

**Managerial Entrenchment and Firms Financing Choices:
A Study of Non-Financing Firms Listed on Kenya's Nairobi Securities
Exchange**

Jane Wanjari Maimba

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**School of Graduate Studies
Strathmore University
Nairobi, Kenya**

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Name: Jane Wanjeri Maimba

signature:

Date:

Approval

The thesis of Jane Wanjeri Maimba was reviewed and approved by the following:

Dr. Robert Mudida

Strathmore Business School

Strathmore University

Dr. David Wang'ombe

Dean, Faculty of Commerce

School of Management of Commerce

Strathmore University

Prof. Ruth Kiraka

Dean, School of Graduate Studies

Strathmore University

Abstract

In this study, corporate governance is portrayed as spreading its tentacles wide into the public sector via the institutional framework. Therefore it would be myopic to view corporate governance within the confines of a company. Out of this acknowledgement, the study champions the cause of good corporate governance by highlighting the consequences of poor corporate governance. In particular, the study concerns itself with how poor corporate governance influences firms' leverage decisions. In order to carry out this investigation, poor corporate governance is fashioned as managerial entrenchment and data for Kenyan firms listed on the N.S.E is collected.

Upon subjecting Kenyan data to panel techniques, results reveal that entrenchment is rife among Kenyan companies. Entrenchment is perpetrated through ownership concentration, board size, CEO tenure, number of outsiders on a firm's board, executive equity ownership levels and executive compensation. Nevertheless, its occurrence is due to the ineffectiveness of debt which is shown by managers' ability to court more debt rather than less debt which contradicts entrenchment theory. Notwithstanding this, debt is still able to wield its disciplinary power when managers try to entrench themselves via a long tenure in office and executive pay.

Further, results show that large shareholders in Kenyan companies are entrenched which encourages managerial entrenchment since they cause companies to adopt low debt levels. In addition, it emerges that in the agricultural segment of the N.S.E, managers exploit firms' board size and a long tenure in office to entrench themselves. In the commercial and services segment, entrenchment is perpetrated through large shareholders and executive ownership. In the industrial and allied segment, managers take advantage of a long tenure in office and their shareholding in firms to act opportunistically. In the A.I.M.S segment, managers entrench themselves through board size and through manipulating the number of non-executives on their firms' boards.

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Abbreviations

ADF- Augmented Dickey-Fuller

AIMS- Alternative Investment Market Segment

ANCOVA- Analysis of Covariance

AfDB- African Development Bank

BK- Book

BLUE- Best Linear Unbiased Estimator

BOD- Board of Directors

C- Coefficient of the equation

CACG- Commonwealth Association for Corporate Governance

CBK- Central Bank of Kenya

CCG- Centre for Corporate Governance

CEO- Chief Executive Officer

CMA- Capital Markets Authority

COLLAT- Collateral value of assets

CIPE- Centre for International Private Enterprise

ECOMP- Executive Compensation

EOWN- Executive Ownership

FE- Fixed Effects

GDP- Gross Domestic Product

GI- Governance Index

GLS- Generalised Least Squares

IPS- Im-Pesaran-Shin

LLC- Levin-Lin-Chu

LOGBS- Logarithm of Board Size

LOGCEOT- Logarithm of CEO Tenure

LOGCSIZE- Logarithm of Company Size

LSDV- Least Squares Dummy Variable

M2- money and quasi- money supply

MKT- Market

NEX- Non-executive

NDTAX- Non-Debt Tax shields
NSE- Nairobi Securities Exchange
OC- Ownership Concentration
OECD- Organisation for Economic Corporation and Development
POLS- Pooled Ordinary Least Squares
PP- Phillips-Perron
PROFIT- Firm Profitability
SEC- Securities and Exchange Commission
SG&A- Selling General and Administrative expenses
SDEV- Standard Deviation
SME- Small and Medium Enterprises
TI- Transparency International
UNCTAD- United Nations Conference on Trade and Development

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CHAPTER 1

1.1 Introduction

Corporate governance is about “doing the right things and doing the things right” (Berghe and Levrau, 2004, p.462). It is also a nexus of relationships between a “company’s management, its board, its shareholders and other stakeholders” (OECD, 2004, p.11). Corporate governance instils a structure through which companies are able to pursue their aims and subsequently attain them in addition to enabling them to supervise performance (OECD, 2004). Specifically, the structure enables “managers at the organisational apex to be controlled through the board of directors, its associated structures, executive incentives and other schemes of monitoring and bonding” (Donaldson, 1990, p.376). Moreover, the institutionalisation of corporate governance principles facilitates ethical and honest business dealings and management of a company, good stewardship of company resources, effective risk management and accountability of organisational members (Mintz, 2005).

Effective corporate governance stimulates managers and the board to undertake objectives that are beneficial to the company as well as to its shareholders. The outcome of these actions spill over to the economy in form of growth via the elevation of investors confidence which lowers the costs of finance and motivates firms to efficiently use resources (OECD, 2004). Moreover, corporate governance “cleans up the governance environment, unveils insider relationships and upholds transparency and accountability in both public and private transactions” (CIPE, 2008, p. 1). Additionally, corporate governance facilitates the development of an effective Small and Medium Enterprises (SME) sector - one avenue for poverty reduction - (CIPE, 2004), provides competitive advantage and enables “economic and social progress” (Iskander and Chamlou, 2000).

In establishing corporate governance systems, the “legal, regulatory and institutional framework” is one of the factors that need attention (OECD, 2004). Indeed, manifestations of weak corporate governance can be traced back to this framework. In particular, CIPE (2008) enumerates some of the features of poor corporate governance

as collapsed privatisations, corruption, feeble property rights, financial system melt downs and a failure to attract investments. In this study, weak corporate governance is fathomed as managerial entrenchment in listed companies. The presence of entrenched management is indicative of ineffective corporate governance mechanisms (Berger, Ofek and Yermack, 1997) which means that managers are able to pursue interests which conflict with those of shareholders (Florackis and Ozkan, 2009)^a.

In poor corporate governance regimes, there is a limit to the amount of equity which entrepreneurs can raise from the capital markets. Subsequently, an increase in “industry concentration” is encouraged because the entry of new firms is curtailed (Fulghieri and Suominen, 2010). Moreover, in such regimes, there is greater use of debt (Fulghieri and Suominen, 2010). In contrast, Gugler, Mueller and Yurtoglu (2003); Florackis and Ozkhan (2009)^b find that poor corporate governance regimes use equity. Notably, Du (2008) claims that corruption gives rise to the need for increased bank financing and large equity holders in a bid to minimise the adverse effects it has on corporate governance. However, a comparison of “financial depth” measures between African banking systems and those of the developed world reveal that the former have an inferior record (Andrianaivo and Yartey, 2010).

In addition, it is claimed that due to depressed “penetration rates” and restricted financing to urban areas, the role of banks in African economies is constrained (Andrianaivo and Yartey, 2010). This is the case in Kenya where urban areas have better access to banking services relative to the rural areas due to poor ICT infrastructure in the later areas (G.O.K, 2008). Nevertheless, since equity markets and banks play different but complementary roles in developing nations, as their stock markets develop large companies take on more debt (Demirguc-kunt and Maksimovic, 1996). Even so, these stock markets have a “low market capitalisation, trade low values of shares relative to developed markets” (Singh, 1999), are not highly advanced (Rwegasira, 2000) and are “illiquid” (Andrianaivo and Yartey, 2010). Further, Arun and Turner (2004) observe that banks in developing nations are hesitant to institute governance principles. In addition, in Kenya, an under-developed legal and regulatory framework fails to facilitate the

development of the insurance and capital markets and that of the quasi-banking and sacco sectors. Moreover, it has been reported that some of the problems that plague Kenya's financial sector are corruption, fraud and poor corporate governance (G.O.K, 2008). The major players of Kenya's financial sector are banks and their debt finance is more preferable to equity finance (Ngugi, Amanja and Maana, n.d).

1.2 Statement of the research problem

Due to the underdeveloped state of developing nations' stock markets, Arun and Turner (2004) suggest that such nations will rely more on bank debt. Indeed, Rwegasira (2000) proposes a "bank-based" corporate governance system for African economies as their capital markets fail to meet the prerequisites of a "market-based" corporate governance system. Even so, corporate governance in developing nations has been found to be weaker relative to that in developed countries and enables managers to access equity to fund low return investments (Gugler, Mueller and Yurtoglu, 2003). This in turn implies that managers may be able to access debt through the informational roles of equity markets because developing nations' bourses and banks complement one another according to Demircug-kunt and Maksimovic (1996). Thus, the effectiveness of debt in restricting managerial opportunism is doubtful in developing nations not to mention that banks in these nations are hesitant to institute governance principles and also show symptoms of under-development (Andrianaivo and Yartey, 2010). In effect, it seems that managers are able to dictate their firms leverage choices which ushers in entrenchment according to Berger, Ofek and Yermack (1997). Subsequently, this study postulates that entrenchment - poor corporate governance - will be related to firms leverage choices.

In order to confirm whether this relationship holds, Kenyan listed firms are chosen to be the subjects of this study. This is the case not least because Kenya shows qualities of weak corporate governance but also its stock market development indicators are inferior relative to those of other countries included in the Financial Development Index (2010).

In this regard, Kenya's stock market to GDP ratio is 0.41* which is lower than the worst performing country's 7.79 (Financial Development Index, 2010). Further, its banking development indicators are not better than those of the worst performing country included in the Financial Development Index (2010). Specifically, Kenya's M2/GDP ratio and private credit to GDP ratios are 0.32* and 0.08* respectively relative to the worst performing country's 27.60 and 13.98 (Financial Development Index, 2010). In addition, since Kenyan banks experienced disruptions in the 1984-2005 periods which were associated with poor corporate governance practices (Barako and Tower, 2006-07), it would be of interest to find out whether they rectified their misdeeds via studying if their debt finance to companies is related to entrenchment or not. This is because the corporate governance of banks and their clients are inter-related because of the important role that the former plays in an economy. Therefore bad governance in banks affects the governance of lending clients (Levine, 2004).

1.3 Research Objectives

1. To find out what corporate governance mechanisms are associated with managerial entrenchment.
2. To find out whether a relationship exists between entrenchment variables and firms capital structures.
3. To find out whether entrenchment causes different effects on firms capital structures in the pre-reform and post-reform periods.

1.4 Research Questions

1. What corporate governance mechanisms are associated with managerial entrenchment?
2. Is there a relationship between entrenchment variables and firms capital structures?

* Author's computation.

*Author's computation

3. Does entrenchment cause different effects on firms' capital structures in the pre-reform and post-reform periods?

1.5 Justification of the study

It has been argued that firms in weak corporate governance regimes use more equity than debt (Gugler, Mueller and Yurtoglu, 2003; Fulghieri and Suominen, 2010; Florackis and Ozkhan, 2009^b). However, these arguments are contradicted by those that are adamant that nations which suffer from poor corporate governance use more debt than equity (Arun and Turner, 2004). Specifically, as one of the symptoms that point to weaknesses in the corporate governance environment, corruption necessitates more debt financing (Du, 2008; Fan, Twite and Titman, 2010) in the form of short-term debt (Fan, Titman and Twite, 2010). Other hallmarks of poor corporate governance are collapsed privatisations, feeble property rights, financial system breakdowns and a failure to attract investments (CIPE, 2008).

Unfortunately, these characteristics are found to exist in developing nations and in this study, Kenya. Thus, it is concluded that developing nations including Kenya's corporate governance systems are indeed wanting. Notwithstanding these allegations, La Porta, Lopez-de-Silanes, Shleifer and Vishny, (1996) have found that common law countries are good custodians of investors' rights relative to civil law countries. Therefore, such countries use more equity and less debt which is of a long-term nature (La Porta et.al, 1996).

Common law countries are those which use English law and those whose laws are fashioned after English law (La Porta et.al, 1996). Therefore, in this case, Kenya falls under this categorisation reason being that it was once a British colony which adopted England's 1948 Companies Act after gaining its independence (Musikali, 2008). However, this categorisation of Kenya is confounding, that is, it fits in the class of countries with good corporate governance. This contradicts the earlier discussion that concludes that it has poor corporate governance. Further, in the later class, constituents sources of finance are the subject of debate, whereas in the former class, members

financing is not in doubt, that is, equity financing. Fortunately, a point of compromise seems to bridge the gap between these classes which is, poor corporate governance in Kenya causes firms to use both equity and debt leading to an investigation as to whether this is indeed the case among Kenyan listed firms.

Moreover, an emphasis on the interrelationship between the institutional environment pillar which includes corporate governance and the financial intermediation pillar which make up the financial development index (Financial Development Index, 2010) is in order. This is because financial development as portrayed by the Financial Development Index (2010) is attained by a mix of various components. Among those components are financial intermediation and the institutional environment meaning that weaknesses in either one of them begets failure in efforts to promote financial development.

In Kenya, the inclusion of the financial intermediation pillar as one of the vehicles through which the Kenyan government expects to achieve vision 2030 (CBK, 2008) tells of its importance in the country. However, other pillars of financial development as discussed above should not be neglected so as to prevent a robbing Peter to pay Paul situation. Therefore, this study proposes that those charged with the responsibility of formulating Kenya's financial policy should also focus on the above aspects of financial development which will serve to meet both the public's and corporate stakeholders interests. This is through a strong institutional environment and therefore improved corporate governance and better financial intermediation which brings the country closer to the achievement of financial development for the benefit of all citizens.

1.6 Scope of the study

The focus of this study is on firms listed on Kenya's Nairobi Securities Exchange (NSE) excluding firms operating in the financial services industry. This is because firms in the financial services industry have "marked differences in leverage and corporate governance relative to other industries and sectors" (Berger and Udell, 1997, p. 1415) and face "peculiar regulatory conditions" (Florackis and Ozkan, 2009, p.502).^a Further, this study is about managerial entrenchment and not large shareholder entrenchment. The later is a case which arises when majority shareholders undertake

adverse actions which disenfranchise minority shareholders (Yeh, 2005; Bozec and Laurin, 2008). Therefore, this type of entrenchment is related to only one corporate governance mechanism as distinguished from managerial entrenchment which includes more than one mechanism. Even so, not all corporate governance mechanisms are of concern to this study.

1.7 Organisation of the study

This study is organised into 5 chapters. Chapter 1 gives a generalised view of the subject of corporate governance, states the problem which the study seeks to investigate and justifies why the study needs to be undertaken. Chapter 2 reviews literature on entrenchment and develops hypotheses on the possible links between it and firms financing choices. Chapter 3 develops the research methodology. Chapter 4 presents and discusses the results of the study and chapter 5 concludes the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Corporate Governance: A generalised view of its origins, importance, varieties and their associated weaknesses

This chapter is divided into six sections. Section 2.1 traces the conditions that give rise to corporate governance and its mechanisms from where section 2.2 delves deeper into the theoretical underpinnings of corporate governance with an eye on entrenchment. Subsequent to that discussion, section 2.3 links entrenchment with leverage and reveals the variables associated with entrenchment. In the penultimate section, that is 2.4, attention is diverted to developing countries culminating to a discussion of Kenyan corporate governance experiences. Finally, the chapter ends with section 2.5 which summarises the main themes and section 2.6 where the conceptual framework is developed.

“The constraints that managers impose on themselves and those that are imposed by investors on managers” are subsumed under corporate governance (Shleifer and Vishny, 1997, p.743). These limitations serve the purpose of minimising the “ex post misallocation” of funds in a bid to stimulate the “ex ante” flow of funds from investors (Shleifer and Vishny, 1997). However, Iskander and Chamlou (2000); Bliss (2010) state that what constitutes the subject of corporate governance is ambiguous. Nevertheless, Hart (1995) suggests that whenever agency problems involving organisational members exist and transaction costs frustrate the use of a contract to solve these problems, a corporate governance problem exists.

In general, it is the prerogative of the managers and the owners of a company to sign a contract detailing how funds are to be put into use and how returns are to be allocated amongst themselves. Under utopian conditions, the contract should clearly state the manager’s actions under all world states and how the profits shall be allocated. However, since these conditions are untenable, the manager is conferred with residual control rights to make decisions which serve to fill lacunas created by the partial contract (Shleifer and Vishny, 1997). Nonetheless, Shleifer and Vishny (1997) interject

by noting that residual control rights end up being significant due to the investors free rider problem and the “business judgement rule in America which keeps courts out of the affairs of a company”(p.745). As a consequence, managers are able to engage in opportunism in form of “expropriation of funds through transfer pricing, taking cash out and entrenching themselves”. In light of this, Shleifer and Vishny (1997) suggest that one way of countering the problem of incomplete contracts is through developing “incentive contracts” to align managers and investors interests. However, they warn that incentive contracts are not a panacea to the manager-investor problem as they create fertile opportunities for managers to pursue their own interests especially if they are settled with boards of directors who lack incentives rather than major investors.

Hart (1995) suggests that since partial contracts have more holes than Swiss cheese, they give rise to “contractual costs” and thus it shall behove a company to institute a corporate governance structure. Some of these costs include “costs of thinking of all possibilities that can occur during the course of the contractual relationship, costs of negotiating with others about these plans and costs of writing down these plans in a manner that facilitates their enforcement by a third party, for example, a judge” (p.680). On the other hand, if a governance structure is in place, it shall facilitate the making of decisions which were not pre-specified at the time of contracting (Hart, 1995).

Various forms of governance structures exist where the constituent parties make their firms unspecified decisions. The first form is comprised of a single party who solely makes the company’s decisions. The second form involves a joint ownership of two parties who both make their company’s decisions and the third form is a partnership where decisions are made by a majority vote (Hart, 1995). In addition, there exist a range of ownership structures in the corporate sector with each of them giving rise to different governance problems (Iskander and Chamlou, 2000). In large public companies, there is a problem of separation of ownership and control because of the incidence of numerous shareholders. This demarcation arises because owners delegate their control rights to the board of directors (henceforth, B.O.D) who in turn delegate them to the management (Hart, 1995). Further, the existence of many shareholders attracts the free rider problem which makes them (shareholders) carry out inefficient

monitoring (Hart, 1995; Edwards, Nibler, Berglof and Franks, 2000). The combined effects of inadequate monitoring and the separation of ownership from control create leeway for managers to pursue their interests. Therefore, this necessitates checks and balances to rein in managers' behaviour (Hart, 1995). In "closely held companies", Iskander and Chamlou (2000) point out that the concern is how outside shareholders can prevent the "controlling shareholder from benefiting through self dealing or disregarding the economic rights of minority shareholders".

2.1.1 Corporate Governance Mechanisms

Internal and external corporate governance mechanisms exist to protect shareholders' interests (Walsh and Seward, 1990). Daily, Dalton and Cannella (2003) adjudge that internal governance mechanisms are comprised of a "well structured board, compensation contracts and concentrated ownership holdings" (p.372) whereas the "market for external control" serves as an external governance mechanism when internal mechanisms fail to protect owners' interests. Iskander and Chamlou (2000) state that the internal corporate governance architecture is structured in such a manner that leads to the creation of relationships between "managers and the public, private or concentrated shareholders". These internal arrangements are embodied by "company law, securities law, listing requirements or they can be negotiated among the key players in the governing documents of a company such as the corporate charter, by-laws and shareholder agreements" (Iskander and Chamlou, 2000, p.4). Further, internal controls are integral as revealed by the Barings bank collapse where poor controls failed to detect massive losses that were being incurred by the bank through Nick Leeson's "speculative activities" (Mallin, 2007).

External mechanisms of corporate governance which complement internal arrangements are in the form of "external laws, rules and institutions which level out the competitive environment and discipline insiders whether managers or shareholders" (Iskander and Chamlou, 2000, p.5). In developed market economies, external mechanisms play the role of minimising the discrepancy between common and individual returns. In addition, they reduce costly agency problems by enhancing openness, ensuring conformity and

utilising the oversight role of “regulatory and self-regulatory bodies”. Further, external mechanisms also include the “legal framework for competition policy, the legal machinery for enforcing shareholder rights, accounting and auditing systems, an effectively regulated financial system, the bankruptcy system and the market for corporate control” (Iskander and Chamlou, 2000, p.5).

When internal and external mechanisms are fused, they result into various governance systems which “reflect explicit market structures, legal systems, traditions, regulations, cultural and societal values” (Iskander and Chamlou, 2000, p.6). Subsequently, countries systems of corporate governance will vary (Iskander and Chamlou, 2000) as well as those for various sectors and companies (Iskander and Chamlou, 2000; Pergola and Joseph, 2011). Among developed nations, recognition is given to the Anglo-American (UK and US) system of corporate governance which is characterised by dispersed ownership and the German and Japanese systems which are known for concentrated ownership (Iskander and Chamlou, 2000).

This study investigates corporate governance mechanisms from the lenses of entrenchment and tries to fathom the links between it and firms financing choices. Most studies on the subject have centred on the developed nations and as a result, developing nations have not received due attention. The bedrock of this claim is that it is difficult to come by empirical studies on entrenchment and its probable link to financing choices in developing nations. Thus, this study focuses on Kenya as one of the developing countries in order to draw comparisons with prior studies on developed nations, identify gaps in the existing literature and generate informed conclusions.

2.2 Agency Theory and Entrenchment

“The dominant theoretical lens for examining corporate governance is agency theory. Agency theory provides a rationale for how the modern organisation can be governed, primarily through the provision of two broad sets of controls that is, external and internal mechanisms” (Roberts, Mc Nulty and Stiles, 2005, p.8). Therefore, in this section, agency theory is discussed, out of which entrenchment theory emerges.

The existence of a firm gives rise to a set of contractual relationships from which a variety of agency problems and their attendant costs ensue (Jensen and Meckling, 1976). Agency problems are perceived to invariably arise as long as “decision management”¹ is separated from “residual claims”. Moreover, these problems are not new as “they have long troubled students of corporations.” In fact, they were one of the reasons that led to the formation of the Securities and Exchange Commission (SEC) in America (Fama and Jensen, 1983).

At the heart of agency problems lie agency relationships which entail the conferring of rights by the principle to the agent in the belief that his interests will be attended to. However, since the agent has his own interests, he will seek to fulfill them which leads to a failure to be fully committed to the principle’s cause. Therefore, the principle in a bid to converge his interests with those of his agent, will incur monitoring costs. Likewise, the agent shall suffer costs which discourage him from acting away from his principle’s wishes (Jensen and Meckling, 1976). It is imperative for these costs to be incurred because “it is generally impossible for the principle or the agent at zero cost to ensure that the agent will make optimal decisions from the principle’s viewpoint” (p.5) Even so, there will still be a remnant of agency costs caused by the discrepancies in the decisions that the agent will make relative to those which the principle would have preferred to make. Subsequently, residual losses are sustained in the form of sub-optimal welfare for the principal (Jensen and Meckling, 1976).

Within the setting of a firm, the principle is the shareholder and his agent is the manager. In a scenario where a manager owns all the equity, he makes decisions which do not impair the value of the firm. However, if he disposes off a portion of his ownership, he is able to extract benefits² in self-aggrandisement using the firm’s funds

¹ The decision making process is divided into decision management and decision control. Decision control is necessary when the agent - who carries out decision management - is not affected by the decisions he makes i.e. he is not a residual claimant. Thus in such a case, effective control would be one that is separate from decision management to prevent an agent from undertaking decisions which hurt the interests of residual claimants (Fama and Jensen, 1983).

² These are in the form of perquisites (Jensen and Meckling, 1976)

which impact negatively on the firm's value. In counter attack, the outside shareholders will expend monitoring costs to curb such actions. However, in the event that the equity market is aware of the existence of a divergence of interests in the firm, potential owners shall discount the share price of the firm to reflect the costs of monitoring and the costs of a departure from their interests. As a result, the existing shareholders will experience a reduction of their wealth (Jensen and Meckling, 1976). These interactions between managerial ownership and firm value are demonstrated by Jensen and Meckling (1976) through a series of mathematical proofs. They show that as a manager's shareholding falls, agency costs rise and conversely, as his shareholding increases, agency costs reduce showing a convergence of his and outside shareholders interests. Seeing the positive outcome of increased managerial ownership, Hermalin and Weisbach (1991) posit that other governance mechanisms will not be strongly enforced.

Similarly, Pergola and Joseph (2011) find that firms whose managers own low stock levels perceive a misalignment of managers interests with those of shareholders and as a result, employ more governance mechanisms relative to when their managers own high levels of stock. However, Zerni, Kallunki and Nilsson (2010) point out that under large managerial ownership, the effectiveness of endogenous and exogenous corporate governance mechanisms can be gainsaid. In particular, Brailsford, Oliver and Pua (2002) claim that high levels of managerial ownership lead to entrenchment since managers are awarded significant control rights relative to external owners which makes them immune to limitations which deter their self-serving behaviours.

Apart from allocating shares to managers to control adverse behaviour, agency theory proposes that other mechanisms for example, the stock market, the market for takeovers and an expert board of directors can be employed (Fama and Jensen, 1983). These mechanisms can be classified into two categories that is, internal and external mechanisms with the B.O.D falling under the former and the takeover market falling under the later (Roberts, Mc Nulty and Stiles, 2005). First, the bourse moderates adverse managerial behaviour through pressuring insiders to make decisions that meet shareholders interests because share prices will reveal the current and future impacts of such decisions. Secondly, the takeover market will minimise the control that managers

have over decisions so as to reduce the temptation of pursuing their interests at the expense of shareholders interests. Thirdly, the presence of an expert board ensures the division of decision control from decision management which serves to control managers opportunistic behaviour.

Additionally, agency theory advocates for the control of managers using a B.O.D that is dominated by non-executive directors, a dichotomy between the CEO and chairperson positions and a CEO whose interests are merged with those of shareholders via incentive compensation plans such as stock ownership and bonus schemes (Donaldson, 1990). However, in spite of these proposals for reining in managerial behaviour, Davis, Schoorman and Donaldson (1997) believe that managerial opportunism will not be eliminated completely because those mechanisms fall short of the ideal standards.

Entrenchment as defined by Berger, Ofek and Yermack (1997) is “ the extent to which managers fail to experience discipline from the full range of corporate governance and control mechanisms including monitoring by the board, the threat of dismissal or takeover and stock or compensation-based performance incentives” (p.1411) It is also “the extent to which managers have the ability and incentives to pursue their self-interests and expropriate wealth from shareholders” (Florackis and Ozkan, 2009, p.498)^a. Equally important, entrenchment is viewed as “weak shareholder governance” (John and Litov, 2010). Entrenched managers have been characterised as having “cross-shareholdings” which even though protect the firm against takeover attempts, act as a means of indulging managerial opportunistic behaviour. Thus, to the extent that a takeover is undervalued, managers will be forced to dispose of such shareholding which thwarts takeover attempts and extinguishes entrenchment (Isagawa, 2007).

Lennox (2005); Teshima and Shuto (2008) find that entrenchment occurs at intervening levels of managerial ownership. Specifically, Teshima and Shuto (2008) characterise entrenchment as the existence of “discretionary accruals” and find that they have a direct relationship with intervening ownership levels. However, this relationship holds where the risk of management being replaced is affected by company performance and/or if the manager is able to amass large benefits of control. Lennox (2005) alleges that opportunistic managers are able to create “related party transactions” to satisfy their

interests as well as invest in undertakings that are not beneficial to shareholders. Therefore, auditing is able to prevent such activities by unveiling them. Further, Lennox (2005) observes that intervening levels of ownership neutralise agency costs since as these costs reduce due to the alignment effect, they also increase due to entrenchment. Thus, this results to a non-monotonic relationship between agency costs and managerial ownership (Mc Connell and Servaes, 1990; Lennox, 2005; Teshima and Shuto, 2008; Florackis and Ozkhan, 2009^b). This occurrence brings about a dichotomy between agency theory and entrenchment theory in that as much as both show the reaction of managers to owning low and high levels of stock, the point of departure is at the intervening stock ownership levels where managers are vulnerable to entrenchment (Pergola and Joseph, 2011).

In particular, Pergola and Joseph (2011) shine the spotlight on entrenchment theory by reporting that it is the most plausible theory relative to agency theory in explaining poor earnings quality. In their study, firms with poor earnings quality are those whose managers “intentionally manipulate earnings, shirk and make poor accrual decisions or conduct fraud activities that adversely affect earnings” (p.202). Since entrenchment - as found out by Pergola and Joseph (2011) - is encased between the 30% and 50% levels of insider ownership, it is noted that earnings quality falls with increased managerial ownership implying increased entrenchment among managers. At the lower boundary of the entrenchment range, it is observed that even though outside directors owned more stock, it still doesn’t prevent earnings quality from plummeting.

Conversely, at the higher boundary of the entrenchment range, it is the insiders who own higher levels of stock and as a result, they have the ability to usurp available governance mechanisms rendering them ineffective. This negative effect of high insider ownership is shown by Pergola and Joseph (2011) as a low governance index (GI) - a proxy for various governance mechanisms - which is interpreted to mean that firms whose management have large shareholdings prevent more governance mechanisms from being employed. However, when higher GI’s are introduced in the linear regression model, insider’s negative effect on earnings is minimised. Even so, this result is conditional on

the utilisation of a combination of governance mechanisms as opposed to individual mechanisms (Pergola and Joseph, 2011).

Equally important, the denouement of the cross-sectional regression model constructed by Subramaniam (2001) is that the payment of “golden parachutes” is symptomatic of entrenched management. Likewise, Shleifer and Vishny (1989) state that golden parachutes are examples of “explicit contracts” which management can use to entrench themselves. In particular, Subramaniam (2001)’s model reveals that if a predator firm is successful in its takeover bid of a target with a “golden parachute” policy, it consumes extra returns that are absent in targets without such a policy.

Under conditions of entrenchment, Brailsford, Oliver and Pua (2002) reveal in their study, that the effectiveness of external block holders is dampened and thus they are unable to restrict adverse actions of the management. In addition, Miguel, Pindado and de la Torre (2005) find interdependencies between insider ownership, debt and dividends in firms where the interests of the insiders and outsiders converge. However, where entrenchment is rife, they find that interdependencies no longer exist and that there are reductions in leverage. John and Litov (2010) find that firms with entrenched managers use debt relative to firms with no incidences of entrenchment which use equity. Moreover, Florackis and Ozkhan (2009)^a report that where management is entrenched, costs emanating from the conflict between managers and external shareholders are significant.

Another effect of entrenchment is that it influences the decision of whether or not to pay dividends and the amount of such payments (Hu and Kumar, 2004). Using logit and tobit regression models, Hu and Kumar (2004) observe that entrenchment inducing corporate governance variables are positively associated with the probability of paying dividends and the probability of high dividend payments. This association is linked to “weak manager types” who “voluntarily commit to payouts as a protection against disciplinary sanctions by outsiders” (p.760). Conversely, entrenchment moderating corporate governance variables are negatively associated with the probability of paying dividends and the probability of high dividend payments. This association characterises

the “strong manager types” (Hu and Kumar, 2004). In contrast, Chava, Kumar and Warga (2009) find that since entrenched management engage in excessive firm building, they prefer cash which means that they will prevent high dividend payouts from being made.

Further, Shleifer and Vishny (1989) argue that there are various leeways that managers can exploit to entrench themselves. Using an entrenchment model as the basis for their arguments, Shleifer and Vishny (1989) posit that managers can become entrenched by pursuing “manager-specific investments,” through “implicit contracting” and through participating in acquisitions and divestitures. “Manager-specific investments” are those investments which are aligned with the manager’s skills and competencies in such a way that he is best placed to run and manage them better than his “potential replacement”.

By undertaking these investments, the manager hopes to significantly increase the firm’s profitability under his tenure relative to that of his “potential replacement”. If he is successful in doing so, his compensation increases, he becomes more valuable to shareholders because of the sunk costs of the investment and he reduces the chances that he will be dismissed due to the associated high termination costs. However, these decisions destroy shareholder wealth especially if they are not value maximising - which seems to be the case where managers would do anything to keep their jobs - because they are undertaken regardless of whether they benefit shareholders or not.

The second means that managers entrench themselves is through “implicit contracts”. These contracts have the potential of imputing value to a managerial personality especially if shareholders attach a value to the performance of such contracts. Therefore, if managers undertake them, shareholders will view them as being valuable even though there is no quid pro quo to managers for complying with such contracts. In this way, the manager becomes entrenched because part of the firm’s value is dependent on his continued employment with the firm.

Thirdly, through acquisitions and divestitures, managers can become entrenched. According to Shleifer and Vishny (1989), managers acquire targets which they are able to run better than their “potential replacements” so as to reduce the likelihood of their dismissal. These acquisitions will be undertaken regardless of whether they enhance

shareholder wealth or not. Therefore, in the wake of such decisions, managers are likely to “overpay” for their target and destroy shareholder wealth. Conversely, managers are likely to divest whenever they perceive that they are unable to out perform “potential replacements” in a particular business line(s). Therefore, such managers will sell a business line(s) to the highest bidder where the price reflects the superior ability of the “potential replacement” manager - in running the divested business line(s) - and the possibility for higher earnings under his tenure. Even so, these negative effects of entrenchment can be mitigated (Shleifer and Vishny, 1989). First, firms should institute a capital rationing policy which reduces the rate at which managers invest. However, as a side effect, this policy may prevent value enhancing investments from being pursued. Secondly, Shleifer and Vishny (1989) advise that the B.O.D should “hire the right managers in the first place” and thirdly, that the B.O.D can offer protection to the CEO against competition for his position and/or “lucrative severance pay.”

On the contrary, Almazan and Suarez (2003) claim that even under conditions of entrenchment, shareholders are able to benefit by using “severance pay” to induce management to attend to their interests. They reason that “severance pay” can be used to trigger “control rents” which will only accrue to well performing managers if the firm has a strong B.O.D, with the aim of reducing agency costs³. However, where the firm has a weak B.O.D (which encourages entrenchment), Almazan and Suarez (2003) posit that “control rents” will be futile but still, severance pay will be useful to shareholders in achieving agreeable results through threatening the management with dismissal. By doing so, managers who take actions agreeable to owners are rewarded whereas those who do not pursue such actions are put under pressure to justify their continued employment with the company (Almazan and Suarez, 2003).

Further, stewardship theory challenges agency theory from which entrenchment theory is birthed (Davis, Schoorman and Donaldson, 1997). According to stewardship theory,

³ Optimal governance structures should aim at minimising agency costs to shareholders. These include costs of inducing the manager to act in a manner that serves their interests for example, incentive contracts and the costs of foregoing the decision to replace the incumbent manager with another who may attend to their interests (Almazan and Suarez, 2003).

the manager is a steward who works towards the common good of the organisation's stakeholders and shareholders and shuns self-serving behaviour. He will achieve this by improving the organisation's performance which will meet competing stakeholder interests while at the same time increase his utility. By pursuing this strategy, stewardship theory suggests that the steward derives more utility than when he indulges in opportunistic behaviour and thus his interests will be aligned with those of the organisation. As a consequence, there will be no "agency costs" and governance mechanisms in such a case only serve to encourage him to double his efforts. Further, since the steward is believed to be trustworthy, more freedom is bestowed on him so that the organisation can reap maximum benefits under his tenure.

However, in spite of the fact that principals stand to gain under a stewardship relationship, it is observed that such relationships are not the norm. This is due to the principals risk attitudes which make them enter into an agency relationship with the agent. If a principal is a risk avoider, it means that he will invariably view the agent as self-serving and would much rather incur agency costs as a form of protection against the risk of such adverse behaviour. Under such conditions, it would be inappropriate for the principal to form a stewardship relationship with an agent as - to the principle - it would be akin to "turning the hen house to the fox" (Davis, Schoorman and Donaldson, 1997, p.26).

2.3 Entrenchment and Leverage

In light of the various means that managers employ to entrench themselves as discussed in section 2.2, this section focuses on the impact of entrenchment on firms leverage levels. From this discussion, the positive and negative sides of using debt are presented which shows that as much as debt constrains adverse managerial behaviour, there is a danger that in the aftermath it is the debt holders who will become self-serving. In effect, this may lead to the perception that agency problems have a hydra headed dimension.

Brailsford, Oliver and Pua (2002) believe that entrenchment among managers causes a decrease in debt since leverage increases the risk that they will be laid off. This is

because as debt holders strive to restrain adverse managerial behaviour (Harris and Raviv, 1990), their presence increases the probability that the firm may become bankrupt (Brailsford, Oliver and Pua, 2002; Zwiebel, 1996). In addition to bankruptcy costs, utilising increasing amounts of debt also attracts agency costs in form of monitoring costs due to the likelihood that managers may shift debt holders' funds to themselves (Jensen and Meckling, 1976). Further, Agarwal and Elston (2000) point out that close firm relationships with banks could negatively affect the firm's performance especially if the bank takes advantage of its position to fulfill its own interests. These negative outcomes include "rent-seeking" and shifting a firm's earnings to debt holders, divulging confidential information to a firm's competitors and inducing management to choose low-risk projects (Agarwal and Elston, 2000).

Nevertheless, debt is portrayed as a watchdog which prevents managers from extracting perquisites which increase with the level of investments they make regardless of whether they are beneficial to shareholders or not ((Stulz, 1990). Notably, in taking up this role, debt has the capacity of minimising investments under all states of nature. Consequently, on one hand, equity holders wealth improves if there was a case of excess investment and on the other hand, their wealth suffers when beneficial investments are curtailed by the actions of debt holders (Stulz, 1990). Zwiebel (1996) also attests to the constraining role of debt by claiming that not only does debt prevent managers from excessively growing the firm, but also is a means of pre-committing managers to reduce wastage of funds which keeps off predators.

In addition, Mustapha and Ahmad (2011) find that debt is negatively related to agency costs implying that increased levels of debt moderate agency costs. Further, Gray (1997) observes that the monitoring and control roles of debt are crucial during periods when the firm needs to apply restrictions on its expenditures. Equally important, Chava, Kumar and Warga (2009) find that debt reduces the demand by bond holders for an "investment restriction covenant" in a firm with entrenched management. Thus, this implies that debt reduces "managerial agency risk" (Chava, Kumar and Warga, 2009). Moreover, Stearns and Mizruchi (1993) propose that all things equal, debt providers should give priority to firms whose boards comprise of debt holders representatives.

Where managers hold high amounts of the firm's shares, it has been observed that lower debt levels are employed (Moh'd, Perry and Rimbey, 1998; Florackis and Ozkhan, 2009^a; Lee and Chen, 2011) because managers become entrenched (Moh'd, Perry and Rimbey, 1998; Florackis and Ozkhan, 2009^a). Moreover, Datta, Iskander-Datta and Raman (2005) find using a 2 stage least squares regression that opportunistic managers choose long-term debt as opposed to short-term debt in order to escape monitoring under the later. Further, Nam, Ottoo and Thornton (2003) find a positive relationship between managerial shareholding through stock options which are responsive to unstable share returns and debt levels. In particular, Nam et al. (2003) observe that such stock options encourage the manager to favour high risk⁴ in line with the shareholders wishes and discard risk averse attitudes which lead to high leverage levels.

On the contrary, Lundstrum (2009) observes using a logit regression model that managerial share ownership is not directly associated with firm's capital structure choice. Instead, insider ownership is related to decisions to alter debt levels in the event of an upcoming security issue. Specifically, entrenched management issue less debt in the period succeeding a security issue date than during the period preceding the security issue date. Accordingly, such management are said to "de-leverage." Moreover, entrenchment is perceived to be beneficial to bond holders to the extent that it aligns their interests with those of managers (Chava, Kumar and Warga, 2009).

Specifically, Chava, Kumar and Warga (2009) show using a multinomial probit regression model that when managers are entrenched, they prefer to use less debt which reduces the need for bond holders to place "subsequent financing covenants" in the bond agreement. In addition, since entrenched management engage in excessive firm building efforts, they prefer cash which prevents high dividend payments. As a result, managers will be acting in line with bond holders interest for low dividend payouts meaning that there will be lesser "dividend restriction" conditions structured into the bond agreement. Therefore under these circumstances, entrenchment is perceived to trade off the risk of shareholder opportunism for reduced "managerial agency risk" for bond holders (Chava, Kumar and Warga, 2009).

⁴ One of the definitions of risk according to Nam et al. (2003) is firms' debt levels.

Subsequent to this evidence on the role of debt, this study tries to draw links between entrenchment and leverage. The approach used is to formulate conjectures about the possible relationships between entrenchment and leverage as guided by the studies of Berger and Yermack (1997) and Florackis and Ozkhan (2009)^a. Therefore, in general, this study hypothesises that firms with entrenched management use less debt.

Entrenchment variables are largely drawn from Florackis and Ozkhan (2009)^a and include ownership concentration, executive ownership, number of non-executives on the B.O.D, board size, executive compensation, block-holders divided into family/unlisted companies and financial institutions and the CEO's years in office. From the Berger and Yermack (1997) study, the entrenchment variable of concern is CEO duality. For purposes of measuring leverage, the study makes use of the market and book values of leverage as found in Berger and Yermack (1997).

The first proposition that is constructed relates to the prior discussion of managerial ownership where Florackis and Ozkhan (2009)^a find that managerial ownership has an indirect relationship with entrenchment. When this interaction is levelled against leverage, the following hypothesis is formed:

H1: Companies whose executives hold high amounts of equity ownership have high leverage ratios.

Further conjectures are found in the succeeding section coupled with a discussion of the relevant entrenchment variables.

2.3.1 The Board of Directors as an entrenchment factor

Notwithstanding the role that debt plays in controlling managerial behaviour, corporate governance has focused attention on the B.O.D as an important internal control mechanism. Indeed, remedial reforms following corporate failures have been targeted towards the B.O.D not to mention that various B.O.D rating tools have been constructed showing an increased interest among stakeholders in the B.O.D (Berghe and Levrau, 2004). Subsequently, in this section, the role played by the B.O.D is discussed with the

aim of gaining appreciation of the importance of this internal corporate governance mechanism.

The B.O.D is the focal point of internal governance mechanisms (Daily, Dalton and Canella, 2003; Iskander and Chamlou, 2000; Fama, 1980). In a publicly held company, it is the board's responsibility to develop and implement internal control mechanisms. However, it is also true that the B.O.D's formal legal powers and responsibilities surpass those of implementing internal mechanisms (Walsh and Seward (1990). Indeed, Iskander and Chamlou (2000) claim that some of the B.O.D's predominant responsibilities in different countries are, "approving the company's strategy and major decisions, hiring, monitoring and replacing management"(p.4). Over and above these tasks, the board also carries out fiduciary responsibilities (Iskander and Chamlou, 2000; Tosi and Gomez-Mejia, 1989) which ensure the adherence to laws and regulations let alone compliance with "accounting and financial reporting requirements" (Iskander and Chamlou, 2000, p.4).

The B.O.D is elected by the shareholders to act in their best interests (Hart, 1995). Be that as it may, Shleifer and Vishny (1997) state that the B.O.D need not represent shareholder interests. Notably, Iskander and Chamlou (2000) adjudge that the directors' primary duty is owed to the company and not to the shareholders. Even so, shareholders could demand from the executive directors to abide by the duty of loyalty which is owed to them and which in many countries undergirds their voting rights. This is so because "shareholders investment in the company is sunk and no further investments are required from them"(p.751), thus they suffer more from inadequate protection against expropriation than other stakeholders do (Shleifer and Vishny, 1997).

The placement of a board facilitates the monitoring of a company's top management and in remote cases, it may oust the chief executive along with other management team members (Hart, 1995). "Independence, it is assumed, facilitates board diligence and arms-length rationality across the director range, particularly the management of Chief Executive Officer (CEO) performance and reward. Further, while independence from

incumbent executives can be construed in terms that are either broad (e.g. no common social or economic interests of any type) or narrow (e.g. no overlapping membership of other boards), it is the non-executive outsider who is typically perceived as being the archetype of director independence” (Capezio, Shields and O’Donnell (2010, p.1-2). Thus, the effectiveness of the B.O.D is hinged on that of the independent director (Brennan and Mc Dermott, 2004). Specifically, Fama and Jensen (1983) report that independent directors “act as arbiters in disagreements among internal managers and carry out tasks that involve serious agency problems between internal managers and residual claimants such as setting executive compensation or searching for replacements for top managers” (p.315). Further, the need for independent directors is demonstrated in the tragic case of Parmalat where it is reported that independent directors were the minority board members which was replicated in the board committees (only 3 out of the 13 board members were independent). As a consequence, family members were given enough leeway to dominate the board which was linked to the company’s downfall (Mallin, 2007).

Nevertheless, the board’s effectiveness can be gainsaid (Hart, 1995; Walsh and Seward, 1990; Hooghiemstra and Manen, 2004; Murphy and Topyan, 2005). Hart (1995) claims that non-executive directors are ineffective in monitoring management because they may lack substantial financial interest in a company which predisposes them to little or no gain should the performance of the company improve. However, if they were allowed to have significant financial interest, it would harm other equity owners as their interests would be diluted (Hart, 1995).

Additionally, Hooghiemstra and Manen (2004) claim that the outside directors face an “independence paradox” in that as much as they are to maintain independence from inside directors, they are dependent on the same for information in order for them to act. Similarly, Fama and Jensen (1983) note that in a B.O.D comprised of experts, it is the executive who plays the dominant role because of the information asymmetries between him and his non-executive counterparts. Therefore, “the non-executive has been made the target of both blame and reform following successive rounds of governance failure” (Roberts, McNulty and Stiles, 2005, p.S7). In contrast, stewardship theory claims that

benefits will accrue whenever a board is biased towards executive membership. These benefits include more experts on the B.O.D, “ventilation of points of contention within management and provision of a status reward for management” (Donaldson, 1990, p.377).

Equally important, Walsh and Seward (1990) note that there is lack of unanimity both theoretically and empirically that an increase of outsiders on the B.O.D improves the performance of a company by reducing agency costs of the manager-shareholder dispute. In addition, it has been suggested that non-executive directors may lack time to devote to the company’s goings on as well as time to collect information about it. Over and above this, board ineffectiveness is attributable to undependable data, the use of “unsophisticated analytic approaches” and unrefined “outcome control mechanisms like incentive adjustments and turnover”. As a consequence, the board’s “decision processes” are subverted which prevents it from pursuing the relevant actions to discipline management for poor performance for which they are responsible (Walsh and Seward, 1990).

Moreover, directors may be compromised since they owe their current positions to the management (Hart, 1995). Further, the board’s tasks are made more challenging by the difficulty of imputing responsibility for a company’s performance due to the entanglement of “managerial and environmental effects of performance” (Walsh and Seward, 1990). Additionally, it has also been found out that a large board further exacerbates inefficiency and as a result, auditors will structure their fees to include a premium in light of the inherent risk (Bliss, 2010). Similarly, Lee and Chen (2011) find that a large board size adversely affects firm value implying that large boards only add to the manager-shareholder conflict. Indeed, “nearly 50 years ago, a Havard Business School professor observed that too many boards of directors were mere “ornaments on a corporate christmas tree” (Byrne, 2002). Further, managerial entrenchment undermines the effectiveness of the B.O.D by reducing the number of outsiders on the board, preventing an outsider from being voted as chairperson of the board and advocating for CEO duality (Lasfer, 2006).

Florackis and Ozkhan (2009)^a find that a direct association between board size, the presence of non-executive directors on the board and entrenchment exists. Therefore, this study expects that these two variables will be inversely related to leverage which results to the following hypothesis:

H2: Companies with large boards have a lower leverage ratio relative to those with smaller boards.

H3: Companies with non-executive directors have a lower leverage ratio relative to those without non-executive directors.

2.3.2 Executive compensation as an entrenchment factor

In spite of the importance of the B.O.D, executive compensation is another internal governance mechanism that stakeholders have lavished their attention on as discussed in this section. From this discussion, it emerges that executive compensation can both enhance and destroy shareholder interests. Further as shall be seen later, there are interactions between executive pay and other governance mechanisms.

Excessive executive compensation packages have drawn the attention of the media and investors alike making this topic subject to increasing scrutiny (Sapp, 2008; Chan, 2008). Indeed, Sapp (2008) concedes that the interest in the design of executive compensation packages is associated with the linkages between “failures in governance and executive compensation” for example in Fannie Mae, Freddie Mac and Parmalat. In the same fashion, Chan (2008) enumerates companies such as Adelphia, Disney, Enron, HealthSouth and Tyco as being involved in lawsuits related to executive compensation. Not only does the size of these packages matter but so does their structure since they influence the executive’s incentives. Hence, executive compensation is a critical part of corporate governance worthy of stakeholders understanding (Sapp, 2008).

In publicly traded companies, the prevailing management compensation packages consist of “a basic salary, a bonus linked to short run performance and a stock

participation plan in addition to other benefits classified as golden parachutes like pension rights and severance pay” (Becht, Bolton and Roell, 2005). However, in countries where equity-based compensation plans are not widely used, Chen (2010) proposes a “managerial pay adjustment” framework to analyse the pay-performance link. According to this framework, “pay adjustments” are linked to firms’ performance measures which reflect the incentive and entrenchment effects. Incentive effects of “pay adjustments” are as a result of a manager’s increased efforts towards improving firm performance which is captured by better accounting and stock returns. On the other hand, “pay adjustments” also reflect managerial entrenchment especially if pay rises are sanctioned by self-serving managers, which is suspected to be the case in companies operated by families. Therefore, if the stock market perceives that such adverse behaviour prevails in a firm, it is capable of wholly reflecting it through poor stock returns. Chen (2010) finds that the entrenchment effect prevails over the incentive effect among Taiwanese companies because many of them are family operated businesses.

Further, “pay adjustments” are distinguished into those that are prompted by the managerial labour market, firm and managerial characteristics and by transitory considerations. Adjustments that are made due to firm and managerial characteristics and by “transitory” considerations produce incentive effects. However, they can also induce entrenchment effects. In particular, among Taiwanese family controlled companies, Chen (2010) finds that because entrenchment prevails, it depresses stock returns. In addition, Chen (2010) reports that managerial labour market induced pay adjustments do not have incentive effects. However, when managers are underpaid relative to the market equilibrium level, the stock prices increase if the bourse interprets underpayment to mean that managers’ value surpasses that portrayed by their present remuneration.

Bebchuk and Fried (2003) advance the “optimal contracting approach”⁵ and the “managerial power approach” in a bid to explain the linkages between the agency problem and executive compensation. According to the “optimal contracting approach”,

⁵ Also known as agency theory

boards design compensation schemes to provide managers with efficient incentives to maximise shareholders wealth (Jensen and Murphy, 1990; Bebchuk and Fried, 2003; Capezio, Shields and O'Donnell, 2010; Ozkan, 2009). Indeed, "in determining rewards, the board can be seen as making rational trade offs between the cost of obtaining necessary information on executive performance (i.e. agency costs) and the anticipated benefits in form of maximum alignment between executive and shareholders material interests" (Capezio, Shields and O'Donnell, 2010, p.3).

The optimal contracting view suggests that awarding managers stock reduces the agency problem by stimulating strong incentives to work towards increasing the firm's share value. Indeed, Hermalin and Weisbach (1991) observe that ownership levels below 1% are successful in aligning managerial incentives with those of shareholders relative to ownership levels above 1%.

Optimal compensation contracts are consequences of "arms-length" agreements between the B.O.D and the management or alternatively, they can be created by market constraints which force the relevant parties to embrace them. Nevertheless, these forces (market and "arms-length" agreements), are not sufficient bulwarks against significant departures from the objective of attaining an optimal compensation contract (Bebchuk and Fried, 2003). This is because in the first instance, the belief that directors will act in the interests of shareholders cannot be justified. Second, the agency problem also corrupts directors' behaviour which subverts their ability to effectively attack the agency problems between managers and shareholders. Third, directors are prone to subservience towards the CEO because of his/her role in the "nomination process" which makes directors compliant to his/her pay preferences. Fourth, boards are deprived of access to independent information and advice with which they would question the CEO's pay. Fifth, market forces such as threats of takeover, are met by a myriad of defences which may prevent shareholders from obtaining attractive bids. Sixth, the presence of "golden parachute" provisions and "acquisition-related benefits" that target managers often receive in an acquisition further undermines the strength of the market for corporate control (Bebchuk and Fried, 2003).

Similarly, Jensen and Meckling (1990) withdraw support from the optimal contracting view as they find a weak relationship between management pay and corporate performance. In particular, for firms whose managers pursue mergers/acquisitions, firm size is the most plausible explanation for the variation in managerial pay rather than firms' performance (Dorata and Petra, 2008). As a result of these weaknesses, Bebchuk and Fried (2003) propose that the "managerial power approach" is used to explain certain features of existing pay plans that are not defensible by the "optimal contracting approach". Some of these features are "the failure of option plans to filter out windfalls, the nearly uniform use of at-the money options and the broad freedom given to managers to unload options and shares" (Bebchuk and Fried, 2003, p.83).

The "managerial power approach" not only views executive pay as a tool for solving agency problems but also as "part of the problem itself". In light of this, Bebchuk and Fried (2003) argue that the design of compensation plans is likely to be affected by "managerial power and rent extraction." As a consequence, shareholders incur costs in form of adverse alteration of managerial incentives which affects the company's performance. "Managerial power approach" is upheld by two foundations. The first is "outrage" which claims that the stringency of the constraints that confront managers and directors depend partially on how much "outrage" a proposed pay plan is expected to generate among stakeholders. As a result, the second element, "camouflage" will be triggered and managers will be motivated to hide their rent extraction practices depending on the level of "outrage" that pay plans generate. This in turn creates inefficient compensation plans that impair managerial incentives and firm performance (Bebchuk and Fried, 2003).

Equally important, it has been suggested that the proportion of external directors on the board influences management pay Ozkan (2009). However, Conyon and Peck (1998); Capezio, Shields and O'Donnell (2010) do not observe such a relationship. Moreover, there exist studies that affirm that large shareholders play a role in determining management compensation (Ozkan, 2009; Cyert, Kang and Kumar, 2002). In particular, Ozkan (2009) finds that the level of a CEO's cash remuneration and total remuneration is inversely related to institutional ownership concentration. Cyert, Kang and Kumar

(2002) find a considerable reduction in the level of the CEO's "equity-based pay" in the presence of a large outside shareholder and the B.O.D. Likewise, Sapp (2008) observes that firms with a controlling shareholder pay their CEO's less. Tosi and Gomez-Mejia (1989) find that in firms without an equity holder with at least 5% shareholding,⁶ there is less monitoring and the CEO is relatively more influential than major shareholders in matters concerning pay. Chen (2010) shows using a pooled regression model that increasing managerial ownership reduces managerial pay levels implying that ownership can substitute managerial pay. However, this relationship is weakened when managerial ownership leads to entrenchment. This view is shared by Lee and Chen (2010) who observe that managers with large proportions of stock are able to influence the board to adjust their compensation upwards. Similarly, Florackis and Ozkhan (2009)^a observe a positive association between executive pay and entrenchment. From this result, this study constructs the following conjecture:

H4: Companies which pay high executive compensation have lower leverage ratios

2.3.3 CEO tenure as an entrenchment factor

CEO pay as discussed in section 2.3.2 mitigates the agency problem to the extent that it is able to match executives incentives with shareholders interests. However, compensation plans as discussed earlier can also lead to managerial entrenchment. In this section, CEO tenure is discussed as another avenue through which managers can become entrenched. This discussion serves to enhance the pattern that has been emerging all along, that is, just as internal and external governance mechanisms interact together to rein in managerial opportunism, they too can be manipulated to encourage such behaviour.

There is a possibility that extended CEO tenure will promote entrenchment among the management and as a consequence, lead to a greater divergence of interests between the agent and the principles. Indeed, successive years of employment with a company, gift the CEO with more power to influence the B.O.D and in turn, condition his/her

⁶ Management controlled firms (Tosi and Gomez-Mejia,1989)

remuneration toward his liking (Hill and Phan, 1991). In particular, Hill and Phan (1991) find that long CEO engagements with a company lead to an inverse association between CEO pay and stock returns. Likewise, Miller (1991) observes that companies with long serving CEO's are likely to have poor performance due to a lack of fit between their "environments and strategies" and also between their "structures and their environments". Such CEOs are thus characterised as having gone "stale in the saddle" (Miller, 1991).

Henderson, Miller and Hambrick (2006) observe that in a volatile environment, a new CEO's views will be well aligned with those of the environment which facilitates better company performance. However, as he continues to work for the company, performance drops as his views become increasingly superseded by those of the dynamic environment. Additionally, Lee and Chen (2011) note that CEO tenure is inversely related to a firm's value indicating that longer tenure destroys value.

In line with these associations, Berger and Yermack (1997) infer a direct relationship between CEO tenure and entrenchment meaning that the longer the tenure, the higher the incidence of entrenchment which leads to the following hypothesis:

H5: Companies with long serving CEOs have low leverage ratios

2.3.4 CEO duality as an entrenchment factor

CEO tenure as discussed in section 2.3.3 and CEO duality are part of the board's structural characteristics (Berghe and Levrau, 2004) through which management may entrench themselves (Berger and Yermack, 1997; Florackis and Ozkan, 2009^a). Therefore, it would seem parsimonious to avoid discussing CEO duality even though the arguments in this section place it in the position of running with the hare and hunting with the hounds.

CEO duality is where the firm's CEO serves under two titles, that is, under the CEO and the chair of the board titles (Kesner and Dalton, 1987; Baliga, Moyer and Rao, 1996; Elsayed, 2007; Bliss, 2010). Notwithstanding this fact, doubts have been expressed about the application of independence by an individual serving in these two roles

(Kesner and Dalton, 1987; Rechner and Dalton, 1989). To this effect, Kesner and Dalton (1987) ask, “Is it appropriate that the very person to be evaluated is the head of the evaluation team?”(p.35) Nonetheless, studies on CEO duality seem to yield confounding results. Those against duality find that it has no effect on the returns of equity holders (Rechner and Dalton (1989) and it does not influence corporate performance (Baliga, Mayer and Rao, 1996; Elsayed, 2007). Moreover, duality encourages managerial entrenchment (Mallette and Fowler, 1992), it weakens the board and in turn reduces its pursuit for “high quality audits” (Bliss (2010), it distracts the board from deliberating on matters concerning oversight of management to matters that promote managers interests in board meetings (Tuggle, Sirmon, Reutzel and Bierman, 2010) and is responsible for a weak pay-performance relationship in firms whose managers do not engage in mergers/acquisitions (Dorata and Petra, 2008).

In contrast, Finkelstein and D’Aveni (1994) suggest that there are circumstances under which effective boards would favour duality and others where they would not opt for it. Specifically, effective boards opt for duality when the company’s performance is wanting and the company’s CEO has little unofficial power whereas under contrary situations, non-duality would be chosen. Additionally, stewardship theory suggests that with CEO duality, “the command becomes united, removing role ambiguities and conflicts that would otherwise arise where power is shared”(p.377). Consequently, duality is expected to lead to better financial performance (Donaldson, 1990).

All in all, in order to conform to the study by Florackis and Ozkan (2009)^a, who find a direct relationship between duality and entrenchment, it then follows that the next hypothesis shall be:

H6: Companies with duality have lower leverage ratios

2.3.5 Large shareholders as an entrenchment factor

As studies in section 2.3.4 engage each other in debate regarding what the effects of duality are, in this section, the effects and activities of large shareholders make them comparable to an 800 pound gorilla. However, this characterisation of large shareholders has both positive and negative effects. In particular, the concern is that large

shareholders may become entrenched and harm minority shareholders as discussed below.

The presence of large shareholders in a company mitigates the free rider problem (Huddart, 1993; Shleifer and Vishny, 1997; Edwards, Nibler, Berglof and Franks, 2000; Yafeh and Yosha, 2003). Large shareholders provide a direct means of aligning the cash flow and control rights of outside investors leading to one or more investors in the firm holding substantial minority ownership stakes such as 10 % or 20% (Shleifer and Vishny, 1997). Yafeh and Yosha (2003) find that these shareholders are prevalent in firms which are unable to sustain high performance. Conversely, numerous dispersed shareholders have to forge alliances with one another to gain control which exposes them to obstacles that are erected by the management. Further, the presence of dispersed shareholders confers courts with the added responsibility of protecting them. Therefore, courts will only take up this responsibility in countries with strong legal systems whereas countries with poor legal systems will rely on large shareholders (Shleifer and Vishny, 1997). However, among large companies, La Porta, Lopez-de-Silanes, Shleifer and Vishny (1996) report that dispersed ownership is like scotch mist.

Under remote situations, a large owner with at least 51% ownership can control the company and its management (Shleifer and Vishny, 1997). Additionally, concentrated ownership reduces expenditures on activities with the capacity of triggering managerial private benefits (Yafeh and Yosha, 2003). Further, large shareholders are able to indicate better future prospects for a company to the market which prevents the use of dividend policy and thus minimises the degree to which shareholders interests are forfeited⁷ (Zeckhauser and Pound, 1990). Moreover, large shareholders are associated with higher firm performance (Perrini, Rossi and Rovetta, 2008; Chaganti and Damanpour, 1991), stronger board effectiveness especially among small companies (Lasfer, 2006) and ameliorate managerial entrenchment (Florackis and Ozkhan, 2009^a).

Specifically, Lasfer (2006) believes that major shareholders in small companies are responsible for reducing the board size, increasing the number of outsiders on the board

⁷ The use of dividend policy to indicate positive future prospects of a company to the market hurts shareholders interests (Zeckhauser and Pound, 1990).

and lead to the appointment of an outsider to the position of board chair. Further, in small companies, the combined presence of a large shareholder and board independence is sufficient to thwart entrenchment unlike in large companies (Hu and Kumar, 2004). Therefore, these two mechanisms are said to complement one another in small companies (Hu and Kumar, 2004).

In addition, institutional ownership and managerial ownership are inversely related (Changati and Damanpour (1991); Lasfer (2006); Lee and Chen (2011) implying that either of them can replace the other and have similar effects especially on firm performance (Changati and Damanpour, 1991). This interaction between large shareholders and managerial ownership is observed in a study of Spanish firms by Garcia-Meca and Sanchez-Ballesta (2011). From this study, the authors find that since Spanish firms have high ownership concentration, managerial ownership and bank ownership are not necessary in tackling the agency problems which for these firms are between minority and majority shareholders. Moreover, Moh'd, Perry and Rimbey (1998) claim that large shareholders substitute debt in dealing with agency problems.

Nevertheless, the power of large shareholders to govern a company using their voting rights depends on the extent to which those rights are legally protected as well as how effective the voting mechanism is (Shleifer and Vishny, 1997). Moreover, large shareholders are linked to reduced marketability of a company's shares (Heflin and Shaw, 2006), are accused of looking after their own interests at the expense of a company's minority shareholders (Shleifer and Vishny, 1997; Yeh, 2005; Garcia-Meca and Sanchez-Ballesta, 2011) and are myopic leading to low leverage levels (Chaganti and Damanpour, 1998). Specifically, Yeh (2005) finds that when a large shareholder's ownership rights (i.e. cash flow rights) are not well aligned with his control rights (i.e. voting rights), the firm's value decreases. Similarly, Bozec and Laurin (2008) find that a firm will be exposed to large shareholder opportunism if its cash flows exceed its investment needs⁸, if its dominant shareholder has below than 25% ownership rights and if its ownership rights and control rights are poorly aligned. Garcia-Meca and Sanchez-Ballesta (2011) find that among Spanish listed firms, large shareholders become self-

⁸ That is, free cash flows are present (Jensen, 1986)

serving at the 60% ownership level because at that level, the firm's value starts declining. Further, among Italian listed companies with high ownership concentration (of large shareholders), an increase in managerial ownership encourages managers to engage in opportunistic behaviour which adversely affects firm value (Perrini, Rossi and Rovetta, 2008).

Florackis and Ozkhan (2009)^a distinguish large shareholders between family/unlisted companies and financial institutions. Therefore, in line with their result that large shareholders and management entrenchment are inversely related, the following hypotheses are formed:

H7: Companies with large non-managerial owners have high leverage ratios

2.4 Corporate governance in Africa

Armed with an a priori appreciation of entrenchment and entrenchment inducing corporate governance variables from the foregoing, this section delves into corporate governance practices in developing countries. From this discourse, a case is made that developing nations have poor corporate governance practices.

In developed countries, corporate governance reforms have succeeded corporate scandals (Berghe and Levrau, 2004; Hooghiemstra and Manen, 2004; Detomasi, 2006; Murphy and Topyan, 2005; Mintz, 2005). Specifically, these reforms have taken the form of law enactment viz. the Sarbanes Oxley Act in the U.S (Murphy and Topyan, 2005; Mintz, 2005), establishment of committees like the Cadbury Committee in the U.K and the Peters Committee in The Netherlands (Hooghiemstra and Manen, 2004) just to mention but a few. However, in developing countries, corporate governance reforms have been a cog in the wheel of “economic liberalisation” following failures of government controlled economic regimes (Reed, 2002). These changes are expected to build investor confidence, to give domestic firms leverage against transnational corporations in commercial activities and to give credence to government efforts aimed at increasing economic growth through altering the make-up of companies (Reed, 2002). Notably, some developing nations have opted for an Anglo-American inspired corporate

governance model. This choice has been influenced first, by the need for developing nations to distance themselves from constituents of failed government controlled economic regimes such as reliance on banks and “industrial policy”. Second, the model presents the financial markets as a mechanism for weeding out uncompetitive companies which prevailed in government controlled economic regimes. Third, the Anglo-American model was proposed by the structural adjustment programmes as a means of achieving corporate governance reforms in exchange for loan (borrowed from international financial organisations by developing nations) restructuring. Fourth, the Anglo- American model seemed to be a “natural” progression following the adoption of British company law (Reed, 2002).

Notwithstanding these efforts, Gugler, Mueller and Yurtoglu (2003) find that weak corporate governance prevails in developing countries and is associated with managers’ decisions to use equity finance to fund low return investments. Therefore, according to this study, the pecking order hierarchy of finance is not adhered to. However, Ngugi (2008) finds that in Kenyan companies, the pecking order theory is in force. Similarly, Fulghieri and Suominen (2010); Florackis and Ozkhan (2009)^b find that in weak corporate governance regimes, inefficient firms reduce insider ownership through the sale of equity to outsiders. Conversely, efficient firms which utilise more debt will have more inside owners (Fulghieri and Suominen, 2010). Be that as it may, Arun and Turner (2004) are of the view that developing nations make more use of debt through banks than equity because of the underdeveloped nature of such nations stock markets. Indeed, Magnusson and Wydick (n.d) report that because of the underdevelopment of African stock markets, they are perceived to have wider divergences of interests between insiders and outsiders. Therefore, Rwegasira (2000) proposes a “bank-based” corporate governance system for African economies as their capital markets fail to meet the prerequisites of a “market-based” corporate governance system.

In the same fashion, Caprio and Demirguc-kunt (1998) believe that businesses in low-income nations are expected to use more short-term debt because of the difficulties of selling equity and implementing contracts. This is the case because successive short-term debt enables banks to restrain their clients adverse behaviours (Caprio and

Demirguc-kunt, 1998). By the same token, Fan, Titman and Twite (2010) find that short-term debt is utilised more by developing countries relative to developed economies which use long-term debt and that in the former, firms use more debt than those in the later.

Subsequent to arguments that champion the use of debt in developing nations and bearing in mind that debt restricts managerial self-dealing, one may be led to believe that entrenchment is not worthy of attention among such nations. Literature claims that entrenchment is a manifestation of weak corporate governance. Following such definitions, the absence of entrenchment may be construed to mean that governance mechanisms are working as they should. However, a close scrutiny of the constituents of an effective corporate governance system disqualifies African nations as those whose systems exhibit such attributes (Okeahalam and Akinboade, 2003).

Indeed, weak corporate governance has its roots in institutional inadequacies which in turn draw linkages to both the private and public sectors of an economy (CIPE, 2008). According to CIPE (2008), some of the hallmarks of weak corporate governance are collapsed privatisations, corruption, feeble property rights, financial system melt downs and a failure to attract investments. Further, CIPE (2008) notes that at the elementary level, well designed corporate governance systems should be able to ensure conformance to laws by companies, clarity in the definition of property rights and their defence for all corporate stakeholders. These elementary aspects are enshrined in an effective judiciary (CIPE, 2008).

La Porta, Lopez-de-Silanes, Shleifer and Vishny (1996) report that laws and the effectiveness of their enforcement are important determinants of whether a firm accesses financing or not. In particular, they find that common law countries provide better protection to equity and debt investors than civil law countries. In addition, laws and the effectiveness of their enforcement affect growth via enhancing financial development. This in effect disregards considerations of whether a company operates a “bank-based” or “market-based” system (Levine, 2002).

Resuming the discussion on the characteristics of weak corporate governance, these seem to exist in developing nations. First, Beck and Fuchs (2004) find that developing nations have experienced collapsed privatisations due to institutional inadequacies where such activities have been marred by collusions with insiders and poor supervision of banks. Secondly, Horst (2006) observes that African economies are among those which have poor property rights scores. Thirdly, TI (2010) report shows that most Sub-Saharan African economies have low global corruption rankings with a majority having a score of below 5⁹. Greater corruption has been associated with high leverage levels (via short-term debt) among firms (La Porta, Lopez-de-Silanes, Shleifer and Vishny, 1996). Lastly, AfDB/OECD (2010) note that the attraction of foreign monies to “higher value added” industries remains a challenge to African economies as most funds are channelled towards the exploration of natural resources.

2.4.1 Corporate Governance in Kenya

In section 2.4, a discussion of the general corporate governance experiences of African nations is presented. However, this section focuses on Kenya’s corporate governance environment as one of Africa’s developing economies. This discussion attempts to narrow down the criticism of poor corporate governance to the Kenyan environment.

In Kenya, the Centre for Corporate Governance (CCG), an associate of the Commonwealth Association for Corporate Governance (CACG) is an important participant in the establishment of a corporate governance structure in Kenya (Barako, Hancock and Izan, 2006). As a testament to its role, the CCG in November 1999 came up with principles for corporate governance which were to be taken up optionally by Kenyan companies. In 2000, it developed a blueprint of the corporate governance code which was issued by the Capital Markets Authority of Kenya. Two years later, this code came into enforcement as a “compulsory guideline for all listed companies in Kenya” (Barako, Hancock and Izan, 2006, p.109). Besides this code, other pillars of corporate governance in Kenya are the Capital Markets Authority Act, the Nairobi Stock Exchange regulations, the Penal Code cap 63 and the Companies Act cap 486.

⁹ Scores range between 10 and 0 with high scores implying low corruption and low scores showing a prevalence of corruption (TI, 2010).

Specifically, the Companies Act (1962) cap 486 has been in existence since the year that Kenya gained independence from British rule viz.1963. However, the end of colonialism did not prevent the adoption of a Companies Act that bore more similarities with England's 1948 Companies Act (Musikali, 2008).

Notwithstanding these laws, regulations and codes, Kenya's financial sector still struggles from "structural" roadblocks (Beck and Fuchs, 2004). Specifically, Beck and Fuchs (2004) find that significant interest rate gaps among Kenyan banks and one of their causes, overhead costs, have their roots in legal and institutional inadequacies. In the 1984-2005 periods, the Kenyan banking sector experienced disruptions. These disruptions were caused by "large non-performing loans, unsecured insider lending, ineffective board and management malpractices, undercapitalisation and violations of the Banking Act and Prudential Regulations" (Barako and Tower, 2006-07, p.134). However, a perfunctory analysis of these factors unveils weak corporate governance as the culprit (Barako and Tower, 2006-07).

Likewise, the Global Corruption Report (2009) blames weak corporate governance in Kenya's financial sector for "ineffective laws, poor financial sector oversight, a base sector culture and overbearing political and executive corruption" (p.2). Further, it is noted that a breach of transparency caused complications in prior privatisation programmes conducted by the government since 1991(AfDB/OECD, 2003). Transparency is one of the pillars of corporate governance (OECD, 2004). Moreover, Kenya violates the qualities of good corporate governance enumerated by CIPE (2008). Kenya is ranked 59th among countries with feeble property rights garnering a score of 3.3 (Horst, 2006) and occupies the 154th position with a score of 2.1 as regards corruption (TI, 2010). In addition, Kenya's FDI flows have an inferior record relative to other countries in its Sub-Saharan categorisation (UNCTAD, 2008) with highs of 29.59% and lows of 0.17% (Author's computations)¹⁰ between 1980 and 2006.

¹⁰ Computations were aided by UNCTAD (2008) figures where a percentage was derived by scaling Kenya's FDI inflows (1980 to 2006) with the total FDI inflows of the Sub-Saharan region (including South Africa) multiplied by 100%.

Subsequent to the above evidence levelled against Kenya's corporate governance experiences, this study investigates whether interactions between entrenchment and the financing choices of firms listed on Kenya's Nairobi Stock Exchange (NSE) exists. As discussed earlier, developing nations rely more on bank debt because their bourses are under-developed. In fact, it has been suggested that such nations should switch from a market-based corporate governance system to a bank-based system. This is because developing nations market-based systems fall short of the prerequisites that accompany such a system. Even so, it is still reported that developing nations' corporate governance is weak and as a result, managers are able to access equity to fund unprofitable projects. In turn, it may seem that managers are not only able to access equity but debt as well through the informational roles of the bourse since they complement banks in developing nations.

Kenya's stock market development indicators as well as those on bank development are inferior to those of the worst performing country included in the Financial Development Index (2010). In respect of the former, Kenya's stock market to GDP ratio is 0.41(author's computation) which is lower than the worst performing country's 7.79. In respect of the later, Kenya's M2 to GDP and private credit to GDP ratios are 0.32 and 0.08 (author's computations) respectively relative to the worst performing country's 27.60 and 13.98 respectively (Financial Development Index, 2010). As a consequence, questions are raised as to whether managers are able to control Kenyan firms leverage choices because of an under-developed stock market which might render bank debt ineffective coupled with an under-developed banking sector. Therefore, this study investigates whether entrenchment and Kenyan firms leverage choices are associated. Further, the investigation of the existence of this link is of interest because it shall hopefully provide evidence on whether banks rectified their misdeeds following failures that were linked to corporate governance. This in light of the knowledge that banks corporate governance affects that of their lending clients.

Moreover, this study is undertaken because prior studies on entrenchment have focused on developed countries and as such, it could be possible that the recommendations given are applicable to such nations. This may be the case since Iskander and Chamlou (2000)

believe that differences in corporate governance systems are due to the amalgamation of internal and external mechanisms which are reflective of countries “market structures, legal systems, traditions, regulations, cultural and societal values” (p.6). Hence, prior studies recommendations on entrenchment in developed nations may be fashioned to meet such characteristics. Thus, it also the intention of this study to find out whether prior studies results compare with the Kenyan results or there exist a divergence.

2.5 Chapter summary

In this chapter, corporate governance has been presented as a solution to the problem of incomplete contracts in corporations. In order to effectively solve these problems, corporate governance employs a two pronged attack via internal and external mechanisms. Unsurprisingly, these are the mechanisms that agency theory proposes to tackle agency problems that arise from the separation of ownership and control. Out of this theory, entrenchment theory is birthed which is the focus of this study.

Entrenchment has been generally portrayed as the inability of available governance mechanisms to forestall selfish managerial ambitions which hurt shareholders objectives. Accordingly, literature in this chapter discusses governance mechanisms that are vulnerable to entrenchment and further links them to firms financing decisions. In this way, the discussion portrays that entrenchment hurts firms access to finance since investors (especially equity investors) cannot be beguiled into providing funds to poorly governed firms. However, this link is nebulous in developing countries.

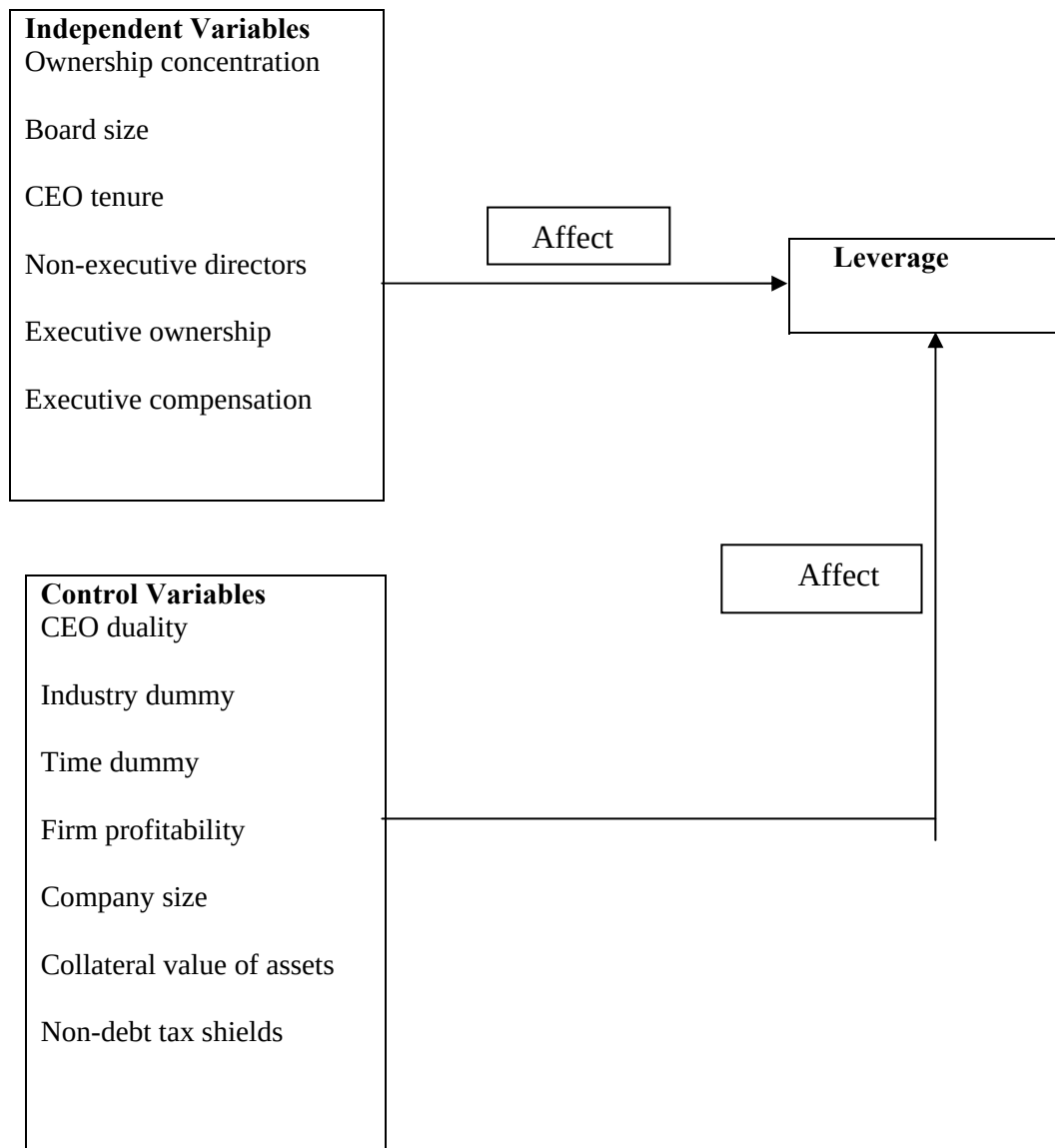
Specifically, Kenya’s inferior stock market development indicators raise fears that managers are not only able to access equity to fund low return investments but also bank debt. Further, these concerns heighten because of Kenya’s inferior banking development indicators which raise doubts about the effectiveness of debt in dealing with managerial opportunism. A summation of these issues portrays both equity and debt as management’s minions through which managerial interests are met at the expense of good corporate governance. Therefore, this study investigates whether there is a link between corporate governance and Kenyan firms’ capital structure decisions. In doing so, the study would like to test the premise that entrenched management have control

over their firms' leverage choices. For this purpose, chapter 3 constructs the research methodology and chapters 4 and 5 come up with the interpretation of results and conclusions respectively.

2.6 Conceptual Framework

The conceptual framework in this section shows the hypothesised relationships discussed in the preceding sections of this chapter. These relationships are mainly drawn from studies by Florackis and Ozkan (2009)^a and Berger and Yermack (1997). Specifically, the bulk of the independent variables are drawn from Florackis and Ozkan (2009)^a who use principal component analysis to derive proxies for the entrenchment variable. In addition to those variables, other entrenchment variables are included from Berger and Yermack (1997) and from the same study, guidance is obtained on how to measure leverage.

The control variables used in this study are obtained from Titman and Wessels (1988) and conform to those used by Berger and Yermack (1997). The first control variable of concern is firm profitability which is found to have an indirect relationship with leverage by Moh'd, Perry and Rimbey (1998); Booth, Aivazian, Demircug-Kunt and Maksimovic (2001); Ngugi (2008); Fan, Titman and Twite (2010). The second control variable is company size where Demircug-kunt and Maksimovic (1996) find that the proportion of debt used by large companies in developing nations increases as such countries bourses develop but



Conceptual framework of the expected relationships between entrenchment variables and leverage.

this relationship does not hold for small companies. Similarly, Moh'd, Perry and Rimbey (2010) observe that leverage increases as firms increase in size.

The third control variable of concern is collateral value of assets. According to Titman and Wessels (1988), firms with “less collateralisable assets” utilise more debt to minimise managerial opportunism and as a consequence incur high agency costs of debt. These costs (defrayed by the firm), are as a result of the challenges of overseeing “capital outlays” encountered by the providers of debt due to low “collateralisation” of

the firm's assets. Nonetheless, Titman and Wessels (1988) fail to find a relationship between collateral value of assets and firms leverage ratios. In contrast, Moh'd, Perry and Rimbey (2010) find that collateral value of assets has a direct effect on firms leverage levels.

The fourth control variable of concern is non-debt tax shields where Titman and Wessels (1988) posit that it has an inverse association with leverage. This relation implies that if firms are able to obtain a reduction in their taxable income without using debt, then less of it is used. However, Moh'd, Perry and Rimbey (2010) report that non-debt tax shields are directly related to firms leverage levels. A somewhat similar measure is used by Booth, Aivazian, Demirguc-Kunt and Maksimovic (2001) to find out its association with debt ratios. They compute Miller's corporate tax shield for a sample of developing countries and find that firms in countries that grant "high tax advantages" use more debt. In the event that data doesn't exist to compute the non-debt tax shield and collateral value of assets variables, the study will opt to use the market-to-book ratio as a proxy for the two variables. This is in line with the approach used by Fan et.al (2010) who use the market-to-book ratio following a failure to obtain data to compute their control variables which are found in Titman and Wessels (1988). Among the control variables replaced by the market-to-book ratio by Fan et.al (2010), are the non-debt tax shield variable and the collateral value of assets variable. Industry and time dummies are used to "control for industry-specific and time-specific effects" (Florackis and Ozkan, 2009^b).

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The objective of this study is to investigate the interaction between corporate governance variables which typify entrenchment and firms financing choices. In doing so, the study aims at tackling the obfuscation surrounding the types of financing used by developing countries firms when faced with entrenchment. Thus, to serve this purpose, this study focuses on Kenyan firms listed on the Nairobi Stock Exchange (NSE).

3.2 Research design

An explanatory research design is formulated for this study. Explanatory designs according to Robson (2002) aim at “explaining a situation or problem,” its behaviour and determines whether there exist links between various facets of the situation or problem. In addition, explanatory research designs may be fixed or flexible (Robson, 2002). A fixed explanatory research design is grounded on theory and thus requires a researcher to understand the conceptual framework related to the situation under study. On the contrary, a fixed explanatory design requires a researcher to “enter the field without theoretical preconceptions” (Robson, 2002). In line with this definition of explanatory designs, this study aims at explaining the entrenchment phenomenon and seeks to determine how it interacts with firms’ capital structure decisions. Moreover, the study is grounded on entrenchment theory which is an off shoot of the agency theory.

The data for this study follows a panel data structure. Specifically, the data set has an unbalanced panel structure. Panel data gives both spatial and temporal dimensions to cross-sectional units (in this study, firms) and in doing so, controls for unobserved heterogeneity. This unobserved effect is of concern because it may be correlated with the explanatory variables (Hausman and Taylor, 1981) which would lead to inconsistency in estimating a model’s parameters. For the purposes of analysing panel data, this study opts for pooled OLS and fixed effects models in line with its

predecessors, that is, Florackis and Ozkan (2009^b) and Berger, Ofek and Yermack (1997).

Pooled OLS estimation method (henceforth, POLS) assumes that the explanatory variables and the disturbance are orthogonal albeit not strictly orthogonal. Moreover, pooled OLS assumes the absence of heteroskedasticity and serial correlation and that explanatory variables cannot be expressed as linear functions of each other (Wooldridge, n.d).

POLS can be used to estimate a model whose explanatory variables incorporate the individual effect of each cross-sectional unit. However, if this is not the case, POLS yields “inefficient estimates and invalid standard errors” (Dougherty, n.d). A POLS estimated equation takes the following form:

Model 1:
$$a_{it} = \alpha + \beta o_{it} + u_{it}$$

Next, a fixed effects model is estimated and its results are compared with those of the POLS method. The fixed effects model (henceforth, FE) imposes a strict exogeneity assumption relative to POLS method. In a case where FE estimates are lower than those of POLS, it may mean that POLS estimates are high because of a failure to recognise unobserved heterogeneity (Dougherty, n.d). In such a case, a FE model, specifically the Least Squares Dummy Variable approach (LSDV), will step into the shoes of POLS since it incorporates the unobserved firm effects. Nevertheless, the LSDV approach is quite laborious since it requires a dummy variable for each observation which increases the number of parameters to be estimated (Yaffee, 2003; Dougherty, n.d). Moreover, an increase in parameters could lead to multicollinearity which leads to large standard errors. Additionally, increased parameters may lead to an insufficient number of degrees of freedom which adversely affects statistical inference (Yaffee, 2003).

Fortunately, LSDV method is expected to yield similar results as the within estimates approach (Dougherty, n.d; Berger, Ofek and Yermack, 1997) and hence in keeping with the principle of Ockham’s razor, this study opts for the later method. Even so, within estimates model is chided for obliterating unobserved effects which means that estimates cannot be derived for these effects parameters. Secondly, within estimates model is only partially efficient because it fails to recognise variation across the sampled cross-

sectional units -in this study, firms- (Hausman and Taylor, 1981). A within estimates model takes the following form:

Model 2: $a_{it} - \bar{a}_i = \beta (o_{it} - \bar{o}_i) + u_{it} - \bar{u}_i$ which is summarised as

$$\tilde{a}_{it} = \beta \tilde{o}_{it} + \tilde{u}_{it}$$

A between estimates model could address the second disadvantage of a within estimates model since according to Wooldridge (n.d), it considers the variation between firms. However, it may not necessarily meet the strict exogeneity condition for it to be called a consistent estimator. The between estimates model takes the following form:

Model 3: $\bar{a}_i = \alpha + \bar{o}_i + u_i$

Thirdly, the standard errors reported by within estimates FE method are incorrect. As a consequence, this method may not be the most efficient estimator among FE models. Additionally, this problem raises concerns that the idiosyncratic errors of a within-effects model may not have a constant variance over all the time periods of concern and that they may be serially correlated with each other. In response to this problem, Wooldridge (n.d) proposes Arellano (1987)'s robust variance matrix estimator which is unaffected by serial correlation and heteroskedasticity in a model. Alternatively, Wooldridge (n.d) suggests a fixed effects GLS model instead of using a robust variance matrix estimator. However, Greene (2003) is of the opinion that whenever the form of heteroskedasticity is unknown, GLS cannot be used. In this study, there is uncertainty about the form of heteroskedasticity that may be present. Therefore, a robust variance matrix estimator is chosen over the fixed GLS method.

Apart from the POLS and FE estimation methods, the random effects method can be used. However, Dougherty (n.d) states that one of the conditions for using the random effects method is that data have to be drawn from a random sample. If this is not the case, a FE method is to be used (Dougherty, n.d). In line with this observation, a FE method is chosen for this study viz. within estimates and between estimates methods, since data used are not derived from a random sample.

3.3 Data set and sample

As mentioned before in chapter 2, this study borrows the bulk of ideas on corporate governance variables from Florackis and Ozkan (2009)^b while additional variables are obtained from Berger, Ofek and Yermack (1997). At the core of the study, is the question of whether there is a relationship between entrenchment and leverage. Entrenchment, as discussed in chapter 2 (viewed as weak corporate governance), takes root when managers have discretion over their firms leverage decisions. In particular, managers can become entrenched when their shareholding in a firm fails to align their interests with those of shareholders. This is the case when managers' ownership lies in the entrenchment range which shows that there is a non-monotonic relationship between executive ownership and firms leverage choices.

In order to test this behaviour, this study in line with Florackis and Ozkan (2009)^b, carries out a univariate analysis of firms. In this analysis, firms are grouped into quartiles of leverage ratios showing the means and standard deviations of their entrenchment variables. Later, these firms will be classified into low governance and high governance firms with the former being those who occupy the lower 45% quartile and the later firms, the upper 45% quartile. This analysis will yield preliminary results to the hypothesised relationships between entrenchment and leverage. In addition, the results will hopefully aid the study in determining whether an entrenchment range exists using Kenyan data.

Further, corporate governance variables representing entrenchment, have the potential to affect firm's leverage choices differently in Kenya's pre-reform and post-reform periods. As discussed in chapter 2, the periods of 1984-2005 were characterised by disruptions in the Kenyan banking sector which a perfunctory analysis revealed were caused by weaknesses in corporate governance (Barako and Tower, 2006-07). As a remedy, the Central Bank of Kenya (CBK) undertook certain corrective measures. Some of these measures took the form of instituting audit committees, advocating for external directors on boards of banks and holding "trilateral meetings with external auditors and financial institutions" (Barako and Tower, 2006-07, p.134).

Additionally, in 2002, the corporate governance code in Kenya came into force as "a compulsory guideline for all firms listed on the NSE" (Barako, Hancock and Izan, 2006,

p.109). A comparison of the periods of these two events reveals an overlap in the period 2002-2005. Drawing from the knowledge that inculcating good corporate governance in banks facilitates effective corporate governance over their clients (Levine, 2003), there arise questions on how effective the corporate governance code was between the periods 2002-2005¹¹. Specifically, did firms in this period experience weak corporate governance (entrenchment) as a result of disruptions in the banking industry? Further, after the CBK undertook reforms, were these changes replicated in the corporate governance of firms funded by banks? In addition, during these periods, did firms increasingly use debt or equity? Accordingly, the periods 2002-2005 and 2006 to date are stylised in this study as the “pre-reform period” and the “post-reform period” respectively and data will be collected for these periods.

Data will be collected from the annual reports of Kenyan listed firms. However, to qualify for selection, firms must be listed throughout the pre-reform and post-reform periods and should not be in the financial services industry categorisation. This is because firms in the financial services industry have “marked differences in leverage and corporate governance relative to other industries and sectors” (Berger and Yermack, 1997, p.1415) and face “peculiar regulatory conditions” (Florackis and Ozkan, 2009^a, p.502). In the NSE, such firms fall under the finance and investment category.

3.4 Study Variables

The variables of concern to this study are those related to entrenchment and leverage. These are drawn from Berger and Yermack (1997) and Florackis and Ozkhan (2009).^b Their operationalisation is discussed below.

Entrenchment variables (Independent variables)

Ownership concentration: This according to Florackis and Ozkhan (2009)^b relates to the total number of shares held by outside shareholders who own at least 3% of the company’s total shares. These shareholders also include those who hold more than 20% of the company’s shares.

¹¹ The study assumes that reforms were undertaken by the CBK after 2005

Non-executive directors: this is the ratio of outside directors to inside directors in a company's board (Florackis and Ozkhan (2009)^b; Berger and Yermack (1997).

CEO duality: this where an individual serves under both the CEO and the Chair of the Board roles. If it exists, a dummy variable of 1 is allocated but if absent, 0 is noted (Florackis and Ozkhan (2009)).^b

CEO tenure: this is the number of years that the CEO has served in a company and is measured as the natural log of tenure (Berger and Yermack, 1997).

Board Size: this is the number of directors in a company's board and will be measured as the log of the number of directors (Berger and Yermack, 1997).

Executive ownership: this is represented by AGENCY COSTS. Agency costs measured in line with Ang, Cole and Lin (2000) and Florackis and Ozkhan (2009)^a is the inverse of the asset utilisation ratio (total sales/total assets). Thus, when this variable is inverted again, a proxy for executive ownership is obtained. The reciprocal of agency costs tests the "optimal contracting approach" advanced by Jensen and Meckling (1976); Hermalin and Weisbach (1991); Mc Connell and Servaes (1990); Lennox (2005); Teshima and Shuto (2008); Florackis and Ozkhan (2009^b). According to this approach, agency costs reduce with higher levels of managerial ownership. To check for robustness, the ratio of selling, general and administrative expenses to total sales (SG&A/total sales) is used to denote agency costs according to Florackis and Ozkhan (2009).^a After deriving this ratio, its inverse is computed from which a reciprocal of the result is obtained to proxy for executive ownership.

Executive compensation: this is represented by key management compensation added to directors' remuneration for management services rendered. However, post-employment benefits are excluded from this measure.

Leverage Variables (Dependent variables)

Leverage (Book value): measured as total book value of debt scaled by total book value of assets (Berger and Yermack, 1997; Florackis and Ozkhan, 2009).^a

$$\frac{\text{Total debt (book value)}}{\text{Total assets (book value)}}$$

Leverage (Market value): measured as total book value of debt scaled by the sum of the total book value of debt and the market value of common equity (Berger and Yermack, 1997).

$$\frac{\text{Total debt (book value)}}{\text{Total debt (book value)} + \text{Common equity (market value)}}$$

Control Variables

These are drawn from Titman and Wessels (1988) and conform to those used by Berger and Yermack (1997). They are:

Firm profitability: measured as the Return on Assets computed as earnings before interest and tax scaled by total assets at the start of the year.

Company size: measured as the log of total assets.

Collateral value of assets: measured as the ratio of net property, plant and equipment plus inventory scaled by total assets.

Non-debt tax shields: measured as depreciation divided by total assets.

Industry and time dummy variables: these shall control for industry-specific and time-specific variables effects. However, like in Berger, Ofek and Yermack (1997) and Florackis and Ozkan (2009^b), industry indicator variables will not be used in the within effects model.

Regression model

The model under investigation initially takes the following form to enable estimation using POLS. Later, it is transformed to facilitate estimation by within estimates and between estimates FE methods.

$$\begin{aligned} Lev = & \alpha_0 + \beta_1 OC_{it} + \beta_2 \ln BS_{it} + \beta_3 \ln CEOT_{it} + \beta_4 NEX_{it} + \beta_5 EOWN_{it} + \beta_6 \\ & ECOMP_{it} + \beta_7 PROFIT_{it} + \beta_8 \ln SIZE_{it} + \beta_9 COLLAT_{it} + \beta_{10} NDTAX_{it} + \beta_{11} \delta_{it} \\ & + \beta_{12} \gamma_{it} + \beta_{13} \lambda_{it} + \varepsilon_{it} \end{aligned}$$

Where:

i: firm 1.....N

t: time periods 1.....T

α_0 : intercept of the equation

OC: ownership concentration

BS: board structure

CEOT: CEO tenure

NEX: non-executive directors

EOWN: executive ownership

ECOMP: executive compensation

PROFIT: firm profitability

SIZE: company size

COLLAT: collateral value of assets

NDTAX: non-debt tax shields

δ : dummy variable for CEO duality. 1- duality and 0- no duality

γ : dummy variable for time effects

λ : dummy variable for industry effects

The expected relationships between the dependent and the independent variables are as shown in the table below:

Dependent Variable	Independent Variable	Expected Sign
LEVERAGE (Market value)	Ownership concentration	+
	Board size	-
	CEO tenure	-
	Non-executive directors	-
	Executive ownership	-
	Executive compensation	-
	CEO duality	-
LEVERAGE (Book value)	Control Variables	
	Firm profitability	-
	Company size	+
	Collateral value of assets	-
	Non-debt tax shields	-
	Industry dummy	
	Time dummy	

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

In this chapter the hypothesised relationships that were discussed in chapter 2 are examined using Kenyan data. In particular, univariate analysis and panel techniques viz. POLS, within estimates and between estimates are utilised in order to confirm or reject the hypothesised relationships. Further, in section 4.3 OLS regression models are used to analyse the relationship between entrenchment and firms' leverage choices in various N.S.E segments.

4.2 Corporate Governance and Firms' Leverage Choices

The discussion presented in chapter 2 about how corporate governance variables should influence firms' leverage choices reflects an ideal with respect to the Kenyan environment. This is because, from the problem statement, it emerges that there is a possibility that managers may entrench themselves because of the ineffectiveness of equity and debt. Thus, this implies that managers can use high or low amounts of debt with abandon as it doesn't deter their self-serving behaviours. Subsequently, the expectation is that the formulated conjectures will be rebuffed in regard to the Kenyan corporate governance environment. In order to confirm whether this is the case, the study performs a univariate analysis of firms and later constructs regression equations using panel data. Prior to these analyses, the study tests for multicollinearity as shown in appendix 2.

From the Pearson correlations, multicollinearity exists. One of the remedies proposed to tackle this problem is dropping the affected variables (Gujarati, 2006) which is akin to throwing the baby out with the bath water. This is because the model becomes vulnerable to specification error (Gujarati, 2006). For instance, in this case, removing EOWN and either LOGBS or NEX puts the model at risk of specification error because these variables are associated with managerial entrenchment according to Florackis and Ozkan (2009^a). Further, another suggestion would be to acquire additional data which in

this case would mean including the period 1984 – 2001. Unfortunately, data for most Kenyan listed firms with respect to this period is unavailable.

Gujarati (2006) also proposes that multicollinearity can be dealt with by principal component analysis. This is a method that transforms the explanatory variables to principal components which are later used in a regression. Principle components are arranged in terms of the size of their variances with the first component having the largest variance and the last components having the lowest variances (Jolliffe, 2002). However, if a regression is to be run on the principle components, one needs to establish criteria for detecting the components to be excluded from the model. Exclusion is done so that the model doesn't carry over the multicollinearity problem (Jolliffe, 2002). Nevertheless, according to Jolliffe (2002), there is no recommended method of removing the components since the ones available are arbitrary. In addition, Jolliffe (2002) warns that interpretation of regression results can be problematic whenever the principle components are ambiguous.

In addition to the above suggestions, Gujarati (2006) also proposes rethinking the model which in this case would entail deviating from the study's core authors' models. This can be recommended for further studies on the subject of entrenchment and firms' capital structure decisions. Overall, even though the data is plagued by multicollinearity, OLS estimators continue being BLUE (Gujarati, 2006).

4.2.1 Univariate Analysis

A univariate analysis is carried out for the purpose of dividing firms into low leverage (low governance) and high leverage (high governance) firms which is in line with Florackis and Ozkan (2009^b). This division is later used to compare corporate governance characteristics between the two groups of firms and helps in determining an entrenchment range. Thus, using Kenyan data, the following results are obtained.

Table 4.1: Mean values of different corporate governance variables computed with regard to book leverage ratios.

		Q1	Q2	Q3	Q4	P Value
OC	BK	0.688478	0.602378261	0.562496667	0.622430882	0.0349

	MKT	0.682307	0.665004348	0.636525652	0.490027536	0
	SDEV	0.179481	0.265476	0.255642	0.308148	
LOGBS	BK	1.872310957	1.97138403	2.036311897	1.968536203	0.0962
	MKT	1.902856072	1.976148072	1.983830985	1.985308145	0.5378
	SDEV	0.461558	0.419638	0.30787	0.321077	
LOGCEOT	BK	0.757740087	0.742809179	1.257808441	0.860520246	0.0024
	MKT	0.789519377	0.921077246	1.141297697	0.776845464	0.0755
	SDEV	0.82058	1.018814	0.735545	0.982784	
NEX	BK	4.898551	5.477612	5.794118	5.15942	0.3102
	MKT	5.188405797	5.289855072	5.651515152	5.202898551	0.7803
	SDEV	2.985972	3.500468	2.600567	2.558855	
EOWN	BK	0.85375	0.916022	1.153143	15.22014	0.3825
	MKT	0.882265652	0.983137928	1.148513606	15.13580777	0.3899
	SDEV	0.458082	0.543399	0.91356	116.0992	
ECOMP	BK	45011.95	37667.42	43028.86	51069.97	0.7353
	MKT	44270.11116	46201	44209.91408	42303.93002	0.991
	SDEV	86268.44	74021.05	55240.74	60329.64	
PROFIT	BK	1.478262	0.096144	0.128781	0.119328	0.3432
	MKT	1.483424507	0.124371087	0.128403379	0.087245894	0.3384
	SDEV	10.64341	0.134624	0.14355	0.117713	
LOGCSIZE	BK	14.50462435	14.68422582	15.349535	15.32369594	0.0014
	MKT	14.59598899	14.63026899	15.33946606	15.31520362	0.0031
	SDEV	1.767874	1.478055	1.371485	1.598609	
COLLAT	BK	0.431058	0.596506	0.625861	10.8458	0.3877
	MKT	0.441205348	0.516969797	0.774459909	10.77389986	0.3962
	SDEV	0.191183	0.757895	0.130391	84.37744	
NDTAX	BK	0.03104	0.033424	0.037906	0.873064	0.3941
	MKT	0.032642246	0.033592388	0.035261924	0.873952638	0.3928
	SDEV	3.55305364	3.487188655	3.630055601	3.601490487	

In this analysis, firms are divided into book and market leverage ratio quartiles. The first quartile represents low leverage firms and the fourth quartile represents high leverage firms. The *p values* are used to test whether there is a difference between the means of each variable. From the table, most variables means are not statistically significant at the

1% level with the exception of OC (market), LOGCEOT (book values) and LOGCSIZE. For instance, the *p value* of ownership concentration (OC - Market) shows that there is strong evidence to conclude that its means are different. On that note, low leverage firms have a greater OC by 10% (book leverage) and 39% (market leverage) relative to high leverage firms. This result deviates from *H7* which states that *companies with a high concentration of large shareholders have high debt levels*. Therefore, it may be possible that in low leverage firms, large shareholders are myopic and entrenched. This is because, according to Chaganti and Damanpour (1998), when majority owners are short-sighted, they cause a reduction in firms' debt levels. Besides this, Yeh (2005) links majority owners with low firm values when they are entrenched.

In similar fashion, other entrenchment variables that is, LOGBS, LOGCEOT, NEX, EOWN and ECOMP present results which deviate from the hypothesised relationships. Instead of high leverage firms preventing entrenchment (via reducing LOGBS, LOGCEOT, NEX, ECOMP and increasing EOWN), they seem to encourage it. Conversely, low leverage firms are seen to reduce entrenchment with respect to LOGBS, LOGCEOT (book), NEX, EOWN and ECOMP. For example, among low leverage firms, board size increases at a lower rate than that of high leverage firms. According to *H2* firms with low leverage ratios are expected to have a larger board size than those with high leverage ratios. In contrast, the above results show that it is the high leverage firms whose board size increases rapidly relative to that of low leverage firms.

Similarly, with regard to EOWN, low leverage firms have higher executive ownership levels relative to high leverage firms. Ideally, as portrayed by *H1*, when managers hold high amounts of equity they increase their firms' debt levels. However, this is not so for highly leveraged Kenyan firms as results show that managers who hold low amounts of equity are still able to increase their firms' leverage levels. These results are also confirmed when EOWN is proxied by SGA scaled by total sales. This serves as early evidence that debt in Kenyan listed firms is ineffective in combating managerial opportunism.

Subsequent to these preliminary results, firms are categorised into low governance and high governance firms. However, this study categorises firms differently from Florackis and Ozkan (2009^b) by naming firms in the lower 50% (rather than the lower 45%) as low governance firms and those in the upper 50% (rather than the upper 45%) as high governance firms. This is as a result of the unavailability of such computations by the software used for this study's analysis. Further, the study defines executive ownership in terms of agency costs because of lack of Kenyan data pertaining to the variable of concern.

Table 4.2: Low and high governance firms' behaviour at different ranges of executive ownership

	Low Governance Firms		High Governance Firms	
EOWN	BK	MKT	BK	MKT
0<1	0.020442022	0.0327	0.295264	0.455459
1<2	0.025982475	0.044495	0.306788	0.452698
2<3	0.0572514	0.049828	0.271128	0.498035
3<4	0.11032	0.146498	0.341879	0.385215
4<5	None	None	0.233114	0.924211
>5	None	None	None	None

The table above groups firms into low and high governance firms and later obtains the average book and market leverage ratios for firms falling within the various ranges of EOWN. It emerges from the results that a non-monotonic relationship does not exist between EOWN and leverage with regard to low governance firms. Instead, among these firms, a continuous increase in agency costs (a decline in executive ownership) leads to higher leverage ratios. This may mean that in firms with weak corporate governance, debt is ineffective in stalling adverse managerial behaviour. Thus, debt is used as a means of perpetrating managerial opportunism. Alternatively, when executives ownership levels are high, debt levels are low in low governance firms. Therefore, this confirms again that entrenchment is rife in such firms. Conversely, for firms with good governance, a reduction in executive ownership occasioned by an increase in agency costs fails to significantly change the leverage levels. This is in line with Florackis and Ozkan (2009^b) result that a weak link exists between executive ownership and leverage in firms with good corporate governance.

Further, when SGA divided by total sales is used as a robust measure of EOWN, a similar pattern emerges like the one discussed above. However, this proxy lacks a wider range relative to the asset utilisation ratio, with which to fully ascertain the direction of the relationship between EOWN and leverage.

Notwithstanding these results, univariate analysis fails to show whether corporate governance variables are positively or negatively related with leverage with the exception of executive ownership. Further, the analysis yields confounding results with respect to low and high leverage firms corporate governance variables that is, LOGBS, LOGCEOT, NEX, EOWN and ECOMP. As a consequence, on one hand, one is led to believe that entrenchment is prevalent in high leverage firms and yet they also seem to have good governance as shown in table 4.2 above. Therefore, the study goes further in its analysis by using regression models on unbalanced panel data for Kenyan listed firms.

4.2.2 Unit Root Tests

Unit root tests are performed to check if a time series is stationary (Phillips, 1999). Stationary time series mean and variances do not change with time. Conversely, non-stationary time series mean and variances change with time which makes it unreliable for forecasting (Iordana, 2009). Non-stationary time series can be stationarized through intergration. Unfortunately, once intergrated, standard interference procedures can no longer be performed on such data (Eviews 5 user's guide, 2004).

The unit root tests will be performed on the following first order auto-regressive process for panel data:

$$a_{it} = \rho_i a_{it-1} + O_{it} \delta_i + u_{it}$$

Where:

i: cross section of firms

t: time period ranging from 2002 to 2010

O_{it} : exogenous variables including any fixed effects or individual trends

ρ_{it} : autoregressive coefficients

u_{it} : assumed to be mutually independent idiosyncratic disturbance

In this study, unit root tests are performed on panel data related to industry groups. This is because, the software used in this study (Eviews 5) is unable to perform unit root tests for all industries combined. In addition, since Eviews 5 is able to perform unit root tests using various methods simultaneously, this study's data is subjected to such an option and a summary of results is shown in the appendix 3. These methods are grouped into 2. The first group contains tests with a common unit root process and include the Levin, Lin and Chu (LLC), Breitung and Hadri tests. The second group contains tests with individual unit root process and include Im, Pesaran and Shin (IPS), Fisher Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests (Eviews 5 user's guide, 2004).

If $p_i = 1$, a_i contains a unit root and the series is not stationary

If $p_i < 1$, a_i is weakly trend stationary

The hypothesis to be tested according to Eviews 5 user's guide (2004), will differ among the tests as shown below:

The LLC & Breitung tests will have the hypotheses:

Ho: there is a unit root; H1: there is no unit root

The IPS, Fisher-ADF and Fisher-PP tests will have the hypotheses:

Ho: there is a unit root; H1: some cross-sections have no unit root

The Hadri test has the following hypotheses:

Ho: there is no unit root; H1: there is a unit root

Unit root test results of the AIMS segment in appendix 3a show that with the exception of the Breitung and Hadri tests, 4 tests show that the series is stationary. In the agricultural segment, most tests show in appendix 3b that the series is stationary with the exception of the Breitung test. In appendix 3c, the commercial and services segment time series data is stationary with the exception of the Hadri test which states otherwise. In the industrial and allied segment, all tests confirm that the series is stationary in appendix 3d. Overall, these tests clear the path for this study to carry out regression analysis on entrenchment variables.

4.2.3 Pooled Ordinary Least Squares regression model

In light of the weaknesses of univariate analysis, a POLS regression model is constructed in this section to address those gaps. POLS estimation method is used if it incorporates the unobserved effect otherwise, it yields inefficient estimates and invalid standard errors (Dougherty, n.d). In this section, the study first tests whether the pre-reform and post-reform samples differ from each other. This test will help in determining whether to run the various regression models on firms ignoring the division between pre and post reform periods or run the regressions on firms acknowledging these periods. Therefore, the test takes the following form:

$$H_0: \mu_1 - \mu_2 = 0$$

$$H_1: \mu_1 \neq \mu_2$$

Assuming a 95% confidence level, a *p value* of 0.368 suggests that there is no evidence to support the alternative hypothesis. Thus this means that there is no difference between the pre-reform and post-reform sample periods. Consequently, the POLS, within estimates and between estimates regression models will cover the period 2002 to 2010 without splitting them into 2 samples.

Further, in this section, the expected signs which were shown in chapter 3 are compared with the results of POLS book and market leverage ratio models. The signs correspond to the various hypothesised relationships discussed in chapter 2.

Table 4.3: Expected relationships between entrenchment variables and leverage using POLS models

Variables	Expected	POLS (BK)	POLS (MKT)
OC	+	-	-
LOGBS	-	-	-
LOGCEOT	-	-	-
NEX	-	-	-
EOWN	-	+	+
ECOMP	-	-	-
PROFIT	-	-	-
LOGCSIZE	+	+	+
COLLAT	+	+	+
NDTAX	-	+	-

From the above table, only OC, EOWN and NDTAX (book) signs using POLS differ from the expected signs. Therefore, with regard to the variables which conform to the expected signs, *H2*, *H3*, *H4* and *H5* (which are stated below) are supported:

H2: Companies with large boards have a lower leverage ratio relative to those with smaller boards

H3: Companies with non-executive directors have a lower leverage ratio relative to those without non-executive directors

H4: Companies which pay high executive compensation have lower leverage ratios

H5: Companies with long serving CEOs have low leverage ratios

Subsequent to these results, it can be said that debt is effective in countering the entrenchment that is enshrined in board size, the number of non-executives in a firm's board, executive pay and a long tenure. This is because in the presence of these factors, debt is reduced in order to escape its discipline.

Further, the relationship between EOWN and leverage is indirect. This is because, in this study, EOWN is proxied by agency costs which vary inversely with executive ownership. Thus, the positive sign between EOWN and leverage shows the relationship between agency costs and leverage. High agency costs (meaning that executive ownership is low), leads to an increase in leverage. Therefore this may be interpreted to mean that among Kenyan firms, executives with low ownership levels are able to increase their firms' debt levels which attests to the expectation that debt may be ineffective in dealing with entrenchment. In contrast, Moh'd Perry and Rimbey (1998), Florackis and Ozkhan (2009^a) and Lee and Chen (2011) find that when managers have high ownership levels, they reduce their firm's debt levels indicating that they are entrenched.

A negative relationship between OC and both book and market leverage ratios contradicts *H7* which expects that firms with large non-managerial owners will have high leverage ratios. These results are similar to those obtained using univariate analysis in section 4.2.1. Therefore, this relationship is interpreted to mean that among Kenyan firms, large shareholders may be entrenched. This is because according to Yeh (2005)

firm value decreases whenever the cash flow and ownership rights of large shareholders are not well aligned (entrenchment). Further, large shareholders in Kenyan firms may be myopic which according to Chaganti and Damanpour (1998) causes firms to adopt a low leverage strategy. These results differ from those of Berger, Ofek and Yermack (1997) and Perrini, Rossi and Rovetta (2008) who find that the presence of large shareholders causes firm's to adopt a high leverage strategy.

The other relationship that differs from expectation is that between NDTAX and book leverage ratios. This interaction may mean that even though Kenyan firms may have an increase in non-debt tax shields to reduce their taxable income, they still use more debt. This is similar to the results obtained by Moh'd, Perry and Rimbey (2010).

Incidentally, the CEO duality variable is not included in the above analysis and in the preceding models. This is because CEO duality is not present in most Kenyan firms. In fact, the corporate governance code in Kenya places emphasis on the separation of the chairman and CEO roles. As such, Kenyan firms seem to have conformed to this code with respect to CEO duality.

The relationships shown in the above table are shown more clearly by POLS regression model results. POLS model takes the following form

$$a_{it} = \alpha + \beta o_{it} + u_{it}$$

Where:

- a: the independent variable in this case book and market leverage ratios
- o: the explanatory variables represented by the entrenchment and control variables
- i: cross section of firms
- t: time period ranging from 2002 to 2010
- u: disturbance term

POLS results are shown in appendix 3. The *p value* of POLS F statistic indicates that there is overwhelming evidence regardless of whether book or market leverage ratios are used, to infer that the regression model is statistically significant at the 1%, 5% and 10% levels. Further, the adjusted R^2 (book) shows that 99.9952% of the variation in book

leverage ratios is explained by the models explanatory variables. In contrast, only 31.7714% of the variation in market leverage ratio is explained by the model's explanatory variables. Moreover, a POLS model estimated using market leverage ratio is less efficient relative to the model estimated using book leverage ratio. This is because the former model has a higher standard error of regression than the later model.

Notwithstanding these results, the Durbin Watson statistic puts to doubt the efficiency of both POLS models. According to this statistic, there is positive auto-correlation among the models residuals which means that POLS estimates are not efficient. In turn this means that the F tests are unreliable, standard error of the regression may be inefficient and the sum squared of the residual is a biased estimator which means that R^2 may fail to measure the true R^2 (Gujarati, 2006). In light of the consequences of serial correlation in the POLS models, the study estimates the relationship between leverage and corporate governance variables using a Fixed Effects model.

4.2.4 Fixed Effects model

In chapter 3, whenever estimates derived using a FE model are significantly lower than those of a POLS model, it may mean that the later fails to account for the unobserved effect. This in turn makes POLS estimates inefficient and its standard errors invalid (Dougherty, n.d). In light of this, a comparison is made between FE model estimates and POLS estimates where it emerges that FE estimates are higher than those of POLS. Despite these being favourable results, POLS as seen in section 4.2.2 is still an inefficient estimator because of the serial correlation that plagues it. The FE model which is of concern to the study is the within estimates model which takes the following form:

$$a_{it} - \bar{a}_i = \beta (o_{it} - \bar{o}_i) + u_{it} - \bar{u}_i \text{ which is summarised as}$$

$$\ddot{a}_{it} = \beta \ddot{o}_{it} + \ddot{u}_{it}$$

In similar fashion to section 4.2.2, the study carries out a comparison of signs of FE model against those of the hypotheses.

Table 4.4: Expected relationships between entrenchment and leverage variables using within estimates fixed effects models

Variables	Expected	FE (BK)	FE (MKT)
OC	+	-	-
LOGBS	-	+	+
LOGCEOT	-	-	-
NEX	-	+	-
EOWN	-	+	+
ECOMP	-	-	+
PROFIT	-	+	+
LOGCSIZE	+	+	+
COLLAT	-	+	-
NDTAX	-	+	+

From the table, the FE model rejects quite a number of hypothesised relationships with regard to OC, LOGBS, NEX (book), EOWN, ECOMP (market), PROFIT, COLLAT (book) and NDTAX. The rejection of *H7* which states that companies with large non-managerial owners have high leverage, again points to the possibility of large shareholders being entrenched and myopic in Kenyan firms. This result differs from that of Berger, Ofek and Yermack (1997) and Perrini, Rossi and Ravetta (2008) who find that firms with large shareholders have high debt levels.

In addition, the FE model using book leverage ratios, suggests that companies with larger board sizes and a large number of non-executives in their boards have higher leverage ratios. This may mean that among Kenyan firms, debt may be ineffective in dealing with the entrenchment associated with large board sizes and a high number of non-executives in their boards. These results with regard to board size differ from those of Berger, Ofek and Yermack (1997) and Lee and Chen (2011) who find that a large board size reduces a firm's leverage levels. However, results of NEX also seem to support stewardship theory which states that the higher the number of non-executives in the board, the higher the benefits that firms will reap. In this context, a large number of non-executives on Kenyan firms' boards may be construed to attract benefits in the form of increased debt finance.

In addition, results also indicate (using market leverage ratios) that the higher the executive pay, the higher the debt, which deviates from *H4*. According to *H4* highly paid executives (an entrenchment factor) should reduce their firms' debt levels. However, in Kenyan firms, such managers (highly remunerated) court even more debt indicating that

it may be nothing more than a paper tiger to them. These results lend further credence to the proposition that was made at the beginning of chapter 4 that since the effectiveness of debt in Kenyan firms is doubtful, hypothesised relationships will be rejected.

Moreover, with regard to EOWN, results report that executives with low shareholding increase their firms debt levels whereas those with high shareholding reduce their firms' debt levels. In summation, managers are entrenched. This is because at low ownership levels, debt is perceived to be ineffective and as a result, managers are able to access more debt implying that entrenchment via ownership goes unchecked. On the other hand, when managers have high ownership levels and their firms' debt decreases, they are deemed to be entrenched according to Moh'd, Perry and Rimbey (1998) and Florackis and Ozkhan (2009^a).

Further, Titman and Wessels (1988) expectation that firms with less collateralisable assets will use more debt is not supported with regard to the book leverage model. Instead, results affirm Moh'd, Perry and Rimbey's (2010) findings that firms with more collateralisable assets utilise higher debt levels. Moreover, this study finds that firms with more non-debt tax shields use more debt which deviates from Titman and Wessels (1988) expectation of an inverse relationship. Equally important, firms with higher profitability are found to use more debt which rejects findings by Moh'd, Perry and Rimbey (1998), Booth, Aivazan, Demirguc-Kunt and Maksimovic (2001), Ngugi (2008) and Fan, Titman and Twite (2010) that profitable firms use less debt.

The results of a regression run on the FE within estimates model are shown in the table in appendix 4.

Appendix 4 shows that the models estimated coefficients - with the exception of OC, EOWN (book) and NDTAX (book) - are not statistically significant at the 1%, 5% and 10% levels respectively. However, according to Gujarati (2006), a lack of statistical significance is likely to affect multiple regression models. This is because, "in a multiple regression, one or more variables individually have no effect on the dependent variable but collectively they have a significant impact on it" (Gujarati, 2006).

In addition, a lack of linearity between the explanatory variables and the dependent variable may be as a result of the form that the explanatory variables take. For instance

logarithmic variables and dummy variables make the model a variant of a semi-log model and an ANCOVA model. Further, as seen earlier in the univariate analysis, among high governance firms, there is a non-linear relationship between EOWN and leverage. Thus, this behaviour may have been incorporated in the FE model causing the t statistic associated with EOWN (market) to lack statistical significance. Nevertheless, 99.9971% of the variation in book leverage ratio is explained by the explanatory variables and the model is statistically significant at the 1,5 and 10 per cent levels.

Positive auto-correlation exists in this model even after including the White period robust coefficient variance estimator. This estimator helps the model yield standard errors that are robust to serial correlation and heteroskedasticity. Notwithstanding this, there is an improvement in the Durbin Watson statistic relative to the POLS model which means that positive auto-correlation is less pronounced in the within estimates FE model. In summary, the FE model is preferable to the POLS model. However, it too has foibles as articulated in chapter 3. Among them, there is one that spawns another FE model which attempts to address that particular weakness. This is the between estimates FE model which tackles the problem of a lack of recognition of variation between firms. Therefore, in the next section, a between estimates model is used to estimate the relationship between leverage and entrenchment inducing variables.

4.2.5 Between Estimates Model

A between estimates model takes the following form:

$$\bar{a}_i = \alpha + \bar{o}_i + u_i$$

The model's signs relative to the expected signs are shown below:

Table 4.5: Expected relationships between entrenchment and leverage variables using between estimates fixed effects models

Variables	Expected	BE (BK)	BE (MKT)
OC	+	-	+
LOGBS	-	-	+
LOGCEOT	-	-	+

NEX	-	-	-
EOWN	-	-	-
ECOMP	-	-	-
PROFIT	-	-	-
LOGCSIZE	+	+	+
COLLAT	-	+	+
NDTAX	-	+	-

The table above shows that a between estimates model does not support conjectures related to OC (book), LOGBS (market), LOGCEOT (market), COLLAT and NDTAX. With regard to OC, the model yields mixed results. On one hand, it lends more support to results obtained by POLS and within estimates book models that large shareholders are short-termists in approach and may be entrenched leading to lower leverage (book) ratios in Kenyan firms. However, on the other hand, the model (market) supports *H7* which states that *companies with large shareholders have high leverage ratios* which buoys Berger, Ofek and Yermack's (1998) and Perrini, Rossi and Ravetta's (2008) findings.

Further, entrenchment inducing variables like LOGBS and LOGCEOT seem to overcome the disciplinary role of debt. For example, instead of a large board reducing debt levels, it is seen to act to the contrary. Conversely, Lee and Chen (2011) find that a large board decreases firm value. Similarly, a long serving executive seems to pursue a high leverage strategy instead of a low leverage strategy indicating that there is a possibility of debt being ineffective. However, this result is opposed by Lee and Chen (2011) and Berger, Ofek and Yermack (1997) who find that long serving managers destroy their firm's value.

Surprisingly, *H1* which expects a positive relationship between executive ownership and leverage is supported. This then means that debt is effective in dealing with the entrenchment that develops through managerial ownership. This is because, when managers have a low shareholding in a firm, results show that they will seek to reduce debt levels. Conversely, when managers have a high shareholding in a firm, results show that they increase debt levels. This may imply that when managers interests are well aligned with those of shareholders (the principle), they increase their firms debt levels as an indication that they are not entrenched.

Therefore, with regard to these results, the findings of Moh'd Perry and Rimbey (1998), Florackis and Ozkhan (2009^a) and Lee and Chen (2011) that managers with a high shareholding reduce their firms' debt levels are rejected.

In addition, the model supports Moh'd, Perry and Rimbey's (2010) results with regard to both collateral value of assets and non-debt tax shields as seen by the deviation from the expected signs. These results are parallel to those obtained using a within estimates model.

The between estimates model results showing interactions between the dependent and independent variables coupled with test statistics are shown in appendix 5.

Similar to the within estimates model, the between effects coefficients are not statistically significant at the 1%, 5% and 10% levels with the exception of ECOMP (market) and LOGCSIZE (market). As explained earlier in section 4.2.3, this occurs because the multiple regression models' explanatory variables may be unable to individually influence leverage. In addition, these independent variables adopt characteristics of ANCOVA and semi-log models resulting into a non-linear relationship between them and the dependent variable. Further, EOWN's *t* statistic is not significant at the 1, 5 and 10 per cent levels because of the likelihood of it having a non-linear relationship with leverage. However, the model's *p* value suggests that it is statistically significant at the 1, 5 and 10 per cent levels with 99.9685% of the variation in book leverage ratios being explained by the independent variables.

Notably, the model's standard error of regression is larger relative to that of the within estimates model but is lower than that of the POLS.

Major strides are made with regard to auto-correlation as the Durbin Watson statistic shows that model approaches the point of no serial correlation. Therefore, this may mean that a between estimates model is more efficient than the POLS and within estimates models because the effects of positive auto-correlation are less pronounced in the model. Even so, the between effects model is not a consistent estimator because it does not adhere to strict exogeneity (Wooldridge, n.d).

The combined results of the POLS, within estimates and between estimates models are shown appendix 6.

The results of the models reject all the hypotheses made in chapter 2 regarding entrenchment variables. This deviation however, does not occur simultaneously for all models. Indeed, some models support hypotheses when using book leverage ratios but when remodelled to use market leverage ratios, they reject the hypothesised relationships. Nevertheless, models constructed with market leverage ratios as the dependent variable are less efficient relative to those which use book leverage ratios because they have large standard errors. Further, all models using market leverage ratios have a low explanatory power relative to those which use book leverage ratios. This means that most of the variation in market leverage ratio is explained by factors that are excluded by the models. In addition, the between estimates model which uses market leverage ratio as the dependent variable is not statistically significant at the 1, 5 and 10 per cent levels implying that its explanatory variables do not jointly influence the dependent variable.

On the other hand, even though models using book leverage ratio are more preferable in light of the weaknesses of their counterparts, they only support *H4* and *H5*. *H4* states that *companies which pay high executive compensation have lower leverage ratios* and *H5* states that *companies with long serving CEOs have low leverage ratios*. Most hypotheses are rejected by one model or the other which further strengthens the expectation that debt in Kenyan firms is not effective in combating weak corporate governance, that is, entrenchment.

4.3 Entrenchment in NSE segments

Generally, Kenyan firms have been found to be entrenched. However, the study would like to find out whether there is a segment relative to all other NSE segments where entrenchment is rife. Therefore, in this section, the study investigates how corporate governance among industries interacts with firms leverage choices. Further, the results of the various categories are compared against each other and against the expected results. These categories are Agricultural, Industrial and allied, Commercial and services and Alternative Investment Market Segment (A.I.M.S).

Table 4.6: Expected relationships between entrenchment and book leverage variables in NSE segments

LEVERAGE (BOOK)					
Independent Variables	Expected	Agricultural	Commercial & Services	Industrial & Allied	A.I.M.S
OC	+	+	-	+	+
LOGBS	-	+	-	-	+
LOGCEOT	-	+	-	+	-
NEX	-	-	-	-	+
EOWN	-	-	+	+	-
ECOMP	-	-	-	-	-
PROFIT	-	-	-	-	-
LOGCSIZE	+	-	+	+	-
COLLAT	-	+	+	+	+
NDTAX	-	+	-	+	+

Table 4.7: Expected relationships between entrenchment and market leverage variables in NSE segments

LEVERAGE (MARKET)					
Independent Variables	Expected	Agricultural	Commercial & Services	Industrial & Allied	A.I.M.S
OC	+	+	-	-	-
LOGBS	-	+	-	-	+
LOGCEOT	-	-	-	+	-
NEX	-	-	-	-	-
EOWN	-	-	+	+	+
ECOMP	-	+	-	-	-
PROFIT	-	+	-	-	-
LOGCSIZE	+	-	+	+	+
COLLAT	-	-	-	+	+
NDTAX	-	+	+	-	+

The above summaries of the relationship between corporate governance and leverage ratios among various industries are obtained from OLS regressions of firms. The results of the regressions are shown below (book and market leverage results are shown in the first and second rows respectively for each variable):

4.3.1 Industrial and Allied

Table 4.8: Relationship between entrenchment variables and leverage ratios (book and market) in the Industrial and Allied segment.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.44454	0.351531	-1.26458	0.2095
	-1.04771	0.406785	-2.57558	0.0118
OC	1.64E-10	8.61E-11	1.902086	0.0606
	-5.48E-11	9.96E-11	-0.55001	0.5838
LOGBS	-0.08165	0.127034	-0.64271	0.5222
	-0.11388	0.147002	-0.7747	0.4407
LOGCEOT	0.025122	0.02325	1.080537	0.283
	0.016715	0.026904	0.621281	0.5361
NEX	-0.01721	0.016598	-1.03687	0.3028
	-0.00851	0.019207	-0.44313	0.6588
EOWN	0.007556	0.025646	0.294633	0.769
	0.000506	0.029677	0.017045	0.9864
ECOMP	-3.91E-07	3.32E-07	-1.17764	0.2423
	-1.37E-07	3.84E-07	-0.3557	0.723
PROFIT	-0.10932	0.192783	-0.56704	0.5722
	-0.62373	0.223085	-2.7959	0.0064
LOGCSIZE	0.047343	0.020504	2.308917	0.0234
	0.103406	0.023727	4.358134	0
COLLAT	0.0555	0.033121	1.675661	0.0975
	0.037829	0.038327	0.987009	0.3265
NDTAX	2.59677	1.1961	2.171031	0.0328
	-1.60444	1.384104	-1.15919	0.2497
γ_{2002}	-0.07482	0.084495	-0.88545	0.3784
	0.12091	0.097777	1.236591	0.2197
γ_{2003}	-0.0337	0.095032	-0.35465	0.7237
	0.084689	0.109969	0.770118	0.4434
γ_{2004}	-0.02033	0.099303	-0.20472	0.8383
	0.134241	0.114912	1.168207	0.246
γ_{2005}	0.068489	0.091498	0.748536	0.4562
	0.100158	0.10588	0.945966	0.3469
γ_{2006}	0.086045	0.079366	1.084152	0.2814
	0.096441	0.091841	1.050088	0.2967
γ_{2007}	0.047119	0.082388	0.571912	0.5689
	0.023436	0.095338	0.245821	0.8064
γ_{2008}	0.048441	0.076994	0.629157	0.531
	0.029323	0.089096	0.32912	0.7429

γ_{2009}	0.033366	0.073157	0.456084	0.6495
	0.047135	0.084656	0.55678	0.5792
R²	0.34131			
	0.356201			
Adjusted R²	0.200162			
	0.218244			
S.E. of regression	0.187277			
	0.216713			
F-statistic	2.418104			
	2.581973			
P value (F-statistic)	0.003607			
	0.001887			
Durbin-Watson statistic	2.22571			
	2.227541			

Book and market leverage results are shown in the first and second rows respectively for each variable

The results above indicate that the models (both book and market) have a low explanatory power. However, the *p values* of the F-statistic imply that the models are statistically significant at the 1%, 5% and 10% levels meaning that their explanatory variables jointly impact leverage. In support of this finding, the models variables as shown above do not individually impact leverage as shown by their high *p values*. Further, the standard error of the model using book leverage ratio is lower than that using market leverage ratio. This implies that the former model is superior to the later in terms of efficiency. As a result, the book model is used for analysis in this section. The table above also shows that the models are relatively free of serial correlation as their Durbin Watson statistics are not far from the point of no serial correlation.

In comparison with the expected relationship between entrenchment variables and leverage, firms in the industrial and allied sector fair relatively well. This is because only two entrenchment variables, LOGCEOT and EOWN differ from the expected relationship. Thus, this seems to imply that in this sector, debt is ineffective in fighting managerial opportunism that is associated with long serving CEOs. In addition, with respect to EOWN, results imply that managers are entrenched courtesy of their ownership levels regardless of whether they are low or high. Results also show that the presence of large shareholders increases firms debt levels which is in agreement with the results of Berger, Ofek and Yermack (1997) and Perrini, Rossi and Ravetta (2008).

In addition, it also emerges that highly profitable firms in this sector use less debt but as firms grow larger in size, they increase their debt levels. This is in line with Moh'd, Perry and Rimbey (1998); Booth, Aivazian, Demirguc-Kunt and Maksimovic (2001); Ngugi (2008); Fan, Titman and Twite (2010) with respect to profitability and Demirguc-kunt and Maksimovic (1996) with respect to LOGCSIZE. Further, when firms in this sector have more collateralisable assets they use more debt which is contrary to Moh'd, Perry and Rimbey (2010) findings. Moreover, even when firms in this sector have more non-debt tax shields, they still use high debt levels which differs from Moh'd, Perry and Rimbey (2010) results.

4.3.2 Agricultural

Table 4.9: Relationship between entrenchment variables and leverage ratios (book and market) in the Agricultural segment.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.992998	0.824403	2.417505	0.0388
	3.795189	1.365633	2.77907	0.0214
OC	1.61E-10	1.34E-10	1.198468	0.2613
	1.54E-10	2.10E-10	0.735534	0.4807
LOGBS	0.058967	0.047383	1.244476	0.2448
	0.381811	0.49929	0.764707	0.464
LOGCEOT	0.009715	0.075004	0.12953	0.8998
	-0.08348	0.117537	-0.710242	0.4955
NEX	-0.057127	0.031427	-1.817804	0.1025
	-0.07024	0.045365	-1.548327	0.156
EOWN	-0.089165	0.155484	-0.573467	0.5804
	-0.099188	0.239699	-0.4138	0.6887
ECOMP	-3.61E-07	1.02E-06	-0.351926	0.733
	1.41E-06	1.56E-06	0.902242	0.3904
PROFIT	-0.017924	0.129453	-0.138462	0.8929
	0.26041	0.198228	1.313689	0.2214
LOGCSIZE	-0.132174	0.056428	-2.34236	0.0439
	-0.250408	0.087499	-2.861848	0.0187
COLLAT	0.039649	0.35908	0.110419	0.9145
	-0.520807	0.53694	-0.969953	0.3574
NDTAX	2.921466	3.739893	0.781163	0.4548
	2.148475	5.736213	0.374546	0.7167
γ_{2002}	-0.154001	0.137085	-1.123396	0.2903
	0.259356	0.215665	1.202588	0.2598
γ_{2003}	-0.114574	0.117762	-0.972928	0.356
	0.154942	0.187268	0.827381	0.4294
γ_{2004}	-0.126189	0.077351	-1.631383	0.1372

	-0.148297	0.12199	-1.215654	0.255
γ_{2005}	-0.076573	0.066817	-1.146018	0.2813
	-0.126468	0.112625	-1.122913	0.2905
γ_{2006}	-0.04926	0.070373	-0.699983	0.5016
	-0.087212	0.110378	-0.790121	0.4498
γ_{2007}	-0.080398	0.078958	-1.018228	0.3352
	-0.063094	0.125482	-0.502812	0.6272
γ_{2008}	-0.00891	0.070538	-0.126314	0.9023
	0.016771	0.110361	0.151966	0.8826
γ_{2009}	-0.144863	0.07593	-1.907844	0.0888
	-0.179298	0.118461	-1.51356	0.1644
R^2	0.911933			
	0.939934			
Adjusted R^2	0.735798			
	0.819803			
S.E. of regression	0.060638			
	0.092954			
F-statistic	5.177478			
	7.8242			
P value (F-statistic)	0.008002			
	0.001732			
Durbin-Watson stat	2.029476			
	2.280012			

Book and market leverage results are shown in the first and second rows respectively for each variable.

Similar to prior results reported in the POLS, FE and between estimates models, the models depicting the behaviour of firms in the agricultural segment show that entrenchment variables do not individually influence leverage choices. Instead, these variables collectively impact on leverage as shown by the high R^2 . In support of this result, the *p values* of both the book and market leverage models show that there is overwhelming evidence at the 1%, 5% and 10% significance levels that the variables have a joint impact on firms leverage choices. However, the model using book leverage as the dependent variable is preferable as seen earlier in panel models, as in this sector, it is more efficient and has little negative auto-correlation relative to the market leverage model. Therefore, analysis of results will be done using the book leverage model. On that note, executives in this sector have more leeways of pursuing their interests through a large board size and long CEO tenure. However, large shareholders in this sector are seen to cause firms to adopt high leverage levels and are not entrenched as shown by

earlier results. In addition, debt is seen to be effective with regard to executive compensation since highly paid executives reduce their firms' debt levels in this sector. Unfortunately, the stewardship theory is rejected in this sector because results show that firms whose boards have a majority of outsiders have low debt levels which encourages entrenchment. On the flipside however, debt is seen to be effective with regard to NEX because when managers use it (NEX) as a means of pursuing their own interests, they reduce their firms' debt levels as a way of reducing its disciplinary role.

The table above also shows that debt is effective with regard to EOWN. This is because poorly aligned managers seek to reduce their firms' debt in order to prevent its disciplinary action. Conversely, well aligned managers increase their firms' debt levels. This is the relationship that was revealed by the between estimates model which conflicted with the results of the other models which portrayed Kenyan managers as being generally entrenched regardless of whether have low or high ownership levels. Further, profitable firms in the agricultural segment use less debt which lends support to findings by Moh'd, Perry and Rimbey (1998); Booth, Aivazian, Demircuc-Kunt and Maksimovic (2001); Ngugi (2008); Fan, Titman and Twite (2010). In addition, results also show that large firms in this group as well as those which have more collateralisable assets use more debt. This supports findings by Demircuc-kunt and Maksimovic (1996) with respect to firm size and Moh'd, Perry and Rimbey (2010) with respect to collateral value of assets. However, the results fail to agree with Moh'd, Perry and Rimbey (2010) that firms with more non-debt tax shields use less debt.

4.3.3 Commercial and Services

Table 4.10: Relationship between entrenchment variables and leverage ratios (book and market) in the Commercial and Services segment.

Variable	Coefficient	Std. Error	t-Statistic	P value
C	-0.78434	0.241352	-3.24976	0.0024
	-1.86063	0.440225	-4.22655	0.0001
OC	-7.62E-12	6.52E-12	-1.16845	0.2497
	-1.26E-11	1.19E-11	-1.06101	0.2952
LOGBS	-0.16177	0.144397	-1.12028	0.2694
	-0.06178	0.263379	-0.23457	0.8158
LOGCEOT	-0.02402	0.025129	-0.9559	0.345
	-0.03993	0.045835	-0.87116	0.389

NEX	-0.00222	0.01151	-0.19268	0.8482
	-0.04186	0.020995	-1.99372	0.0532
EOWN	0.128146	0.040051	3.199572	0.0027
	0.12177	0.073053	1.666876	0.1036
ECOMP	-9.70E-08	3.39E-07	-0.28654	0.776
	-6.00E-07	6.18E-07	-0.9708	0.3376
PROFIT	-0.00053	0.001487	-0.35949	0.7212
	-0.00134	0.002711	-0.49265	0.625
LOGCSIZE	0.067022	0.017552	3.818583	0.0005
	0.167652	0.032014	5.236839	0
COLLAT	0.389559	0.064634	6.027183	0
	-0.2068	0.117891	-1.75417	0.0873
NDTAX	-0.50543	0.704174	-0.71776	0.4772
	0.499842	1.284409	0.389161	0.6993
γ_{2002}	0.02732	0.084993	0.321434	0.7496
	0.301525	0.155027	1.944976	0.059
γ_{2003}	0.07955	0.077124	1.031459	0.3087
	0.212799	0.140673	1.512719	0.1384
γ_{2004}	0.060311	0.087881	0.686282	0.4966
	0.105903	0.160294	0.660677	0.5127
γ_{2005}	0.002574	0.077907	0.033033	0.9738
	0.051129	0.142102	0.359801	0.7209
γ_{2006}	0.03945	0.072963	0.540683	0.5918
	0.227645	0.133084	1.710543	0.0951
γ_{2007}	0.049004	0.079191	0.618808	0.5396
	-0.05207	0.144444	-0.36051	0.7204
γ_{2008}	0.018876	0.08038	0.23484	0.8156
	-0.07781	0.146612	-0.53072	0.5986
γ_{2009}	0.082458	0.07106	1.160402	0.2529
	0.013805	0.129613	0.106507	0.9157
R²	0.999996			
	0.724584			
Adjusted R²	0.999995			
	0.597469			
S.E. of regression	0.110619			
	0.201769			
F-statistic	601769.9			
	5.700227			
P value (F-statistic)	0			
	0.000003			
Durbin-Watson statistic	2.245545			
	2.862108			

Book and market leverage results are shown in the first and second rows respectively for each variable.

According to the results shown above, the model using book leverage ratio as the dependent variable is more preferable than the one using market leverage ratio as the dependent variable. This is because it has a lower standard error of regression, less pronounced negative serial correlation and a higher explanatory power. Thus, analysis of firms in the commercial and services segment will focus on results of the model using book leverage as the dependent variable. As a starting point, large shareholders of firms in this group are seen to be entrenched since their presence reduces firms leverage levels. This is in contrast to the prior firm groupings (Agricultural and Industrial and allied) where large shareholders encourage higher debt levels in firms.

Similar to firms in the agricultural and industrial and allied classes, a large number of outsiders in commercial and services firms' boards leads to a decrease in debt levels. Again, this result rejects the stewardship theory and testifies to the effectiveness of debt. Other entrenchment variables that is, LOGBS, LOGCEOT and ECOMP show that the presence of debt diminishes chances of managers behaving opportunistically. This is because when managers are entrenched as represented by these entrenchment variables, they seek to reduce their firms' debt levels which means that debt in this group of firms is effective except where large shareholders are present and when managers hold their firm's equity instruments.

Further, results show that higher profitability in firms leads to low debt levels but growing firms increase their debt levels. In addition, firms that have more collateralisable assets use more debt as found by Moh'd, Perry and Rimbey (2010) but those with higher non-debt tax shields reduce their debt levels as expected by Titman and Wessels (1988).

4.3.4 Alternative Investment Market Segment (A.I.M.S)

Table 4.11: Relationship between entrenchment variables and leverage ratios (book and market) in the A.I.M.S segment.

Variable	Coefficient	Std. Error	t-statistic	P value
C	0.6066	0.4337	1.40	0.176
	-1.4091	0.6885	-2.05	0.053
OC	0.0000	0.0000	0.75	0.460
	-0.0000	0.0000	-0.61	0.550

LOGBS	0.1419	0.1468	0.97	0.345
	-0.1659	0.2331	-0.71	0.484
LOGCEOT	-0.11793	0.05582	-2.11	0.047
	-0.20541	0.08863	-2.32	0.031
NEX	0.03298	0.01885	1.75	0.095
	-0.01048	0.02993	-0.35	0.730
EOWN	-0.01212	0.03764	-0.32	0.751
	0.08987	0.05976	1.50	0.148
ECOMP	-0.0000	0.0000	-0.35	0.728
	-0.0000	0.0000	-1.43	0.168
PROFIT	-0.0367	0.1474	-0.25	0.806
	-0.3296	0.2340	-1.41	0.174
LOGCSIZE	-0.06026	0.04339	-1.39	0.179
	0.15316	0.06888	2.22	0.037
COLLAT	0.0495	0.2600	0.19	0.851
	0.2200	0.4129	0.53	0.600
NDTAX	4.190	2.218	1.89	0.073
	5.358	3.522	1.52	0.143
γ_{2002}	-0.1681	0.1579	-1.06	0.299
	0.1522	0.2508	0.61	0.550
γ_{2003}	-0.1454	0.1551	-0.94	0.359
	-0.2150	0.2463	-0.87	0.393
γ_{2004}	-0.0834	0.1256	-0.66	0.514
	-0.2293	0.1994	-1.15	0.263
γ_{2005}	-0.1403	0.1517	-0.92	0.366
	-0.3622	0.2408	-1.50	0.147
γ_{2006}	-0.1169	0.1407	-0.83	0.416
	-0.3592	0.2234	-1.61	0.123
γ_{2007}	-0.0521	0.1509	-0.35	0.733
	-0.2317	0.2396	-0.97	0.345

γ_{2008}	-0.1729	0.1178	-1.47	0.157
	-0.2780	0.1870	-1.49	0.152
γ_{2009}	-0.1627	0.1170	-1.39	0.179
	-0.2139	0.1858	-1.15	0.262
R²	0.68			
	0.827			
Adjusted R²	0.406			
	0.679			
S.E of regression	0.122711			
	0.194830			
Sum squared residual	0.31622			
	0.79713			
F- statistic	2.48			
	5.58			
P value	0.024			
	0.000			
Durbin Watson statistic	2.54893			
	2.77375			

Book and market leverage results are shown in the first and second rows respectively for each variable

The results above again support the previous findings that the model using book leverage as the dependent variable is more preferable than that using market leverage as the dependent variable. This is because the former has a lower standard error of regression, making it more efficient and has a lower negative serial correlation than the later. As a consequence, this study chooses this model (book) for analysis in this segment. In addition, in line with prior results, most entrenchment variables (except LOGCEOT) and control variables lack statistical significance. However, the low *p values* of the models' F statistic relative to 5% and 10% significance levels indicate that the variables collectively impact on the book and market leverage ratios.

In this sector, the stewardship theory is supported as seen by the positive relationship between NEX and leverage. This may be interpreted to mean that for firms in the

A.I.M.S segment, a large number of outsiders in the board enable firms to have access to more debt financing. However, on the flip side, this relationship may also portray debt's inability to quash the entrenchment that exists in the form of manipulating the number of outsiders in firms' boards.

Notably, debt seems to be effective with regard to EOWN, LOGCEOT and ECOMP. This is because when firms' executives are entrenched via their equity ownership levels, a long tenure in office and high remuneration, they seek to reduce their firms' debt levels. In particular, the results of EOWN show that managers whose interests are well aligned with those of shareholders increase their firms' debt and the converse is true. This is the relationship that was unveiled by the between estimates model at the time when other models did not seem to recognise it.

Further, similar to Moh'd, Perry and Rimbey (1998); Booth, Aivazian, Demircug-Kunt and Maksimovic (2001); Ngugi (2008); Fan, Titman and Twite (2010), highly profitable firms reduce their debt levels. In addition, large firms in A.I.M.S do not have high debt levels as found by Demircug-kunt and Maksimovic (1996). Nonetheless, firms increase their debt levels when they have more collateralisable assets and have more non-debt tax shield. This supports Moh'd, Perry and Rimbey (2010) results with respect to collateral value of assets and non-debt tax shields.

Overall, entrenchment is present in each segment regardless of whether the book or market leverage models are used. In the agricultural segment, managers exploit firms' board size and a long tenure in office to serve their own interests. In the commercial and services segment, entrenchment is perpetrated through large shareholders and executive ownership. In the industrial and allied segment, managers take advantage of a long tenure in office and their shareholding in firms to act opportunistically. In the A.I.M.S segment, managers entrench themselves through board size and through manipulating the number of non-executives on their firms' boards.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter marks the end of the study whose theme is weak corporate governance fashioned as entrenchment. However, this must not be construed to mean that further improvements cannot be made on the study. Therefore, this chapter makes recommendations about areas that could be charted by researchers of corporate governance. Further, since the study is prone to human fallibility, its limitations are highlighted. In addition, the final conclusions about the study are also made in this chapter.

5.2 A summary of the study

The theme of weak corporate governance has been built throughout this study. In chapter 1, the role that corporate governance plays in a corporation and subsequently to a country's economic well being is highlighted. A case is then made for corporate governance to the effect that countries ignore good corporate governance at their expense. In support of this, the study states the adverse conditions that are linked to weak corporate governance in countries. Unfortunately, these conditions are found to prevail in developing nations which leads to an early perception that weak corporate governance affects them. In a bid to delve further into this menace, Kenya is chosen as one of the developing nations whose corporate governance environment is put into this study's limelight. In particular, the study interests itself on how Kenyan firms' corporate governance affects their financing decisions.

Out of available information scoured, there emerges a financing pattern that points to the likelihood of the ineffectiveness of debt and equity in restricting managerial opportunism. In order to investigate this behaviour and its possible link to firm's financing choices, the study shrouds it in the cloak of weak corporate governance. This then sets the course of the study which subsequently lays out its objectives and the questions it wants answered. For instance, the study inquires about the variables that

could be related to weak corporate governance and whether they impact on Kenyan firms leverage decisions. These questions lead to chapter 2 which lays down the theories that provide the needed framework for the study's inquiries.

The theories presented in chapter 2 are inseparable from each other in that one theory is birthed from the other. Specifically, entrenchment theory is developed out of agency theory. Agency theory states the internal and external corporate governance mechanisms that can be used to protect firms' stakeholders. At its core, it describes how higher managerial ownership levels should reduce agency costs. However, at a certain point, managers become entrenched and agency costs start increasing. This is where the entrenchment theory emerges which is the concern of this study. According to this theory, entrenched managers influence their firms leverage levels to suit their interests. Therefore, hypotheses are formed as to how variables linked with entrenchment are expected to impact on firms leverage levels. The validity of these expectations are tested in chapter 4 using Kenyan data. These tests are guided by the research methodology in chapter 3.

In chapter 3, Kenyan data is identified to have spatial and temporal dimensions necessitating panel techniques. These techniques take the form of POLS, within estimates and between estimates FE models. The results of these models are compared against each other and are discussed in chapter 4. The results inform the study that

1. Entrenchment inducing variables are represented by ownership concentration, board size, CEO tenure, number of non-executives in the board, executive equity ownership levels and executive compensation.
2. There exists a relationship between entrenchment variables and firms capital structure decisions. As shown by the models using book leverage ratios, these variables jointly determine firms leverage ratios as opposed to when each of them is considered individually.
3. There is no difference between the pre-reform and post-reform periods. Thus, the expectation that Kenyan firms corporate governance environment would differ between the two periods is voided. In turn, this implies that debt is still ineffective in combating weak corporate governance in Kenyan firms.

4. There is no entrenchment range as pointed out by studies which investigate managerial entrenchment. However, this does not rule out the possibility of the absence of entrenchment. Indeed, among Kenyan firms, entrenchment seems to be encouraged by the ineffectiveness of debt. Therefore, even at low managerial ownership levels, managers are able to access high debt levels which contradicts the expectation that they will reduce the same.
5. Majority shareholders in Kenyan firms (especially those that fall under the commercial and services segment of the N.S.E) cause a reduction in debt levels indicating that they too may be entrenched and are myopic. This opposes results of studies (and indeed *H7*) that find that the presence of large shareholders forces firms to adopt high debt levels as one of the ways of exercising their monitoring roles.
6. Debt is ineffective in dealing with managers who entrench themselves via a large board (*H2*), manipulation of the number of non-executives in a firm's board (*H3*) and through their equity shareholding (*H1*). Notwithstanding this, debt is successful in combating managerial entrenchment which occurs through a long tenure in office (*H5*) and executive pay (*H4*).
7. In the agricultural segment, managers exploit firms' board size and a long tenure in office to serve their own interests. In the commercial and services segment, entrenchment is perpetrated through large shareholders and executive ownership. In the industrial and allied segment, managers take advantage of a long tenure in office and their shareholding in firms to act opportunistically. In the A.I.M.S segment, managers entrench themselves through board size and through manipulating the number of non-executives on their firms' boards.

In light of these results, the study proposes the following recommendations:

1. Weak corporate governance in firms which use bank debt also implies that the debt providers may be ailing from the same condition. Therefore, this study suggests that the Central Bank of Kenya should take a pro-active role in ensuring that Kenyan banks corporate governance is strengthened.
2. The Capital Markets Authority should strengthen the role of the equity market in championing the cause of good corporate governance. This may be through

setting strong corporate governance requirements for firms which are listed in the N.S.E and those which would like to be listed. In this way, only well governed firms are ensured of investors funds and investors on the other hand will be assured that their interests will be addressed.

3. In chapter 1, the institutional environment of a country plays a critical role in determining the shape of its corporate governance environment. In developing nations and indeed in Kenya, this environment has been plagued by inadequacies which manifest themselves in the form of weak corporate governance. Weak corporate governance has been associated with a number of adverse consequences one of them being financial system melt downs and an inability to attract investments. Therefore, it shall behove the Kenyan government to address these problems if it is to realise its vision for the financial sector in its vision 2030.

5.3 Areas for further study

This study focuses on how entrenchment affects Kenyan non-financing firms' capital structure decisions. Therefore, since the results showed that the ineffectiveness of debt may be linked to entrenchment among firms, further studies could investigate whether this behaviour ails financial sector firms. This is informed by studies that link weak corporate governance in banks clients to weak corporate governance among banks.

In addition, since this study finds that there may be large shareholder entrenchment in Kenyan firms, further studies could investigate this phenomenon. This is because the variable that is used in this study to proxy large shareholders differs from that used by its core author. Therefore there is a likelihood that results differ from the core author because of the measure used for large shareholders.

5.4 Limitations of the study

As much as the study would like to be thorough in approach, there are certain road blocks that prevent it from achieving this purpose. First, the study is plagued by multicollinearity which can be best addressed by rethinking the model. Second, the

study is hindered by a lack of Kenyan data pertaining executive ownership and thus it is forced to use a proxy for the same. If such data were available, perhaps, it may have shed further light on whether an entrenchment range exists. Third, the study uses the upper and lower 50% quartiles instead of the upper and lower 45% quartiles as per Florackis and Ozkhan (2009^b), to determine whether entrenchment exists. This is as a result of the software used for analysis being unable to compute such measures. As a consequence, it may be possible that the study was unable to identify an entrenchment range because of this limitation.

Fourth, available data on management compensation does not disclose the breakdown of what individual managers are actually paid. If such data were available, it may have given more authenticity to the results in chapter 4 regarding its relationship with firms' leverage choices. This is because the variable used for management compensation is an aggregated measure which includes various items that differ between firms.

Fifth, the study does not collect data starting from 1984 to 2001 but instead focuses on the period 2002 to 2010. This is because two events that are of concern to this study occur in this period. These are the enforcement of the corporate governance code in Kenya and the continuation of financial sector challenges. Thus, if data from 1984 to 2001 would have been considered, there is a perception that there would have emerged a clear dichotomy of the corporate governance environment before and after reforms and the code were introduced.

Sixth, unlike Berger, Ofek and Yermack (1997), the study does not make use of dummy variables representing block holders and CEO duality. With regard to block holders, the software used for this study is unable to estimate a model incorporating block holders as an indicator variable. Therefore, the study aggregates the ownership levels of shareholders who hold at least 3% of their company's outstanding shares. In retrospect, the use of this variable may have influenced the outcome that large shareholders cause more harm than good in companies. Perhaps if block holders were used, results would indicate a positive impact by majority owners on firms leverage decisions.

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APPENDIX 1: Companies considered for the study

Agricultural	Years considered	Industrial & Allied	Years considered
Brookebond/Unilever Tea	2002-2007	Athi River	2002-2010
Kakuzi	2002-2009	BOC	2002-2006, 2009-2010
Rea Vipingo	2002-2010	Bamburi	2005-2010
Sasini Ltd	2002-2010	BAT	2002-2010
Commercial and Services		Carbacid	2002-2004, 2006-2010
AccessKenya	2007-2008	Crown Berger	2002-2010
Car & General	2003-2007, 2009-2010	EA Cable	2002-2010
CMC Holdings	2002- 2010	EA Portland cement	2003-2010
Hutchings Biemer	None	EABL	2002-2004, 2006-2010
Kenya Airways	2002-2006, 2009-2010	Eveready	2006-2009
Marshalls E.A	2002-2007, 2009-2010	Kengen	2002-2004, 2006-2007, 2010
Nation Media Group	2002-2003,2005-2010	Kenya oil	2002, 2004, 2006, 2010
Safaricom	2004-2006, 2010	KPLC	2002-2004, 2006-2010
ScanGroup	2006-2007, 2009	Mumias sugar	2002-2005, 2007-2010
Standard Group	2002-2010	Sameer Africa	2002-2009
TPS Serena	2002-2010	Total Kenya	2002-2006, 2008-2010
Dunlop/Olympia Capital	2002-2006, 2008-2009	Unga group	2002-2004, 2006, 2008-2010
Uchumi	2004 & 2010	Alternative Investment Market Segment	
		A Baumann & co.	2002-2009
		Eaagads	2006
		Express	2002-2006, 2008-2010
		Williamson Tea	2002-2004, 2007-2010
		Kapchorua Tea	2002-2009
		Kenya Orchads	2004 & 2007
		Limuru Tea	2002-2008, 2010

APPENDIX 2: Pearson correlations of entrenchment and leverage variables

	LEV BK	OC	LOGBS	LOGCE OT	NEX	EOWN	ECOMP	PROF IT	LOGC SIZE	COLLA T
OC	0.001 0.988									
LOGBS	0.072 0.236	0.052 0.391								
LOGCE OT	0.075 0.254	0.104 0.113	-0.068 0.304							
NEX	0.077 0.207	0.067 0.273	0.817 0.000	0.001 0.992						
EOWN	1.000 0.000	0.001 0.992	0.071 0.242	0.074 0.260	0.075 0.216					
ECOMP	0.120 0.065	0.454 0.000	0.376 0.000	0.126 0.074	0.262 0.075	0.121 0.064				
PROFIT	-0.005 0.937	-0.006 0.920	-0.004 0.947	-0.077 0.241	-0.011 0.862	-0.004 0.941	0.007 0.911			
LOGCS IZE	-0.140 0.020	0.175 0.004	0.692 0.000	-0.089 0.176	0.595 0.000	-0.141 0.019	0.448 0.000	-0.073 0.226		
COLLA T	1.000 0.000	0.001 0.982	0.074 0.224	0.075 0.255	0.078 0.197	1.000 0.000	0.121 0.065	-0.005 0.939	-0.142 0.019	
NDTAX	1.000 0.000	0.003 0.966	0.071 0.238	0.075 0.255	0.077 0.207	1.000 0.000	0.121 0.063	-0.005 0.940	-0.141 0.019	1.000 0.000

Book and market leverage results are shown as the first and second numbers respectively for each variable

APPENDIX 3: Unit Root Tests

(a) Alternative Investment Market Segment (AIMS)

Group unit root test: Summary

Date: 11/15/13 Time: 07:05

Sample: 1 42

Series: COMPANY, YEAR, , , OC, BS, CEOT, NEX, EOWN,

ECOMP, BLOCK, PROFIT, CSIZE, COLLAT, NDTAX,

NUM2002,

NUM2003, NUM2004, NUM2005, NUM2006, NUM2007,

NUM2008, NUM2009, NUM2010, AGRICULTURAL, , , AIMS

Exogenous variables: Individual effects, individual linear trends

Automatic selection of maximum lags

Automatic selection of lags based on SIC: 0 to 9

Newey-West bandwidth selection using Bartlett kernel

Method	Statistic	Prob.**	Cross- sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-4.81642	0.0000	17	640
Breitung t-stat	0.35470	0.6386	17	623
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-10.4818	0.0000	17	640
ADF - Fisher Chi-square	233.154	0.0000	17	640
PP - Fisher Chi-square	1146.40	0.0000	21	837
Null: No unit root (assumes common unit root process)				
Hadri Z-stat	23.4292	0.0000	23	953

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

b)Agricultural Segment

Group unit root test: Summary

Date: 11/15/13 Time: 06:57

Sample: 1 32

Series: COMPANY, YEAR, , , OC, BS, CEOT, NEX, EOWN,

ECOMP, BLOCK, PROFIT, CSIZE, COLLAT, NDTAX,

NUM2002,

NUM2003, NUM2004, NUM2005, NUM2006, NUM2007,

NUM2008, NUM2009, NUM2010, AGRICULTURAL, , , AIMS

Exogenous variables: Individual effects, individual linear trends

Automatic selection of maximum lags

Automatic selection of lags based on SIC: 0 to 7

Newey-West bandwidth selection using Bartlett kernel

Method	Statistic	Prob.**	Cross- sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-9.90088	0.0000	20	587
Breitung t-stat	0.12077	0.5481	20	567
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-14.3271	0.0000	20	587
ADF - Fisher Chi-square	257.062	0.0000	20	587
PP - Fisher Chi-square	803.041	0.0000	20	611
Null: No unit root (assumes common unit root process)				
Hadri Z-stat	-0.39585	0.6539	23	730

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

c) Commercial & Services

Group unit root test: Summary

Sample: 1 85

Series: COMPANY, YEAR, , , OC, BS, CEOT, NEX, EOWN,
ECOMP, BLOCK, PROFIT, CSIZE, COLLAT, NDTAX,
NUM2002,
NUM2003, NUM2004, NUM2005, NUM2006, NUM2007,
NUM2008, NUM2009, NUM2010, AGRICULTURAL, , , AIMS

Exogenous variables: Individual effects, individual linear trends

Automatic selection of maximum lags

Automatic selection of lags based on SIC: 0 to 9

Newey-West bandwidth selection using Bartlett kernel

Method	Statistic	Prob.**	Cross- sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-11.7911	0.0000	18	1463
Breitung t-stat	-0.57502	0.2826	18	1445
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W- stat	-20.5107	0.0000	18	1463
ADF - Fisher Chi-square	438.906	0.0000	18	1463
PP - Fisher Chi-square	548.708	0.0000	21	1729
Null: No unit root (assumes common unit root process)				
Hadri Z-stat	5.79255	0.0000	23	1935

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

d) Industrial and Allied

Group unit root test: Summary

Sample: 1 126

Series: COMPANY, YEAR, , YEAR01, , , OC, BS, CEOT, NEX,
 EOWN, ECOMP, BLOCK, PROFIT, CSIZE, COLLAT,
 NDTAX,
 NUM2002, NUM2003, NUM2004, NUM2005, NUM2006,
 NUM2007, NUM2008, NUM2009, NUM2010,
 AGRICULTURAL, , ,
 AIMS

Exogenous variables: Individual effects, individual linear trends

Automatic selection of maximum lags

Automatic selection of lags based on SIC: 0 to 2

Newey-West bandwidth selection using Bartlett kernel

Method	Statistic	Prob.**	Cross- sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-14.7150	0.0000	22	2718
Breitung t-stat	-1.00489	0.1575	22	2696
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W- stat	-26.8182	0.0000	22	2718
ADF - Fisher Chi-square	707.150	0.0000	22	2718
PP - Fisher Chi-square	739.696	0.0000	22	2720
Null: No unit root (assumes common unit root process)				
Hadri Z-stat	-0.17455	0.5693	24	3006

** Probabilities for Fisher tests are computed using an asymptotic Chi
 -square distribution. All other tests assume asymptotic normality.

APPENDIX 4: Pooled least squares regression results

Variable	Coefficient	Std. Error	t-Statistic	P values
C	-0.4499	0.207059	-2.17279	0.0311
	-1.32318	0.267887	-4.93934	0
OC	-1.18E-11	7.16E-12	-1.64847	0.101
	-1.17E-11	9.26E-12	-1.26611	0.2071
LOGBS	-2.86E-02	8.72E-02	-0.32832	0.7431
	-4.18E-02	1.13E-01	-0.37027	0.7116
LOGCEOT	-1.35E-02	1.64E-02	-0.82357	0.4113
	-3.81E-03	2.12E-02	-0.17977	0.8575
NEX	-0.00198	0.009069	-0.21881	0.827
	-0.03726	0.011733	-3.17527	0.0018
EOWN	0.067779	0.015954	4.248509	0
	0.001756	0.02064	0.085064	0.9323
ECOMP	-4.16E-07	2.42E-07	-1.72377	0.0865
	-4.34E-07	3.13E-07	-1.38742	0.167
PROFIT	-0.00242	0.002138	-1.13058	0.2598
	-0.00111	0.002766	-0.4005	0.6893
LOGCSIZE	3.05E-02	1.30E-02	2.352257	0.0198
	1.16E-01	1.68E-02	6.922815	0
COLLAT	0.121373	0.027673	4.386011	0
	0.012875	0.035802	0.359603	0.7196
NDTAX	3.772381	0.400504	9.41909	0
	-0.16999	0.51816	-0.32806	0.7433
λ_{AGRI}	0.043547	0.042364	1.027941	0.3054
	0.038628	0.054809	0.704775	0.4819
λ_{AIMS}	-0.00987	0.055254	-0.17867	0.8584
	0.257192	0.071486	3.597775	0.0004
$\lambda_{\text{COMM \& SERV}}$	0.057127	0.035109	1.627109	0.1055
	0.160987	0.045423	3.544145	0.0005
γ_{2002}	-0.1328	0.059495	-2.23217	0.0269
	0.259579	0.076972	3.372358	0.0009
γ_{2003}	-0.03075	0.065284	-0.47095	0.6383
	0.15097	0.084462	1.787419	0.0756
γ_{2004}	-0.04039	0.063333	-0.63771	0.5245
	0.120436	0.081938	1.469847	0.1434
γ_{2005}	-0.04652	0.059613	-0.78043	0.4362
	0.040552	0.077125	0.5258	0.5997
γ_{2006}	-0.0231	0.054104	-0.42694	0.6699
	0.096899	0.069998	1.384315	0.168
γ_{2007}	-0.0045	0.056533	-0.07956	0.9367
	-0.02328	0.073141	-0.31834	0.7506
γ_{2008}	-0.01499	0.054768	-0.27369	0.7846
	-0.02803	0.070857	-0.39564	0.6928
γ_{2009}	0.014302	0.052243	0.273757	0.7846
	0.021341	0.06759	0.315746	0.7526
R²	0.999957			
Adjusted R²	0.389714			
	0.999952			

	0.317714			
S.E. of regression	0.179509 0.232243			
Sum squared residual	5.73578 9.600791			
F-statistic	198331.3 5.412702			
P value (F-statistic)	0 0			
Durbin-Watson statistic	0.752295 0.768468			

Book and market leverage results are shown as the first and second numbers respectively for each variable

APPENDIX 5: Within estimates fixed effects model results

Variable	Coefficient	Std. Error	t-Statistic	P value
OC	-1.09E-11	2.41E-12	-4.51169	0
	-3.57E-11	5.49E-12	-6.50328	0
EOWN	0.072251	0.027121	2.664018	0.0082
	0.020812	0.032723	0.636029	0.5253
ECOMP	-2.73E-07	1.85E-07	-1.47468	0.1415
	2.10E-07	3.28E-07	0.640073	0.5227
LOGBS	0.037441	0.054745	0.683923	0.4946
	0.090496	0.082373	1.098612	0.273
LOGCEOT	-0.00462	0.013214	-0.34956	0.727
	-0.01757	0.024537	-0.71591	0.4747
LOGCSIZE	0.009102	0.01582	0.575372	0.5656
	0.016162	0.02038	0.793049	0.4285
COLLAT	0.102211	0.081906	1.247906	0.2132
	-0.03422	0.032488	-1.05323	0.2932
NDTAX	3.925182	1.058283	3.70901	0.0003
	0.069683	0.415837	0.167573	0.8671
NEX	0.000928	0.006112	0.151795	0.8795
	-0.00774	0.012321	-0.62845	0.5303
PROFIT	0.000248	0.000391	0.632685	0.5275
	0.000334	0.000356	0.938673	0.3488
γ_{2002}	-0.07694	0.024583	-3.12988	0.002
	0.279972	0.063158	4.432907	0
γ_{2003}	-0.06356	0.026498	-2.39855	0.0172
	0.114602	0.038758	2.956896	0.0034
γ_{2004}	-0.061	0.027871	-2.18868	0.0295
	0.066099	0.035863	1.843101	0.0665

γ_{2005}	-0.02327	0.021254	-1.09502	0.2745
	0.010524	0.024305	0.432982	0.6654
γ_{2006}	-0.0243	0.0278	-0.87425	0.3828
	0.052987	0.039189	1.352094	0.1776
γ_{2007}	-0.01679	0.017679	-0.94987	0.3431
	-0.0386	0.021202	-1.82046	0.0699
γ_{2008}	0.022833	0.011164	2.04517	0.0419
	0.00735	0.015916	0.461797	0.6446
γ_{2009}	0.040735	0.018817	2.164812	0.0313
	0.030178	0.026225	1.150718	0.2509
γ_{2010}	0.041725	0.021467	1.943661	0.053
	0.052723	0.032963	1.599453	0.111
R²	0.999973			
	0.299148			
Adjusted R²	0.999971			
	0.249285			
S.E. of regression	0.111877			
	0.164135			
Sum squared residual	3.166652			
	6.815857			
F-statistic	512584.9			
	5.999392			
P value (F-statistic)	0			
	0			
Durbin-Watson statistic	1.272102			
	1.213545			

Book and market leverage results are shown as the first and second numbers respectively for each variable

APPENDIX 6: Between estimates model results

Variable	Coefficient	Std. Error	t-Statistic	P value
C	-0.730148	0.804523	-0.907553	0.3795
	-2.217282	1.051756	-2.10817	0.0535
OC	-5.31E-11	8.37E-11	-0.63529	0.5355
	3.37E-11	1.09E-10	0.308116	0.7625
LOGBS	-0.123143	0.422475	-0.29148	0.775
	0.105797	0.552303	0.191556	0.8508
LOGCEOT	-0.047867	0.058144	-0.823247	0.4242
	0.025371	0.076012	0.333782	0.7435
NEX	-0.029370	0.045080	-0.651511	0.5253
	-0.065647	0.058934	-1.113915	0.2841
EOWN	-0.023932	0.072946	-0.328077	0.7477
	-0.004972	0.095362	-0.052143	0.9592
ECOMP	-0.000002	0.000001	-1.447239	0.1698
	-0.000003	0.000002	-1.97555	0.0683
PROFIT	-0.020728	0.019764	-1.048768	0.3121
	-0.029041	0.025838	-1.123978	0.2799
LOGCSIZE	0.067146	0.044608	1.505231	0.1545
	0.138719	0.058317	2.378726	0.0322
COLLAT	0.403949	0.127594	3.165887	0.0069
	0.135584	0.166805	0.812829	0.4299
NDTAX	1.910805	1.849135	1.033351	0.319
	-1.510435	2.417382	-0.624823	0.5421
γ_{2002}	-0.102152	0.918289	-0.111242	0.913
	-0.254105	1.200483	-0.211669	0.8354
γ_{2003}	-0.418347	1.358409	-0.307969	0.7626
	0.669799	1.775853	0.37717	0.7117
γ_{2004}	-0.494038	0.899528	-0.549219	0.5915
	0.122545	1.175957	0.104209	0.9185
γ_{2005}	-1.524664	1.053730	-1.446922	0.1699
	-1.350833	1.377545	-0.980609	0.3434
γ_{2006}	0.426580	1.497441	0.284872	0.7799
	1.328141	1.957611	0.67845	0.5085
γ_{2007}	0.723495	0.914406	0.791218	0.442
	1.386367	1.20E+00	1.159745	0.2655
γ_{2008}	0.307086	1.097188	0.279885	0.7837
	1.592711	1.434358	1.1104	0.2855
γ_{2009}	-1.466362	1.892537	-0.774813	0.4513
	-1.621727	2.474121	-0.655476	0.5228
γ_{2010}	-0.157506	0.753372	-0.209067	0.8374
	0.349408	0.984886	0.35477	0.728
$\lambda_{\text{AGRICULTURAL}}$	0.434706	0.262246	1.657628	0.1196
	0.289333	0.342835	0.843942	0.4129

λ_{AIMS}	0.357596 0.409047	0.244897 0.320155	1.46019 1.277656	0.1663 0.2222
$\lambda_{\text{COMM \& SERV}}$	0.541084 0.439917	0.268848 0.351466	2.012605 1.251664	0.0638 0.2312
$\lambda_{\text{IND \& ALLIED}}$	0.421874 0.259292	0.268522 0.35104	1.571095 0.738639	0.1385 0.4723
R²	0.999881 0.692224			
Adjusted R²	0.999685 0.186591			
S.E. of regression	0.151642 0.198243			
Sum squared residual	0.321935 0.550201			
F-statistic	5105.169 1.369026			
P value (F-statistic)	0 0.274997			
Durbin-Watson statistic	1.631947 1.764562			

Book and market leverage results are shown as the first and second numbers respectively for each variable

APPENDIX 7: Combined results of POLS, within and between estimates models

Variables	LEV(BK)			LEV(MKT)		
	POLS	FE-within	BE	POLS	FE-within	BE
C	-0.4499 0.0311	-0.0025 0.0023	-0.7301 0.3795	-1.3232 0.0000	-0.0017 0.1850	-2.2173 0.0535
OC	-1.18E-11 0.1010	-1.16E-11 0.0000	-5.31E-11 0.5355	-1.17E-11 0.2071	-3.66E-11 0.0000	3.37E-11 0.7625
LOGBS	-0.0286 0.7431	0.0372 0.4973	-0.1231 0.7750	-0.0418 0.7116	0.0903 0.2738	0.1058 0.8508
LOGCEOT	-0.0135 0.4113	-0.0046 0.7255	-0.0479 0.4242	-0.0038 0.8575	-0.0176 0.4743	0.0254 0.7435
NEX	-0.0020 0.8270	0.0009 0.8774	-0.0294 0.5253	-0.0373 0.0018	-0.0077 0.5306	-0.0656 0.2841
EOWN	0.0678 0.0000	0.0723 0.0082	-0.0239 0.7477	0.0018 0.9323	0.0208 0.5248	-0.0050 0.9592
ECOMP	-4.16E-07 0.0865	-2.14E-07 0.1397	-0.000002 0.1698	-4.34E-07 0.1670	2.81E-07 0.5240	-0.000003 0.0683
PROFIT	-0.0024 0.2598	0.0003 0.5229	-0.0207 0.3121	-0.0011 0.6893	0.0003 0.3454	-0.0290 0.2799
LOGCSIZE	0.0305 0.0198	0.0093 0.5572	0.0671 0.1545	0.1161 0.0000	0.0163 0.4246	0.1387 0.0322
COLLAT	0.1214 0.0000	0.1023 0.2132	0.4039 0.0069	0.0129 0.7196	-0.0342 0.2934	0.1356 0.4299
NDTAX	3.7724 0.0000	3.9239 0.0003	1.9108 0.3190	-0.1700 0.7433	0.0688 0.8686	-1.5104 0.5421
$\lambda_{\text{AGRICULTURAL}}$	0.0435 0.3054		-0.1022 0.1196	0.0386 0.4819		0.2893 0.4129
$\lambda_{\text{COMM \& SERV}}$	0.0571 0.1055		-0.4183 0.0638	0.1610 0.0005		0.4399 0.2312
λ_{AIMS}	-0.0099 0.8584		-0.4940 0.1663	0.2572 0.0004		0.4090 0.2222
$\lambda_{\text{IND \& ALLIED}}$			-1.52466 0.1385			0.259292
γ_{2002}	-0.1328 0.0269	-0.086708 0.0007	0.42658 0.913	0.259579 0.0009	0.273274 0	-0.25411 0.8354
γ_{2003}	-0.03075 0.6383	-0.073345 0.0063	0.723495 0.7626	0.15097 0.0756	0.107888 0.0061	0.669799 0.7117
γ_{2004}	-0.04039 0.5245	-0.070827 0.0153	0.307086 0.5915	0.120436 0.1434	0.059359 0.1017	0.122545 0.9185
γ_{2005}	-0.04652 0.4362	-0.033054 0.1284	-1.46636 0.1699	0.040552 0.5997	0.003815 0.8777	-1.35083 0.3434
γ_{2006}	-0.0231 0.6699	-0.034149 0.2186	-0.15751 0.7799	0.096899 0.168	0.046234 0.2369	1.328141 0.5085
γ_{2007}	-0.0045 0.9367	-0.026736 0.1225	0.434706 0.442	-0.02328 0.7506	-0.04542 0.0441	1.386367 0.2655
γ_{2008}	-0.01499	0.013073	0.357596	-0.02803	0.000656	1.592711

	0.7846	0.2588	0.7837	0.6928	0.969	0.2855
γ_{2009}	0.014302 0.7846	0.030887 0.1167	0.541084 0.4513	0.021341 0.7526	0.023423 0.373	-1.62173 0.5228
γ_{2010}		0.031751 0.1662	0.421874 0.8374		0.045881 0.1621	0.349408 0.728
R²	0.999957	0.999973	0.999881	0.389714	0.299208	0.692224
Adjusted R²	0.999952	0.999971	0.999685	0.317714	0.24637	0.186591
S.E. of regression	0.179509	0.112077	0.151642	0.232243	0.164453	0.198243
Sum squared residual	5.73578	3.16541	0.321935	9.600791	6.815273	0.550201
F statistic	198331.3	483877.1	5105.169	5.412702	5.662792	1.369026
P value (F statistic)	0	0	0	0	0	0.274997
Durbin-Watson statistic	0.752295	1.271905	1.631947	0.768468	1.213625	1.764562

Book and market leverage results are shown as the first and second numbers respectively for each variable