RELATIONSHIP BETWEEN CAPITAL STRUCTURE AND CORPORATE GOVERNANCE OF THE FIRMS LISTED AT THE NAIROBI STOCK EXCHANGE

BY
SHADRACK MUSYOKA

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF DEGREE IN MASTER OF BUSINESS ADMINISTRATION (MBA), SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.

2009
DECLARATION

I declare to the best of my knowledge that this is my original work and has not been presented for a degree in any other university. No part of this proposal may be reproduced without prior permission of the author and / or University of Nairobi.

Signature: _______________________________          Date: ______________________
Name: Musyoka, Shadrack
Registration No. D61/P/7126/03

This project has been presented for examination with my approval as the university supervisor.

Signature: _______________________________          Date: ______________________
Mrs Winnie Nyamute
Lecturer, Department of Finance and Accounting
School of Business
University of Nairobi
TABLE OF CONTENTS

DECLARATION II

TABLE OF CONTENTS III

ABSTRACT 1

CHAPTER ONE 2
1.0 INTRODUCTION 2
1.1 BACKGROUND 2
1.2 PROBLEM STATEMENT 8
1.3 OBJECTIVES 9
1.4 IMPORTANCE OF THE STUDY 9

CHAPTER TWO 11
2.0 LITERATURE REVIEW 11
2.1 CAPITAL STRUCTURE 11
2.2 AGENCY THEORY 14
2.3 THE OUTCOME HYPOTHESIS 15
2.4 THE SUBSTITUTION HYPOTHESIS 16
2.5 EMPIRICAL LITERATURE ON CAPITAL STRUCTURE AND CORPORATE GOVERNANCE 16
2.6 GOVERNANCE PRINCIPLES AND GUIDELINES 19
2.7 CORPORATE GOVERNANCE IN KENYA 20
2.8 RESEARCH ANALYTICAL FRAMEWORK 23

CHAPTER THREE 27
3.0 RESEARCH METHODOLOGY 27
3.1 POPULATION AND SAMPLE 27
3.2 DATA COLLECTION 27
3.3 DATA SPECIFICATION 28
3.4 DATA ANALYSIS 28

CHAPTER FOUR 29
4.0 DATA ANALYSIS AND DISCUSSION OF EMPIRICAL FINDINGS 29
4.1 DESCRIPTIVE ANALYSIS 29
4.2 REGRESSION ANALYSIS 31

CHAPTER FIVE 34
5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION 34

REFERENCES 36

APPENDICES 40
We examine how corporate governance indicators such as board size, board composition, CEO duality and CEO compensation among other factors impact on financing decisions of firms. Corporate governance has been said in previous studies to influence the capital structure decisions of large and listed firms. In Kenya corporate governance is prescribed by section 11(3) and 12 of the Capital Markets Authority Act that empower the Capital Markets Authority to make rules and regulations to govern capital markets in Kenya. Although studies have been done in Kenya on capital structure and corporate governance of companies that are listed at the Nairobi Stock Exchange, none seem to show whether or not there is a relationship between the corporate governance and capital structure of the firms. The objective of this study was therefore to determine whether there is a relationship between capital structure and corporate governance of the firms that are listed at the Nairobi Stock Exchange.

A census study of the firms that have been consistently listed at the Nairobi Stock Exchange over the financial period 2003/2004 – 2007/2008 was done. Primary data was collected from CEOs of the listed firms using a validated structured questionnaire. The secondary data was collected from annual financial statements of the target firms. Analysis was done within the Random-effects GLS regression framework.

Findings of the study indicate that firms with larger board sizes employ more debt irrespective of the maturity period and also the independence of a board negatively and significantly correlates with short-term debts. Again, when a CEO doubles as board chairperson, less debt is employed. Thus, the study reaffirms the notion that the governance structure of a firm affects its financing choices.
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background
The capital structure of a company is the particular combination of debt, equity and other sources of finance that it uses for its long term financing. The key division in capital structure is between debt and equity. The proportion of debt funding is also called the gearing ratio. This separation of funding into either debt or equity can be sometimes complicated by the existence of other types of capital that blur the line between debt and equity. For example, a company can be partly financed by preference shares or convertible debt, which is a hybrid of debt and equity. Preference shares are legally shares, but have a fixed return that makes them closer to debt than equity in their economic effect. Convertible debt may be likely to become equity in the future. This study adopts the definition that capital structure of a company is the combination of debt and equity a firm uses to finance its long term assets.

The literature in capital structure began with the seminal work by Modigliani and Miller (1958) on the irrelevance of capital structure. Since then, capital structure continues to be a topic of interest in finance. Several theories have been advanced to explain capital structure decisions. One theory that has garnered strong empirical support is agency theory. Agency theory posits that capital structure is determined by agency costs, that is, costs due to conflicts of interest.

The Modigliani- Miller theorem forms the basis for modern thinking on capital structure, though it is generally viewed as a purely theoretical result since it assumes away many important factors in the capital structure decision. The theorem states that, in a perfect market, the value of a firm is irrelevant to how that firm is financed. But in the real world, there are many factors such as bankruptcy costs, agency costs, taxes and information asymmetry just to name some that make a market imperfect. These factors may therefore cause capital structure to become relevant. Some theories try to address some of these imperfections.

The Trade-off theory addresses the issue of bankruptcy cost. It states that there is a tax advantage to financing with debt and that there is a cost of financing with debt - the bankruptcy costs of
debt. The theory argues that marginal benefit of further increases in debt declines as debt increases, while the marginal cost increases, so that a firm that is optimizing its overall value will focus on this trade-off when choosing how much debt and equity to use for financing.

The Pecking Order theory tries to capture the costs of asymmetric information. It states that companies prioritize their sources of financing (from internal financing to equity) according to the law of least effort, preferring to raise equity as a financing means “of last resort”. This theory argues that internal debt is used first, and when that is depleted debt is issued, and when it is not sensible to issue any more debt, equity is issued. This theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal financing when available, and debt is preferred over equity if external financing is required. Myers (1984) argues that equity is a less preferred means to raise capital because when managers (who are assumed to know better about true condition of the firm than investors) issue new equity, investors believe that managers think that the firm is overvalued and they are taking advantage of this over-valuation. As a result, investors will place a lower value to the new equity issuance.

Three types of agency costs help explain the relevance of capital structure. The first one is the ‘asset substitution effect’ that holds that as the debt equity ratio increases, management has an increased incentive to undertake risky (even negative NPV) projects. This is because if the project is successful, share holders get all the upside, whereas if it is unsuccessful, debt holders get all the downside. If the projects are undertaken, there is a chance of firm value decreasing and a wealth transfer from debt holders to share holders. The second type of agency cost, the ‘underinvestment problem’ holds that if debt is risky, the gain from the project will accrue to debt holders rather than shareholders. Thus, management have an incentive to reject positive NPV projects, even though they have the potential to increase firm value. The third type of agency cost is the ‘free cash flow’ cost, which maintains that unless free cash flow is given back to investors, management has an incentive to destroy firm value through empire building and perks etc. Increasing leverage imposes financial discipline on management.

Corporate governance is the process and structure used to direct and manage the business affairs of the company towards enhancing business prosperity and corporate accountability with the
ultimate objective of realizing long-term shareholder value, whilst taking into account the
interest of other stakeholders. Keasey et al (1997) defines corporate governance to include the
structures, processes, cultures and systems that engender the successful operation of an
organization. The Cadbury Committee (1992, p. 15) defines corporate governance as the system
by which companies are directed and controlled. Corporate governance is about supervising and
holding to account those who direct and control the management. The compliance with codes of
corporate governance has become the norm for listed firms all over the world.

Traditionally, corporate governance has been associated with larger companies and the existence
of the agency problem. Agency problem arises as a result of the relationships between
shareholders and managers. It comes about when members of an organization have conflicts of
interest within the firm. This is mainly due to the separation between ownership and control of
the firm. Well-defined and enforced corporate governance provides a structure that, at least in
theory, works for the benefit of everyone concerned by ensuring that the firm adheres to accepted
ethical standards.

In recent years, corporate governance has received increased attention because of high-profile
scandals involving abuse of corporate power and, in some cases, fraud by the managers. A
corporate governance structure specifies the distribution of rights and responsibilities among
different participants in the firm such as the board, managers, shareholders and other
stakeholders, and spells out the rules and procedures for making decisions on corporate affairs.
By doing this it also provides the structure through which the company objectives are set, and the
means of attaining those objectives and monitoring performance.

Corporate governance has been identified in previous studies (see Berger et al, 1997; Friend and
Lang, 1988; Wen et al, 2002; Abor, 2007) to influence the capital structure decisions of firms
(especially large and listed firms). The extant literature identifies the main characteristic of
corporate governance to include board size, board composition, CEO duality, tenure of the CEO
and CEO compensation. However, empirical results on the relationship between corporate
governance and capital structure appear to be varied and inconclusive.
According to Kumar (2005), corporate ownership structure can act as an incentive device for reducing the agency costs associated with the separation of ownership and management can be used to protect property rights of the firm (Kumar, 2005). A large body of literature does confirm the evidence that corporate governance, particularly the role of ownership structure, is crucial in determining the incentive of insiders to expropriate minority shareholder.

Corporate debt policy has been viewed as an internal control mechanism, which can reduce agency conflicts between management and shareholders, particularly the agency costs of free cash flow as suggested by Jensen (1986). Jensen (1986) argues that managers with substantial amounts of free cash flow are likely to engage in non-optimal activities. Grossman and Hart (1980) suggest that debt is a disciplinary device that may be used to reduce the agency costs of free cash flow. However, as Myres (1977) demonstrates, debt can also have undesirable effects such as inducing managers to forego positive net present value projects. Jensen and Meckling (1976) argue that managerial shareholding can reduce managerial incentives to consume perquisites, expropriate shareholder’s wealth and to engage in other non-maximizing behavior and thereby helps in aligning the interests between management and shareholders.

The Outcome Hypothesis by Chiyachantana et. al (2005), holds that capital structure is determined as an “outcome” of corporate governance quality. Firms with low governance quality suffer more severe agency problems. Managers of these firms are better able to exploit shareholders and place their private benefits ahead of those of the shareholders. As argued by agency theory, debt plays a role in controlling agency costs, making it more difficult for opportunistic managers to misbehave. In firms with poor governance, managers experience less monitoring and are more likely to behave opportunistically. These managers are more likely to carry debt at a sub-optimal level because they do not want to impose additional constraints on themselves in the form of fixed interest payments or be deprived of “free” cash flow that they have control over. Therefore, this view suggests that poor governance quality is associated with low leverage. In other words, there is a positive relationship between governance quality and capital structure.
But Chiyachantana et. al (2005), also contends in the Substitution Hypothesis that leverage acts as a “substitute” for corporate governance. Debt helps alleviate agency costs. Likewise, corporate governance is installed to mitigate agency conflicts. Thus, debt and governance play the same role and may substitute for each other. In firms with weak governance, the need for debt to act as a tool for controlling agency costs may be greater than in firms with strong governance. Hence, firms with poor governance quality should be more leveraged. In other words, there is an inverse relationship between corporate governance and leverage.

Corporate governance in Kenya is as prescribed by Sections 11(3) and 12 of the Capital Markets Authority Act (the Act). The Act empower the Capital Markets Authority to make rules and regulations to govern capital markets in Kenya. Pursuant to this authority, the Capital Markets Authority developed guidelines on corporate governance practices by public companies in Kenya (GoK, 2002) and incorporated them as a schedule in the Capital Markets Act. The guidelines were developed in recognition of the role of good governance in corporate performance, capital formation and maximization of shareholders value and protection of investors’ rights.

The main objective of these rules is to strengthen corporate governance practices in public listed companies in Kenya and to promote the standards of self-regulation so as to bring the level of governance in line with international standards. Some of the standards taken into account by the Authority while formulating the guidelines include those in the United Kingdom, Malaysia, South Africa, Organization for Economic Cooperation and Development (OECD) and the Commonwealth Association for Corporate Governance. The code of best practice for corporate governance in Kenya issued by the Private Sector Corporate Governance Trust, Kenya, (PRSCG) in 1999 was also useful in the development of the guidelines. This code has also been incorporated into the Act as recommended best practices in corporate governance by public listed companies.

For purposes of the guidelines, the Authority has defined corporate governance as the process and structure used to direct and manage business affairs of the company towards enhancing prosperity and corporate accounting with the ultimate objective of realizing shareholders long-term value taking into account the interests of other stakeholders (CMA, 2002). The Authority
identified a number of principles as essential and critical foundations for good corporate governance practices. These are the minimum standards that public listed companies are expected to adhere to and they relate to directors, shareholders, auditors, public disclosure, chairman and chief executives.

In Kenya, although studies have been done on the capital structure and corporate governance of companies that are listed at the Nairobi Stock exchange, I have not seen any studies that show whether or not there is a relationship between corporate governance and the capital structure of those firms. Because leverage is related to agency costs and agency costs, in turn, are related to governance quality, and since studies elsewhere have shown there is a relationship between the two, I predict that corporate governance influences capital structure in the case of companies listed at the Nairobi Stock Exchange.
1.2 Problem Statement
Agency theory argues that capital structure is affected by agency costs, which arise from conflicts of interests with earlier studies arguing that a relationship exists between capital structure and corporate governance but empirical results on the association has been mixed and inconclusive. Theoretical underpinnings of the relationship between capital structure and corporate governance have been contradictory: the outcome hypothesis predicts a positive relationship whereas the substitution hypothesis predicts a negative one.

Kumar (2005) study shows that the debt structure is non-linearly linked to the corporate governance (ownership structure). In his study he found that firms with weaker corporate governance mechanisms, dispersed shareholding pattern tend to have a higher debt level while firms with higher foreign ownership or with low institutional ownership tend to have lower debt level. Similarly, Chiyachantana, Jiraporn and Kitsabunnarat (2005) found that the association is not only non-linear but also parabolic and convex. Leverage is negatively related to governance quality up to a certain point. Then, the relationship reverses and becomes positive as governance quality improves further.

However, in Kenya, despite various studies having been done on the capital structure and corporate governance for the companies that are listed at the Nairobi Stock Exchange, no one seems to have studied whether or not corporate governance for companies that are listed at the Nairobi Stock Exchange affect the capital structure of those companies. Motivated by the conflict of the outcomes of the empirical studies elsewhere and the theoretical underpinning, this study is intended to find out if corporate governance influences capital structure for the firms listed at the Nairobi Stock Exchange and if so, what is the nature of the relationship.
1.3 Objectives
The objective of this study is to determine the relationship between capital structure and corporate governance of the firms that are listed at the Nairobi Stock Exchange.

1.4 Importance of the study
The results of this study will benefit the academia. The study of the relation between capital structure and corporate governance would enrich our understanding about whether or not firms that are vulnerable to expropriation issue more debt to have more resources to use for private interests. Scholars may also wish to use the findings of this study as a basis for further research on this subject.

The study would also benefit the Capital Markets Authority. Given the reforms on corporate governance due to the recent corporate scandals, the significance of the results of this study cannot be overemphasized. As the licensing body, CMA needs to fully appreciate whether or not corporate governance issues affect capital structure and how.

Firms’ shareholders also need to appreciate the possible agency issues in determining the firm’s financing decisions. The agency problems may also arise between the firm’s controlling shareholders and the debt providers and between the debt suppliers and their minority shareholders. For example, the controlling shareholder of a firm and the firm’s debt providers might belong to the same business groups. In such a case, instead of performing the active monitoring and governance function, the debt suppliers could become the center of corrupted crony systems.

Management of publicly quoted companies would benefit form the study as they need to make more informed financial decisions. Investors would also make use of the findings of this research to be able to make more informed decisions, as they will be aware of the corporate governance issues to ascertain before they invest in that firm.
Others to benefit would be financial consultants and scholars who intend to analyze the content of information contained in financial reports to be able to offer proper advice to clients on the possible effects of reported corporate governance compliance levels.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Capital Structure

Capital structure of a company is the combination of debt, equity and other sources of finance that it uses to fund its long term financing. Although the key division in capital structure is between debt and equity, funding can sometimes comprise many other types of capital that blur the line between debt and equity. For example, a company can be partly financed by preference shares or convertible debt, which is a hybrid of debt and equity. Preference shares are legally shares, but have a fixed return that makes them closer to debt than equity in their economic effect. Convertible debt may be likely to become equity in the future.

The finance literature is replete with studies that attempt to explain the determinants of capital structure. Several hypotheses have been advanced in the past couple of decades, for instance, the signaling hypothesis (Ross, 1977 and Leland and Pyle, 1977), the pecking order hypothesis (Myers, 1984), and agency theory (Jensen, 1986). Throughout the literature, debate has centered on whether there is an optimal capital structure for an individual firm.

The seminal work by Modigliani and Miller (1958) in capital structure provided a substantial boost in the development of the theoretical framework within which various theories were about to emerge in the future. Modigliani and Miller (1958) concluded to the broadly known theory of “capital structure irrelevance” where MM (1958) argues financial leverage does not affect the firm's market value. However, this theory was based on very restrictive assumptions that do not hold in the real world. These assumptions include perfect capital markets, homogenous expectations, no taxes, and no transaction costs. The presence of bankruptcy costs and favorable tax treatment of interest payments lead to the notion of an “optimal” capital structure which maximizes the value of the firm, or respectively minimizes its total cost of capital.

Modigliani and Miller (1963) reviewed their earlier position by incorporating tax benefits as determinants of the capital structure of firms. The key feature of taxation is that interest is a tax-
deductible expense. A firm that pays taxes receives a partially offsetting interest “tax-shield” in the form of lower taxes paid. Therefore, as Modigliani and Miller (1963) propose, firms should use as much debt capital as possible in order to maximize their value. MM (1963) however warns against maximizing debt in capital structure as other sources of finance like retained earnings may be cheaper where personal income taxes are incorporated into the capital structure equation. Altman (1984) also asserts that as much as debt financing could present the firms with tax shield benefits, there is a limit to which firms can use debt financing: excessive debts may lead to bankruptcy

Other theories that have been advanced to explain the capital structure of firms include Trade-off theory, agency theory, and the pecking order theory. These theories are discussed in turn.

The Trade –off theory addresses the problem of bankruptcy costs. Bankruptcy costs are the costs directly incurred when the perceived probability that the firm will default on financing is greater than zero. The bankruptcy probability increases with debt level since it increases the fear that the company might not be able to generate profits to pay back the interest and the loans. The potential costs of bankruptcy may be both direct and indirect. Examples of direct bankruptcy costs are the legal and administrative costs in the bankruptcy process. Examples of indirect bankruptcy costs are the loss in profits incurred by the firm as a result of the unwillingness of stakeholders to do business with them (Titman, 1984)

Trade-off theory states that there is a tax advantage to financing with debt, and that there is also a cost of financing with debt (bankruptcy cost). The theory argues that the marginal benefit of further increase in debt declines as the debt increases, while the marginal cost increases, such that for a firm that is optimizing its overall value would focus on this trade-off when choosing how much debt and equity to use for financing.

Agency costs arise as a result of the relationships between shareholders and managers and those between debt-holders and shareholders (Jensen and Meckling, 1976). The need to balance gains and costs of debt financing emerged as a theory known as the static trade-off theory by Myers
(1984). It values the company as the value of the firm if unlevered plus the present value of the tax shield minus the present value of bankruptcy and agency costs.

The concept of capital structure is also expressed by Myers (1984) and Myers and Majluf (1984), based on the notion of asymmetric information. The existence of information asymmetries between the firm and likely finance providers causes the relative costs of finance to vary between the different sources of finance. For instance, an internal source of finance where the funds provider is the firm will have more information about the firm than new equity holders; thus, these new equity holders will expect a higher rate of return on their investments. This means that it will cost the firm more to issue fresh equity shares than using internal funds.

Similarly, this argument could be provided between internal finance and new debt holders. The conclusion drawn from the asymmetric information theories is that there is a hierarchy of firm preferences with respect to the financing of their investments (Myers and Majluf, 1984). This “pecking order” theory suggests that firms will initially rely on internally generated funds, that is, undistributed (retained) earnings, where there is no existence of information asymmetry, then they will turn to external debt if additional funds are needed and finally they will issue new equity to cover any remaining capital requirements. The order of preferences reflects the relative costs of various financing options.

The pecking order hypothesis suggests that firms are willing to sell equity when the market overvalues it (Myers, 1984; Chittenden et al., 1996). This is based on the assumption that managers act in favor of the interest of existing shareholders. As a consequence, they refuse to issue undervalued shares unless the value transfer from “old” to new shareholders is more than offset by the net present value of the growth opportunity. This leads to the conclusion that new shares will only be issued at a higher price than that imposed by the real market value of the firm. Therefore, investors interpret the issuance of equity by a firm as signal of overpricing.
2.2 Agency Theory
Agency theory is the fundamental reference in corporate governance as the ownership structure of an organization will have an impact on the corporate 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 lead to the development of ‘agency theory’. The owners as principals contract executives (agents) to manage the business on their behalf.

Agency theory suggests that professional managers can, by virtue of their superior knowledge and expertise, take advantage to benefit themselves more than firm’s owners. In other words, managers have a conflict of interest with those of the shareholders. They are working to maximize their own personal interests rather than maximizing shareholder value. Managers as agents are thus motivated by their own personal gains. Kiel and Nicholson (2003b) present the view that agency theory was widely adopted in the 1970s’ and 1980’s due to the ‘excesses’ of the period. That is, managers were making decisions on a grand scale, takeovers of companies were very common and managers were paying themselves hefty salary packages even in situations where the business was not performing so well. This type of behavior needed to be controlled by the ‘widespread adoption of an independent board mechanism to monitor a corporation’s management’ (Kiel and Nicholson, 2003b).

Alternative governance structures and compensation schemes to minimize agency costs and protect shareholder interests have been suggested by some writers. Governance structures use control and monitoring devices such as audits and performance evaluations. Financial incentives including long-term bonuses (agency costs) tied to firm performance can be used to provide rewards to managers to achieve shareholders’ objectives. Some other effective governance structures for the control of managers include a board of directors, who are predominantly outsiders with no personal relationship with management, a chairperson of the board who is not an executive manager of the company; a chief executive officer whose personal interest is
aligned with shareholders through stock ownership or a bonus compensation plan that is linked to shareholder wealth and so on. The role of corporate governance here is to protect the shareholders by monitoring managers through the board of directors.

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, increases in the fraction of the firm financed by debt increase the manager’s share of the equity, thereby bringing the manager’s and the shareholders’ interests into better alignment. Moreover, as argued by Jensen (1986), since debt commits the firm to pay out cash, it reduces the amount of “free” cash available to managers to engage in excessive perquisite consumption. Corporate governance is put in place specifically to ensure that managers act in the interest of shareholders. Therefore, corporate governance is designed to minimize agency conflicts.

2.3 The Outcome Hypothesis
As argued by Chiyachantana et. al (2005), capital structure is determined as an “outcome” of corporate governance quality. Firms with low governance quality suffer more severe agency problems. Managers of these firms are better able to exploit shareholders and place their private benefits ahead of those of the shareholders. As argued by agency theory and shown by empirical evidence, debt plays a role in controlling agency costs, making it more difficult for opportunistic managers to misbehave.

In firms with poor governance, managers experience less monitoring and are more likely to behave opportunistically. These managers are more likely to carry debt at a sub-optimal level because they do not want to impose additional constraints on themselves in the form of fixed interest payments or be deprived of “free” cash flow that they have control over. Therefore, this view predicts that poor governance quality is associated with low leverage. In other words, there is a positive relationship between governance quality and capital structure.
2.4 The Substitution Hypothesis

Advanced by Chiyachantana et. al (2005), this perspective contends that leverage acts as a “substitute” for corporate governance. Debt helps alleviate agency costs. Likewise, corporate governance is installed to mitigate agency conflicts. Thus, debt and governance play the same role and may substitute for each other. In firms with weak governance, the need for debt to act as a tool for controlling agency costs may be greater than in firms with strong governance. Hence, firms with poor governance quality should be more leveraged.

Alternatively, there is another way to reason for the substitution hypothesis. This argument relies critically on the need for firms to raise money in the external capital markets, at least occasionally. To be able to raise external funds on attractive terms, a firm must establish a reputation for moderation in expropriating shareholders. One way to establish such a reputation is by carrying debt and making interest payments, which reduces what is left for expropriation. A reputation for good treatment of shareholders is worth for most firms with weak corporate governance. As a result, the need for debt to establish a reputation is the greatest for such firms. By contrast, for firms where governance quality is high, the need for a reputation mechanism is weaker, and, thus, so is the need for leverage. This view, a similar argument is made by La Porta (2000) on dividend policy and shareholder protection. Therefore, all else equal, leverage should be higher in firms with weaker governance quality. In other words, an inverse relationship should be observed.

2.5 Empirical Literature on Capital Structure and Corporate Governance

Corporate governance has been identified in previous studies (see Berger et al, 1997; Friend and Lang, 1988; Wen et al, 2002; Abor, 2007) to influence the capital structure decisions of large and listed firms. The extant literature identified the main characteristic of corporate governance to include board size, board composition, CEO duality, tenure of the CEO and CEO compensation. However, empirical results on the relationship between corporate governance and capital structure appear to be varied and inconclusive.

The board of directors is charged with the responsibility of managing the firm and its operation. According to Pfeffer & Salancick (1978) and Lipton & Lorsch (1992), there is a significant relationship between capital structure and board size. Berger et al (1997) find that firms with
larger board membership have low leverage or debt ratio. They assume that larger board size translates into strong pressure from the corporate board to make managers pursue lower leverage to increase firm performance. However, Jensen (1986) argues that firms with high leverage or debt ratio rather have larger boards. The results of Wen et al (2002) and Abor (2007) also show a positive relationship between board size and financial leverage (capital structure). Their findings suggest that large boards, which are more entrenched due to superior monitoring by regulatory bodies, pursue higher leverage to raise company value. Another reason is that larger board membership could result in difficulty in arriving at a consensus in decision-making. These conflicts arising from bigger board size have the tendency of weakening corporate governance resulting in high leverage. Anderson et al (2004) also show that the cost of debt is lower for larger boards, presumably because creditors view these firms as having more effective monitors of their financial accounting processes.

The resource dependence approach, developed from Pfeffer (1973) and Pfeffer and Salancick (1978), emphasizes that external directors enhance the ability of a firm to protect itself against the external environment, reduce uncertainty, or co-opt resources that increase the firm’s ability to raise funds or increase its status and recognition. High proportion of outside directors is believed to be associated with high leverage position.

Wen et al (2002) find a significantly negative relationship between number of outside directors on the board and leverage. They argue that outside directors tend to monitor managers more actively, causing these managers to adopt lower leverage for getting improved performance results. Also, firms with higher proportion of outside directors tend to pursue low financial leverage with a high market value of equity. On the contrary, Jensen (1986), Berger et al (1997) and Abor (2007) argue that firms with higher leverage rather have relatively more outside directors, whiles firms with low percentage of outside directors experience lower leverage.

CEO duality also influences the financing decision of the firm. CEO duality is a situation where the CEO is also the chairman of the board, and this compares with a two-tier leadership structure in which the chair of the board of directors and the CEO position are not held by the same person. Fama and Jensen (1983) define decision management as the right to initiate and
implement new proposals for the expenditure of the firm's resources and decision control as the right to ratify and monitor those proposals. By not allowing an insider to have both decision management and decision control authority over the same proposals, a series of checks and balances are imposed that make it more difficult for managerial insiders to engage in any type of opportunistic behaviour. At the highest levels, this implies that the person with the senior decision management authority (the CEO) should not be allowed to exercise the senior decision control authority as well. Since the board of directors is the highest-level decision control structure in the firm, this requires that the board must not be under the control of the CEO. If the board is controlled by the CEO, it signals the absence of separation of decision management and decision control (Fama and Jensen, 1983).

Since the chairman has the greatest influence over the actions of the board, the separation of decision management and decision control is compromised when the chairman of the board is also the CEO of the firm. Thus, requiring the chair and CEO positions to be held by different people (a two-tier leadership structure) should more effectively control the agency problems associated with the separation of ownership and control typical in the modern corporations.

According to Fosberg (2004), firms with a two-tier leadership structure should be more likely to employ the optimal amount of debt in their capital structures than firms in which the CEO is also the board chair (a unitary leadership structure or CEO duality). He finds that, firms with a two-tier leadership structure have higher debt/equity ratios. However, the relationship is not statistically significant.

Another corporate governance characteristic affecting capital structure is the tenure of the CEO. This refers to length of years the CEO remains in that position. The daily running of the firm is the responsibility of the CEO and management who are accountable to the board of directors. The decisions of the management, especially the CEO, therefore have an impact on the performance of the firm. Empirical evidence suggests a negative relationship between the tenure of CEO and leverage. Berger et al (1997) and Wen et al (2002) identify the tenure of the CEO to be negatively related to the leverage. Leverage is lower when the CEO has a long tenure in
office. Entrenched CEOs and directors prefer low leverage to reduce performance pressures associated with high debt.

The other related characteristic of corporate governance is compensation of the CEO. CEOs with attractive fixed compensation might pursue lower leverage to reduce the financial risk and keep their job for the attractive remuneration (Stulz, 1988; Harris and Raviv, 1988). However, empirical evidence has shown contradictory findings. Jensen and Meckling (1976) show positive association between CEO’s compensation and capital structure of the firm. Wen et al (2002), Friend and Hasbrouck (1988) and Friend and Lang (1988) also find a negative relationship between fixed compensation and financial leverage.

2.6 Governance Principles and Guidelines

Corporate governance principles and guidelines are established by several organizations to provide best practices or benchmarks against which to assess the appropriateness and the quality of the corporate governance system. The development of governance standards and principles has been influenced by ‘social, legal and economic forces’ (Kiel and Nicholson, 2003b). Shalier (2004) evaluates governance practices on the basis of the following elements: predictability, transparency, accountability and participation. These elements form the basis of governance principles. The first element, predictability, applies to consistent interpretation and enforcement of rules, procedures and regulations. The second element, transparency refers to the availability and disclosure of information. Transparency in decision making and implementation reduces stakeholders’ uncertainty and so enhances predictability. The main focus of the third element, accountability, requires identifying who is accountable, to whom are they accountable, and for what are they accountable. The final element of participation enables stakeholders to participate in the decision-making process.

Over the years a number of organizations have been involved in preparing various guidelines and principles of corporate governance. All of these advocate the common threads of core corporate governance perspectives owing to the emergent corporate governance challenge; financial scandals and corporate collapses and has generally been motivated by a desire for more transparency, accountability, integrity and efficiency and a desire to increase investor confidence
The guidelines recognize the fact that corporate governance is not merely compliance, as it works best when it is flexible. In all the codes, it is recognized that directors should act in good faith, exercise due care, possess some skills, and exercise due diligence. Appendix ii shows a summary of the various guidelines.

2.7 Corporate Governance in Kenya
Sections 11(3) and 12 of the Capital Markets Authority Act (the Act) empower the Capital Markets Authority to make rules and regulations to govern capital markets in Kenya. Pursuant to this authority, the Capital Markets Authority developed guidelines on corporate governance practices by public companies in Kenya and incorporated them as a schedule in the Capital Markets Act. The guidelines were developed in recognition of the role of good governance in corporate performance, capital formation and maximization of shareholders value and protection of investors’ rights.

The main objective of these rules is to strengthen corporate governance practices in public listed companies in Kenya and to promote the standards of self-regulation so as to bring the level of governance in line with international standards. Some of the standards taken into account by the Authority while formulating the guidelines include those in the United Kingdom, Malaysia, South Africa, Organization for Economic Cooperation and Development (OECD) and the Commonwealth Association for Corporate Governance. The code of best practice for corporate governance in Kenya issued by the Private Sector Corporate Governance Trust, Kenya, (PRSCG) in 1999 was also useful in the development of the guidelines. This code has also been incorporated into the Act as recommended best practices in corporate governance by public listed companies.

For purposes of the guidelines, the Authority has defined corporate governance as the process and structure used to direct and manage business affairs of the company towards enhancing prosperity and corporate accounting with the ultimate objective of realizing shareholders long-term value taking into account the interests of other stakeholders. The Authority identified a number of principles as essential and critical foundations for good corporate governance practices. These are the minimum standards that public listed companies are expected to adhere
to and they relate to board of directors, shareholders, auditors, public disclosure, chairman and chief executives as explained below:

Every public listed company is to be headed by a board of directors made up of both executive and non-executive directors with a specific requirement that at least one third of the directors should be independent and non-executive. The Authority justifies this requirement with the need to ensure that no individual or group of individuals can dominate the board’s decision-making processes. The procedure for appointment to the board should be formal and transparent, and prospective directors are required to disclose potential areas of conflict that may undermine their position as director. The Authority restricts any person from being a director in more than five listed companies at any one time to ensure effective participation in the board. In addition, election of all directors, except the managing director, is to be conducted at regular intervals or at least every three years with present directors presenting themselves for re-election. Executive directors should have a fixed service contract not exceeding five years with a provision to renew subject to regular performance appraisal and shareholder approval.

The procedure for remuneration of directors and the remuneration package is to be approved by the shareholders. The executive directors’ remuneration should be competitively structured and linked to performance while that of non-executive directors should be in line with that of other directors in competing sectors. Directors are expected to be accountable to shareholders and to offer strategic advice, lead and control the company. In addition, they are to establish an audit and nominating committee and delegate specific mandate to these and other committees. In addition, they are to present an objective and understandable assessment of the Company’s operating position and prospects, and ensure that accounts are presented in line with international Accounting standards.

The Authority requires that auditors of public listed companies be members of the Institute of Certified Public Accountants and comply with the International Auditing Standards. Independent auditors are to be appointed by the shareholders at each annual general meeting.
The board is required to disclose in its annual report, its policies, incentives, quantum and components of remuneration for directors as well as the share options and other forms of executive compensation that have been made or are to be made during the financial year. Other forms of disclosure include the ten major shareholders of the company, the aggregate loans held by directors and any management or business agreements entered into by the company and its related companies that may result in a conflict of interest. The system of corporate governance required by the Authority relies on the board of directors rather than the shareholder instruments of corporate governance. The focus on directors has been attributed to the fact that corporations need quality and effective leadership which is responsive, transparent and accountable in order to achieve their objectives, effectively discharge their responsibilities, create wealth and be sustainable in the long term (Gatamah, 2004).

The guidelines prescribe a clear separation of the role and responsibilities of the chairman and chief executive officer (CEO) to ensure a balance of power of authority and to provide for checks and balances so that no individual has unfettered powers of decision-making. In the event that the role of the chairman and CEO are combined, disclosure of the same is required to the shareholders in the company’s annual report. A chairman is precluded from holding a similar position in more than 2 listed companies at any one time to ensure effective participation in the board.

The recommendations of best practices, summarized below, relate to the role and responsibilities of the board of directors, the position of the chairman and chief executive, the rights of shareholders, the conduct of annual general meetings and the role of audit committees.

The role and responsibilities of the Board of Directors is to appoint a nominating committee consisting mainly of independent and non-executive directors to propose new nominees for the board and consider candidates for directorship proposed by the chief executive and shareholders. The proposed candidates should only be considered if they are persons of caliber, credibility and who have necessary skills and expertise to exercise independent judgment on issues necessary to promote the company’s objectives and performance. The Board of Directors should also appoint a remuneration committee or assign mandate to a nominating committee made up of independent
and non-executive directors to recommend to the board the remuneration of the executive directors and the structure of their compensation package. The whole board should determine the remuneration of non-executive and independent directors.

The consolidated total remuneration of the directors should be disclosed to the shareholders in the annual report. The structure of the board should reflect the company’s shareholding structure without being biased towards representation by a substantial shareholding (not less than fifteen per cent of the voting shares) structure and provide a mechanism for representation of the minority shareholders without undermining the collective responsibility of the directors.

The role of the chairman and CEO should be separated. However, where it is combined a clear rationale and justification must be for a limited period, be approved by shareholders, include measures to ensure no one individual person has unfettered powers of decision in the company and include a plan for separation in the future; the chairman should be an independent and non-executive director; a clear succession plan for the chairman and CEO should be put in place to avoid unplanned and sudden departures which could undermine the company’s and shareholders’ interest; the CEO is obliged to provide necessary information to the board in the discharge of the board’s business.

The Audit committee should consist of at least three independent and non-executive directors who report to the board. The chairman of this committee should also be an independent and non-executive director. The board should disclose whether it has an audit committee and the committee’s mandate in its annual report. The committee should obtain professional advice and invite or consult with outsiders with relevant experience. The committee should also review the quarterly, half-yearly and year-end financial statements of the company.

2.8 Research Analytical framework
Our analysis was carried out in a panel data framework due basically to its advantage of allowing for a broader set of data points. Thus, we specify the basic framework for our analysis in the form of the following regression equation:
\[ Y_{it} = \beta x'_{it} + \alpha z'_{i} + \epsilon_{it} \]

Where \( i = 1, \ldots, N \) and \( t = 1, \ldots, T \) and \( x_{it} \) is a K-dimensional vector of explanatory variables not including the constant. In the equation, the heterogeneity or individual effect is \( \alpha z'_{i} \) where \( z'_{i} \) represents a constant term and a set of observable and unobservable variables. With \( z' \) containing only a constant term, Ordinary Least Squares (OLS) thus provides consistent and efficient estimates of the common and the slope vector \( \beta \). However, if \( z' \) is unobserved and correlated with \( x_{it} \) then the OLS estimators are biased and inconsistent due to an omitted variable. Dealing with this situation, we employ either the fixed or random effects models. The fixed effect is specified as seen in the following equation:

\[ y_{it} = \beta x_{it} + \alpha_{i} + \epsilon_{it} \]

where \( \alpha_{i} = \alpha z_{i} \) and captures all the observable effects and specifies an estimable conditional mean. Since the fixed effects are not time variant and therefore non-stochastic, we consider the random effects which operate on the assumption that the individual unobserved heterogeneity formulated is uncorrelated with the included variables as shown in the following equation:

\[ y_{ii} = \beta x'_{it} + E(\alpha z'_{it}) + [z'_{i} - E(\alpha z'_{i})] + \epsilon_{it} \]

which could be reduced to the form

\[ y_{it} = \beta x'_{it} + \alpha + \epsilon_{it}^{*} \]

This is a linear regression model with a compound disturbance that may be consistently estimated by least squares. Thus, the use of either the fixed or random effect is dependent on the behaviour of the components of the error term:

\[ \epsilon_{it} = \mu_{i} + \nu_{it} \]
2.8.1 Empirical Model Specification

From the above, our model was based on that of Wen et al. (2002) with some modifications. The modification of the model involves the inclusion of other standard capital structure variables that are not captured in the model used by Wen et al. (2002). Hence the model is specified as follows:

\[ Y_{it} = \alpha_0 G_{it} + \alpha_1 X_{it} + \ell_{it} \]

where \( Y_{it} \) is the dependent variable (leverage) measured by the ratio of debt to assets. \( G_{it} \) is a vector of governance characteristics; \( X_{it} \) is a vector of standard capital structure variables serving as control and \( \ell_{it} \) is the error term. Thus, \( Y_{it} \) captures short-term leverage, long-term leverage, and total leverage; \( G_{it} \) captures Board size, Board composition, and CEO duality as measures of corporate governance. With short-term leverage we are referring to debt obligations with maturity periods of one year or less, while long-term leverage refer to debt obligations with maturity periods that expand beyond two years.

2.8.2 Estimation issues

The most basic estimator of panel data sets is the pooled Ordinary Least Squares (OLS). In the simplest case in which there are no firm specific and time specific effects the ordinary least square is the most appropriate. Johnston and DiNardo (1997) recall that the pooled OLS estimators ignore the panel structure of the data, treating observations as being serially uncorrelated for a given firm with homoscedastic errors across individuals and time periods. A more appropriate approach is therefore to estimate the model using other panel data techniques. In estimating our model, unobservable effects can be accommodated using one of two techniques. Thus, to reduce the number of parameters to be estimated it is possible to justify treating the individual fixed effects as being drawn from some distribution. The parameters of this distribution then become parameters to be estimated. The unobservable effects are therefore included in the error term. The variance-covariance matrix of the resulting non-spherical errors are transformed to obtain consistent estimates of the standard errors. In this case, the random effects estimator is the most appropriate (Hsiao, 1989).
However, a problem arises with the random effects estimator if the unobservable effects which have been included in the error term are correlated with some or all of the regressors. This simultaneity makes the random effects estimator inconsistent. As a consistent alternative to the random effects estimator, a dummy variable could be included for each firm. This estimation approach yields consistent estimates regardless of the correlation between firm specific error components and the regressors. However, it is less efficient than the random effects estimator. The inefficiency arises because the fixed effects estimator requires a separate parameter to be estimated for each firm in the sample in place of the single variance estimate that is required for the random effects estimator.

2.8.3 Choosing between random and fixed effects
Hausman (1978) suggested a test to check whether the individual effects are correlated with the regressors. Under the null hypothesis of orthogonality, that is, no correlation between individual effects and explanatory variables, both random effects and fixed effects estimators are consistent but the random effect estimator is efficient while fixed effects are not. Under the alternative hypothesis that individual effects are correlated with the regressors, the random effects estimator is inconsistent while the fixed effects estimator is consistent and efficient.

In addressing this problem, Greene (1997) recalls that under the null hypothesis, the estimates should not differ systematically. Thus, a test based on a contrast vector $H$ is carried out where:

$$H = \left[ b^{GLS} - b^w \right]' \left[ V(b^w) - V(b^{GLS}) \right]^{-1} \left[ b^{GLS} - b^w \right]$$

In this case, $H$ is approximately chi-squared distributed with $k$ degrees of freedom and $k$ is the number of regressors excluding the constant. Thus, in carrying out our regression, we test the hypothesis that there is no correlation between individual effects and the explanatory variables using our baseline model and the results of the Hausman specification test reported in subsequent regression results.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Population and Sample
A census study of all firms that have been consistently listed on the Nairobi Stock Exchange over a five financial year period (2003/2004-2007/2008) was done. These companies number 47. This period was considered representative to provide sufficient data for a reliable regression model so as to ascertain the strength of the relationship.

3.2 Data Collection
For the purpose of this study, both primary and secondary data was used. The primary data collected was on corporate governance and was collected from CEOs of the listed companies (questionnaire attached). The researcher used a validated structured questionnaire for primary data collection. The questions were closed and structured in both yes/no basis. A pilot survey of 10 respondents was conducted in pre-testing the questionnaires for validity and practicality. The lessons from the survey formed the basis for the review of the questionnaire administration for the main survey. The final survey was self-administered. Drop and pick later approach was utilized. Response rates were continuously and closely monitored by making follow up reminder calls to the respondents after the survey was distributed. To ensure quality of responses the respondents were urged to be as honest as possible in filling the questionnaire. Again, participation was voluntary, anonymous and confidential.

The secondary data was on capital structure of the firms and was collected from annual financial statements of the target firms that are quoted at the Nairobi Stock Exchange. The latter information was available from the Nairobi Stock Exchange, the Capital Markets Authority and the Company Registry, and the annual published financial statements.
3.3 Data specification

For the dependent variable, we used the firm’s debt ratio measured as the ratio of total debt to total assets (that LEV = Leverage). For a deeper understanding of further relationships, we breakdown leverage into short-term leverage (STL) and long-term leverage (LTL) which are measured as the ratio of short-term debts and long-term debts to assets respectively. Regarding the independent variables, we use Board size (BDS) measured by the number of board members, Board composition (BDC) measured by the ratio of non-executive board members to board size, which is also a measure of board independence, and CEO duality (CEO) which is a dummy and is equal to unity when a CEO doubles as board chairperson and zero otherwise. CEO tenure and compensation were not disclosed by the firms. Due to model specification inadequacy, we include some standard determinants of capital structure as control variables. These include profitability, firm risk, firm size, firm age and firm growth opportunities. We measure profitability as the return on assets (ROA) captured by the ratio of EBIT (earnings before interest and taxes) to total assets; firm size (SZE) is measured by using net total assets; CIN is the firm’s growth rate (opportunity) and is measured by the annual rate of change in turn-over (that is,

\[
\left[ \frac{\text{TurnOver}_i - \text{TurnOver}_{i-1}}{\text{TurnOver}_{i-1}} \right];
\]

age (AGE) is measured by the number of years of operation using the year of incorporation as reference; and firm risk (RSK) is measured by earnings variability.

3.4 Data Analysis

As discussed in the literature, data analysis was done using pooled Multivariate Ordinary Least Squares method. Pooled panel data analysis was employed because it is more suited for this study.
CHAPTER FOUR

4.0 DATA ANALYSIS AND DISCUSSION OF EMPIRICAL FINDINGS

4.1 Descriptive analysis

Table 4.1 shows the summary statistics of both dependent and independent variables. The mean board size is about eight with the minimum and maximum being three and thirteen respectively. There is also some amount of variation in this ratio across the cross-section of firms as seen in the standard deviation between the cross-sections.

With board composition, the mean ratio of 17.7% suggests that more insiders serve on these boards as opposed to outsiders. This also suggests that these boards are relatively less independent (John and Senbet, 1998). However, the minimum and maximum of 0 and 71.2% is an indication that some of the boards are largely independent. On the average, 17% of the boards operate a 1-tier board structure meaning that about 83% of the firms have the critical roles of decision-taking and decision-management embedded in two personalities and this augurs well for firm management.

The standard deviation of 0.38 between cross-sections shows that these firms are widely dispersed with regards to CEO duality. Most of the firms are doing well with regards to profitability. Again, it is evident that a large number of the firms are highly leveraged and most of them depend on long-term as opposed to short-term debt. Once again, most of the firms have been operating for the past 59 years. Furthermore, most of these firms are considered relatively risky as shown by their average earning variability of 40%, though the minimum risk measured is 0.00002.
Table 4.1: Corporate governance and financing choices of firms - Summary statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDS</td>
<td>7.8066</td>
<td>2.6188</td>
<td>3</td>
<td>13</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>2.6720</td>
<td>3</td>
<td>13</td>
<td>7.8066</td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>7.8066</td>
<td>7.8066</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BDC</td>
<td>0.177089</td>
<td>0.1274265</td>
<td>0</td>
<td>0.71248</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>0.1264454</td>
<td>0</td>
<td>0.71428</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0.17779</td>
<td>0.17779</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO</td>
<td>0.1698113</td>
<td>0.3763556</td>
<td>0</td>
<td>1</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>0.3798826</td>
<td>0</td>
<td>1</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0.1698113</td>
<td>0.1698113</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.0815525</td>
<td>0.5648411</td>
<td>-2.3421</td>
<td>7.73582</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>0.2510516</td>
<td>-0.460781</td>
<td>1.542153</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0.5011093</td>
<td>-1.799766</td>
<td>6.275219</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STL</td>
<td>0.4049035</td>
<td>0.2900415</td>
<td>0.01087</td>
<td>0.9975</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>0.0482773</td>
<td>0.3663556</td>
<td>0.489746</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0.2876244</td>
<td>0.0049418</td>
<td>0.98226</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTL</td>
<td>0.7875697</td>
<td>0.680053</td>
<td>0.00125</td>
<td>5.5357</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>0.1072186</td>
<td>0.5859774</td>
<td>0.8661719</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0.68233289</td>
<td>0.0558261</td>
<td>5.547257</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>1.192473</td>
<td>0.6553353</td>
<td>0.011337</td>
<td>6.22716</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>0.5169143</td>
<td>0.739418</td>
<td>4.451647</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0.3766239</td>
<td>-2.497145</td>
<td>3.607903</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>59.00483</td>
<td>26.12683</td>
<td>8</td>
<td>152</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>25.89469</td>
<td>8</td>
<td>152</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0.4072797</td>
<td>55.00472</td>
<td>59.00472</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>3.55e+07</td>
<td>3.7e+08</td>
<td>45254</td>
<td>5.40e+09</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>1.5e+08</td>
<td>50968.6</td>
<td>1.14e+09</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>3.29e+09</td>
<td>-1.04e+09</td>
<td>4.30e+09</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RSK</td>
<td>0.3980358</td>
<td>0.2879798</td>
<td>0.00002</td>
<td>1.2266</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>0.205919</td>
<td>0.006647</td>
<td>0.706139</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>0.1996487</td>
<td>-0.2164381</td>
<td>1.016036</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIN</td>
<td>0.6279688</td>
<td>7.677573</td>
<td>-7.4965</td>
<td>111.1172</td>
<td>N=212</td>
</tr>
<tr>
<td></td>
<td>1.0768228</td>
<td>-0.1031588</td>
<td>2.4838807</td>
<td></td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>7.61165</td>
<td>-6.7653772</td>
<td>109.2614</td>
<td>T=4.5</td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: N refers to overall panel observations (n*T), n is the cross-sectional observations (firms), T is the time frame.

4.2 Regression analysis

In Table 4.2, the results of the Hausman specification test do not allow us to reject the null hypothesis that the difference in coefficients is not systematic. Given such results, the preferred model is the Random-effects GLS because it is consistent and efficient under the circumstances. Model 1 has been used to establish relationships within sectors, while model 2 measures relationships between sectors.

The study shows a positive correlation between short-term debt, long-term debt, total leverage and corporate board size, thus contradicting the findings of Berger et al. (1997) who showed that firms with large board sizes employ less leverage. The positive relationship between the board size and leverage suggests that larger boards employ a high debt policy to raise corporate value. This may be due to an apparent lack of consensus building due to board size resulting in weaker corporate governance. Also, our finding is consistent with other studies (Jensen, 1986; Wen et al., 2002; Abor, 2006) and thus confirms the argument by Anderson et al. (2004) that the cost of debt is lower for larger boards probably due to the fact that creditors view these firms as essentially having an effective monitoring system in place. Again, this could be due to the fact that large board sizes, which are relatively more entrenched due to monitoring by regulatory bodies, make it a deliberate policy to target higher leverage for the purpose of enhancing corporate value.

The results of the study show that the independence of the board through the appointment of more outside directors is negatively related to short-term leverage but positively related to long-term debt and total leverage. While the relationship between short-term leverage and the independence of the board contradicts other studies, the positive relationship between board independence and both long-term leverage and total leverage confirms earlier findings by Jensen (1986) and Berger et al. (1997) that firms with higher leverage tend to have more outside directors. It also supports the argument by Pfeffer (1973) and Pfeffer and Salancick (1978) that when a firm has more external directors, it enhances the firm’s ability to protect itself against the
external environment which in turn increases the ability of the firm to raise funds or increase its value. It must however be noted that board independence is insignificant in explaining both long-term and total leverage.

The study also shows that when a CEO is also the board chairperson, agency costs rise and this discourages lenders from investing in such entities leading to a lower leverage ratio. The finding of the study is consistent with earlier findings by Fosberg (2004) that a two-tier leadership structure results in a higher debt: equity ratio. Although the study shows that when a CEO combines as board chairperson it has a positive impact on long-term leverage, the result is not significant. The result for short-term leverage is highly significant as compared to total leverage buttressing the argument that one person occupying the two positions leads to a conflict of interest and higher agency costs thereby discouraging investment in such firms.

The control variables in the regression also showed signs which are consistent with standard capital structure theories. Thus, firms that generate internal funds largely tend to avoid employing more debts. This is basically because, while profitable entities may have better access to debt finance, the demand for debt finance may probably be lower if retained earnings are adequate to finance new investments according to the pecking order theory. The negative effect of risk means that below-average performers tend to be less leveraged. That is, firms with more risk exposure tend to control risk by reducing financial risks and therefore employ less debt. This is due to the fact that such firms find it difficult to sustain financial risk. Age, as a measure of reputation, is also positively related to short-term leverage but insignificant in determining both long-term and total leverage.

The size of the firm appears inconclusive in determining firm leverage. While it is positively related to short-term leverage, it is negatively and significantly related to both long-term and total leverage. This is because large firms are more diversified and thus are capable of employing higher leverage. Again, lenders are more willing to support large firms because of the perception of the existence of lower risk levels compare to small firms. However, the findings of the study suggest that firms with the capacity to employ debt may use less debt primarily as a result of their ability to generate enough internal funds as shown by the profitability and risk variables.
Surprisingly, the growth opportunity or potential of a firm does not influence a firm’s ability to employ either short-term or long-term debt, or total debt.
5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATION

5.1 SUMMARY AND CONCLUSION

Corporate governance refers to how corporate entities ought to be run, directed and controlled. It is indeed believed that better corporate governance enhances a firm’s profile through better access to finance, lower cost of capital, better performance and preferential treatment on the part of all stakeholders. Of critical importance is the fact that the concept of corporate governance is now dominating the policy agenda of most developing nations primarily because of the 1997 East Asia crisis, the relative lack of or existence of weak corporate governance mechanisms and the current global financial and economic crisis that has subjected the resilience of the global financial system to significant pressure following problems in the US subprime mortgage market. Corporate governance may also facilitate access to capital markets and boost the profitability of firms.

This study looked at corporate governance and its relationship with financing choices of firms by using data from 47 listed firms on the Nairobi stock exchange covering the period 2003/04 to 2007/08. A random-effects GLS panel data regression model was employed and results show that corporate governance does indeed influence the financing decisions of firms.

Specific findings of the study indicate that firms with larger board sizes employ more debt, irrespective of the debt’s maturity period, in order to raise corporate value. The regression results also show that while independence of the board positively affect both long-term and total leverage, it is negatively and significantly correlated with short-term debt. Similarly, when a CEO doubles as board chairperson, less short-term debt and to some extent total leverage are employed.

In conclusion therefore, it is recommended that firms listed on the Nairobi Stock Market should position themselves by strengthening governance structures in order to promote their attractiveness and therefore their capacity to access financial markets. One of the mechanisms
that has been found to be a sound corporate governance principle is board independence. It is therefore recommended, in tandem with the King Report (1994, 2002), that corporate entities should make more use of external directors so as to ensure board independence and send a positive signal to potential investors, particularly debt-holders. Another policy recommendation that arises out of our findings refers to the ability to strike a good balance between quality and quantity with regards to board sizes. Since larger board sizes discourage investors, it is our recommendation that corporate entities should not sacrifice quality for quantity with regards to board appointments.

5.2 LIMITATIONS OF THE STUDY
This study covered all the companies that had been consistently listed at the Nairobi Stock Exchange over the period 2003/2004 and 2007/2008, all the companies’ financial year does not start and end at the same time. Some companies have their financial year starting from January and ending in December, while others start from July and end in June. Some adjustments to make the accounting period uniform may therefore have been in order, but since the financial results were not broken into monthly or quarterly results, the study extracted information from the published results covered over the five year period without adjustments but this was considered to be a fair representation for comparison purposes.

This study would have been more conclusive if it included the large companies which are not necessarily listed at the Nairobi Stock Exchange, but this was not possible because of logistics of collecting data from all those companies.

5.3 SUGGESTION FOR FURTHER RESEARCH
This study only covered firms that are listed at the Nairobi Stock Exchange. There are large limited liability companies that are not listed, such as Bidco Oil Refineries and Zain. A study may be conducted to establish whether the relationship between capital structure and corporate governance of all large firms, whether listed or not, is the same as the relationship described in the findings of this study.
REFERENCES


# APPENDIX I: EXAMPLES OF CORPORATE GOVERNANCE GUIDELINES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>As many as possible</td>
<td>Clear preference for split</td>
<td>Not covered</td>
<td>Quarterly</td>
<td>No</td>
<td>Adoption of IAS/U.S. GAAP Fiscal boards</td>
</tr>
<tr>
<td>CVM Code (2002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Tag-along rights</td>
</tr>
<tr>
<td>France</td>
<td>At least one-half of board</td>
<td>No recommendation</td>
<td>Regularly, for lead auditors</td>
<td>No recommendation given</td>
<td>No</td>
<td>Dual statutory Auditors</td>
</tr>
<tr>
<td>Russia</td>
<td>At least one-quarter of board</td>
<td>Split required by law</td>
<td>Not covered</td>
<td>Quarterly</td>
<td>No</td>
<td>Managerial boards</td>
</tr>
<tr>
<td>CG Code (2002)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>At least one-third of board</td>
<td>Recommended</td>
<td>Not covered</td>
<td>Quarterly</td>
<td>Yes</td>
<td>Disclosure of pay for family members of directors/CEOs</td>
</tr>
<tr>
<td>CG Committee (2001)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Majority of non-executive directors</td>
<td>Recommended</td>
<td>Periodically, for lead auditors</td>
<td>Semiannually</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Cadbury Code (1992)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combined Code (2003)</td>
<td>At least one-half of board</td>
<td>Clear preference for split</td>
<td>Not covered</td>
<td>Semiannually, per listing rules</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>United States Conference Board (2003)</td>
<td>Substantial majority of board</td>
<td>Separation is one of three acceptable options</td>
<td>Recommended for audit firm</td>
<td>Quarterly, as required by law</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>South Africa (King II Report) 2004</td>
<td>As many as possible</td>
<td>Recommended</td>
<td>Recommended</td>
<td>Semiannually</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Coombs and Wong (2004)*
## APPENDIX II: GOVERNANCE QUESTIONNAIRE

Please indicate your responses in regards to the following corporate governance practices in your company.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board size (BDS)</td>
<td>Indicate the number of Board members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board composition (BDC)/</td>
<td>Indicate the number of non-executive board members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Duality (CEO)</td>
<td>Please indicate whether the CEO doubles as Board Chairperson (indicate 1 if yes, 2 if otherwise).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Compensation</td>
<td>CEO total annual cash remuneration and other monetized benefits (in Kshs.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Tenure</td>
<td>CEO tenure (in years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX III: SUMMARY OF DATA ANALYSIS

Corporate governance and financing choices of firms (Regression results)

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLE</th>
<th>Short-term Leverage (Random Effect Estimation)</th>
<th>Long-term Leverage (Random Effect Estimation)</th>
<th>Leverage (Total) (Random Effect Estimation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 1</td>
</tr>
<tr>
<td>Board size</td>
<td>0.024877 (2.20)**</td>
<td>0.0230226 (2.64)**</td>
<td>0.024663 (0.91)</td>
</tr>
<tr>
<td>Board independence</td>
<td>-0.2768097 (-1.95)**</td>
<td>-0.3465926 (-2.17)**</td>
<td>0.5654548 (1.38)</td>
</tr>
<tr>
<td>CEO duality</td>
<td>-0.1758673 (-4.02)**</td>
<td>-0.3465926 (-2.17)**</td>
<td>0.5654548 (1.38)</td>
</tr>
<tr>
<td>Firm growth</td>
<td>-0.000103 (-0.47)</td>
<td>-4.46e-06 (0.18)</td>
<td>0.0000383 (0.60)</td>
</tr>
<tr>
<td>Profitability</td>
<td>-0.1129504 (-3.75)**</td>
<td>0.0154349 (0.12)</td>
<td>-0.1631324 (-1.34)</td>
</tr>
<tr>
<td>Risk</td>
<td>-0.3587314 (-6.09)**</td>
<td>-0.0537259 (-0.32)</td>
<td>-0.4124573 (-2.55)**</td>
</tr>
<tr>
<td>Log of firm age</td>
<td>0.0400735 (1.19)</td>
<td>0.0613251 (1.62)**</td>
<td>-0.1346571 (-1.38)</td>
</tr>
<tr>
<td>Log of firm size</td>
<td>0.0150849 (1.07)</td>
<td>0.023782 (1.60)**</td>
<td>-0.0931517 (-2.28)**</td>
</tr>
<tr>
<td>Constant</td>
<td>0.0589993 (0.28)</td>
<td>-0.3111427 (-1.45)</td>
<td>2.43692 (4.02)**</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.67</td>
<td>0.15</td>
<td>0.06</td>
</tr>
<tr>
<td>No. of Obs.</td>
<td>212</td>
<td>212</td>
<td>212</td>
</tr>
</tbody>
</table>

Test of probability

| Wald Chi2 (8) = 118.54 [0.0000] | Wald Chi2 (5) = 44.93 [0.0000] | Wald Chi2 (8) = 13.56 [0.0940] | Wald Chi2 (8) = 14.93 [0.0606] | Wald Chi2 (6) = 13.68 [0.0334] |

Hausman test

| Chi2 (8) = 1.66 [0.9897] | Chi2 (5) = 3.27 [0.6579] | Chi2 (8) = 2.40 [0.9664] | Chi2 (8) = 1.26 [0.9960] | Chi2 (6) = 1.05 [0.9837] |

Note: All regressions include a constant. T-statistics are in parenthesis and Probability values in square brackets. ** indicate significance at 5 per cent level.