Firms Have Information. Those Investors Do Not Have. *Journal of financial Economics*, Vol. 13, pp. 187-221.
- Mang'anyi, E. (2011). Ownership Structure and Corporate Governance and Its Effects on Performance: A Case of Selected Banks in Kenya. *International Journal of Business Administration* Vol.no 3
- Muga, D.N. (1974). The Nairobi Stock Exchange; it's History, Organization and Role in the Kenyan Economy. Unpublished MBA Dissertation University of Nairobi
- Mugenda, O. M., & Mugenda, A. G. (2003). Research methods, Quantitative and Qualitative approaches. *African Centre for Technology Studies (ACTS)*.
- Murtishaw, S., & Sathaye, J. (2006). *Quantifying the Effect of the Principal-Agent Problem on US Residential Energy Use*. LBNL-59773. Berkeley, Calif.: Lawrence Berkeley National
- Musyoka, S. (2009). Relationship between capital structure and corporate governance of the firms listed at the Nairobi Stock Exchange. <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/13009>
- Myers, S. & Majluf, N. (1984). Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have, *Journal of Financial Economics* 13, 187-221.
- Myers, S.C. (2003). The Capital Structure Puzzle. *Journal of Finance*, 39(3), 575-592.
- Ngugi, R. (2005). Growth of Nairobi Stock Exchange primary market. KIPPRA discussion paper No. 47. Nairobi: KIPPRA.
- NSE, (2011). *Regulatory Framework*. Retrieved August 1st , 2011, from Nairobi Stock Exchange: <http://www.nse.co.ke/regulatory-framework/category/42-nairobi-stock-exchange-nse.html> of linkage, *Revue International PME*, vol. 8, n°3-4, pp. 67-90.

- Pandey, I.M. (2002). Capital structure and market power interaction: Evidence from Malaysia. *Working paper, Indian Institute of Management, Ahmedabad*.
- Pettit, R. & Singer, R. (1985), *Small business finance: a research agenda*, Financial Management, vol. 14, n3, autumn, pp. 47-60.
- Pindado, J. & Torre. C. (2004). *Why is ownership endogenous?* Applied Economics Letters, 11, 901-904.
- Polit, D. F. & Beck, C.T. (2003) Nursing Research. Principles and methods. 7th edition. Lippincott Williams & Wilkins, Philadelphia.
- Psillaki M., (1995). *Credit rationing and small and medium sized firms: a tentative*
- Rajan, R. & Zingales. L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*.50. 1421-1460.
- Rajendran, K. (2012).Effect Of Corporate Governance on Capital Structure: Case Of The Srilankan Listed Manufacturing Companies. *Journal of Arts, Science & Commerce*
- Rehman, M. A. U., Rehman, R. U., & Raoof, A. (2010). Does corporate governance lead to a change in the capital structure? *American Journal of Social and Management Sciences*
- Saad, N.M. (2010).Corporate Governance Compliance and the Effects to Capital Structure in Malaysia *International Journal of Economics and Finance*, 2(1)
- Seppa, R. (2008). Capital structure decisions: research in Estonian non-financial companies, *Baltic Journal of Management*, Vol. 3 No. 1, pp. 55-70.
- Shah, A. & Khan, S. (2007), Determinants of Capital Structure: Evidence from Pakistani Panel Data, *International Review of Business Research Papers*, Vol. 3 No. 4, pp. 265-282.

- Suhaila, M.K., Mansour, W. & Wan Mahmood, W., (2009). Capital structure and firm characteristics: Some evidence from Malaysian companies, *Euro-Mediterranean Economics and Finance Review (EMEFIR)*, University of Cergy and ISC Paris, 4(2), pp 105-119
- Wambua, K.P. (2011). The effects of corporate governance on savings and credit co-operatives (Sacco's) financial performance in Kenya. *Unpublished thesis university of Nairobi*.
- Zeitun, R. & Tian, G. G. (2007). Capital Structure and Firm Performance: Evidence from Jordan, *Australia Accounting Business and Finance Journal*. 1 (4), pp.148-168
- Zingales L. (1998).Corporate Governance, in *The New Palgrave Dictionary of Economics and the Law*', MacMillan, London.
- Zingales L. (2000). In Search of New foundations, *Journal of Finance*, vol. 1, n. 4.

APPENDICES

Appendix 1. List of companies sampled

NAME	SECTOR	YEAR LISTED	SIGNIFICANT SHAREHOLDING	FINANCIAL YEAR END
ACCESSKENYA GROUP	IT	2007	Local	Dec
ATHI RIVER MINING	Cement & Mining	1997	Foreign – Lafarge	Dec
BAMBURI CEMENT	Cement	1970	Foreign – Lafarge	Dec
BAT KENYA	Tobacco	1969	Foreign – BAT	Dec
BOC KENYA	Energy	1969	Local	Sep
CARGEN KENYA	Motor	n/a	Local	Sep
CARBACID INVESTMENTS	Energy	n/a	Local	Jul
CENTUM INVESTMENT	Investments	1977	Government / Local	Jun
CROWN BERGER PAINTS	Paints	1992	Local	Dec
EA CABLES	Manufacturing	1973	Local	Dec
EA PORT CEMENT	Cement	n/a	Government/ Lafarge	Jun
EAST AFRICAN BREWERIES	Beverages	1972	Foreign – Diageo	Jun
EVEREADY EA	Batteries	2006	Local	Sep
EXPRESS KENYA	Transport	1978	Local	Dec
GEORGE WILLIAMSON	Agriculture	1972	Local	Mar
KAKUZI LIMITED	Agriculture	1951	Local	Dec
KENGEN	Energy	2006	Government	Jun
KENYA AIRWAYS	Airlines	1996	Government / KLM	Mar
KENYA OIL CO	Oil	1959	Government / Local	Sep
KENYA POWER	Energy	1972	Government	Jun
MUMIAS SUGAR	Sugar	2001	Government	Jun
NATION MEDIA GROUP	Media	1973	Local / Foreign	Dec
OLYMPIA CAPITAL	Manufacturing	1974	Local	Dec
REA VIPINGO	Agriculture	1995	Foreign / Local	Dec
SAFARICOM	Communications	2008	Government / Vodac	Mar
SAMEER AFRICA	Transport	1994	Local	Dec
SASINI TEA	Agriculture	1965	Local / Foreign	Sep
SCANGROUP	Media	2006	Local	Dec
STANDARD GROUP	Media	1954	Local / Foreign	Sep
TOTAL KENYA	Oil	1988	Foreign - Total	Dec
TPS (SERENA)	Hotel & Tourism	1997	Local / Foreign	Dec
UCHUMI SUPERMARKETS	Retail	1992	Local	Jun
UNGA GROUP	Food	1971	Local	Jun