UNIVERSITY OF GHANA

CORPORATE GOVERNANCE AND FINANCING DECISIONS: A STUDY OF GHANAIAN LISTED FIRMS

BY

TAKIYATU JUMAI YUSSIF

THIS THESIS IS SUMMITTED TO UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MPHIL FINANCE DEGREE

JUNE 2013
DECLARATION

I do hereby declare that this work is the result of my own research and has not been presented by any one for any academic award in this or any other university. All references used in the work have been fully acknowledged.

I bear the responsibility of any short comings.

------------------------------------      ---------------------
TAKIYATU JUMAI YUSSIF                          DATE
(10115013)
CERTIFICATION

I hereby certify that this thesis was supervised in accordance with procedures laid down by the University.

--------------------------------      ---------------------
PROF. JOSHUA ABOR              DATE
(SUPERVISOR)

--------------------------------      ---------------------
DR. GODFRED A. BOKPIN              DATE
(SUPERVISOR)
DEDICATION

This work is dedicated to my husband; Mr. Alhassan Abubakar for his countless support. It is also dedicated to my mother; Zulaiha Fuseini, my mother-in-law; Mary Halimah Sulley and to my children; Hikma and Hanif. And to all who have in one way or the other contributed to my successful completion of the programme.
ACKNOWLEDGEMENT

I am indebted to my supervisors, Professor Joshua Abor and Dr. Godfred A. Bokpin for their timeless dedication during the supervision of this work. I also acknowledge Dr. Amidu Mohammed of the Accounting Department of UGBS for the personal discussions I had with him during the course of this work.
ABSTRACT

Earlier studies on the Ghana stock exchange failed to consider the influence of institutional ownership and board committee on the financing decisions of the firms. This study examines the impact of institutional ownership and board committee on capital structure decisions. The study also examines the nature of corporate board and financing pattern of the firms for the period under investigation.

Twenty nine (29) firms out of total number of thirty four (34), on the Ghana Stock Exchange were used for the periods 2004 to 2011 based on the availability of data. Secondary data on board and ownership structure were obtained from the annual reports of firms and the Ghana Stock Exchange facts book. Information on best governance practices were also from the annual reports and guidelines of Ghana’s Securities and Exchange Commission. Using unbalance data with a maximum and minimum period of 8 and 3 years respectively, the fixed effect regression technique was used to examine the effect of board characteristics and ownership structure on financing decisions of the firms.

A positive and significant relationship was found in the case of board size, board composition, institutional ownership and firm type. CEO duality, board committee and profitability register negative relationships with capital structure. Managerial ownership, growth and firm size recorded not significant relationships with financing decisions. The result suggests that firms on the Ghana Stock Exchange pursue high debt policy with higher proportion of outside directors, larger board size, and higher percentage of institutional shareholdings. However, lesser number of oversight committees and one tier leadership style are associated with lower debt levels. This study therefore reaffirms that corporate governance influences financing decisions of Ghanaian listed firms.
The findings of the study also shows that, the board structure of firms on the Ghana Stock Exchange is dominated by non executive directors, larger board size, two tier leadership structure and an average of two board committees. Again the ownership structure is dominated by institutional holdings. As indicated by this work, the capital structure of Ghanaian listed firms is likely to follow the pecking order theory.

To access debt financing, the study recommends firms to open up for institutional investors, increase the board size, with greater percentage of it being outside directors. However increase in board size beyond a certain point would reduce debt. Also, the number of oversight board committees must be maintained at a desired minimum. Generally, it was observed that listed firms complied with rules and directives of the regulatory authorities and therefore to ensure best practices in corporate governance in the country as a whole, more firms have to be encouraged to list on the stock exchange so that regulation can compel them to exhibit the best of conducts.
# TABLE OF CONTENTS

DECLARATION .............................................................................................................................. i  

CERTIFICATION ......................................................................................................................... ii  

DEDICATION ............................................................................................................................... iii  

ACKNOWLEDGEMENT ............................................................................................................ iv  

ABSTRACT ................................................................................................................................. v  

LIST OF TABLES ................................................................................................................ xii  

LIST OF FIGURES ................................................................................................................ xiii  

LIST OF ACRONYMS AND ABBREVIATIONS .......................................................................... xiv  

CHAPTER ONE ....................................................................................................................... 1  

INTRODUCTION ....................................................................................................................... 1  

1.1 Background to the study....................................................................................................... 1  

1.2 Problem Statement ............................................................................................................ 2  

1.3 Objectives of the Research ............................................................................................... 4  

1.4 Research questions .......................................................................................................... 4  

1.5 Significance of the study .................................................................................................. 5  

1.6 Scope of the study ............................................................................................................ 5  

1.7 Limitations ....................................................................................................................... 5  

1.8 Chapter disposition ......................................................................................................... 5  

1.9 Chapter Summary............................................................................................................. 6
3.2.2 The Resource Dependency Theory ................................................................. 29
3.2.3 The Stakeholder Theory .................................................................................. 30
3.2.4 The Stewardship Theory ................................................................................ 30
3.3 Capital Structure ............................................................................................... 31
3.3.1 Why Capital Structure ................................................................................... 32
3.3.2 Trade off Theory ............................................................................................. 33
3.3.3 Pecking Order Theory .................................................................................... 33
3.3.4 Free Cash Flow Theory .................................................................................. 35
3.3.5 The Signaling and Market Timing Theories ..................................................... 36
3.3.6 Agency Cost Theory ....................................................................................... 37
3.4 Empirical literature ............................................................................................ 37
3.4.1 Board Committee ........................................................................................... 38
3.4.2 Institutional Ownership ................................................................................... 39
3.4.3 Managerial ownership .................................................................................... 41
3.4.4 Board Composition ....................................................................................... 43
3.4.5 Board Size ..................................................................................................... 45
3.4.6 CEO Duality ................................................................................................... 48
3.5 Conceptual Framework ..................................................................................... 49
3.6 Chapter Summary .............................................................................................. 50
CHAPTER FOUR ................................................................................................................ 52

METHODOLOGY ............................................................................................................... 52

4.1 Introduction .................................................................................................................... 52

4.2 Study population ............................................................................................................ 52

4.3 Study Sample ............................................................................................................... 53

4.4 Data sources ................................................................................................................ 53

4.5 Model Specification .................................................................................................... 54

4.6 Empirical model .......................................................................................................... 55

4.6.1 Dependent variable .................................................................................................. 57

4.6.2 Independent variables ............................................................................................ 57

4.6.3 Control variables .................................................................................................... 59

4.7 Estimation Technique ................................................................................................. 60

CHAPTER FIVE .................................................................................................................. 61

ANALYSIS AND DISCUSSION OF RESULTS ................................................................... 61

5.1 Introduction .................................................................................................................. 61

5.2 Descriptive statistics .................................................................................................. 61

5.3 Model Diagnostics ...................................................................................................... 63

5.4 Correlation Matrix ..................................................................................................... 64

5.5 Regression Results ..................................................................................................... 65
CHAPTER SIX ........................................................................................................................................ 72

SUMMARY, CONCLUSION AND RECOMMENDATIONS ........................................... 72

6.1 Introduction .......................................................................................................................... 72

6.2 Summary of Key Findings ............................................................................................... 72

6.3 Conclusion ........................................................................................................................ 74

6.4 Recommendations .......................................................................................................... 75

REFERENCES .......................................................................................................................... 77

APPENDICES ........................................................................................................................... 84
LIST OF TABLES

Table 4.1  Measurement of Variables ............................................. 56
Table 5.1  Descriptive Statistics ................................................. 61
Table 5.2  Model Diagnostics ....................................................... 63
Table 5.3  Correlation Matrix ....................................................... 64
Table 5.4  Regression 1 ............................................................... 66
Table 5.5  Regression 2 ............................................................... 66
LIST OF FIGURES

Figure 3.1 Conceptual model ................................................................. 50
**LIST OF ACRONYMS AND ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CSD</td>
<td>Central Securities Depository</td>
</tr>
<tr>
<td>FINSAP</td>
<td>Financial Sector Adjustment Programme</td>
</tr>
<tr>
<td>GACH</td>
<td>Ghana Automated Clearing House</td>
</tr>
<tr>
<td>GAX</td>
<td>Ghana Alternative Market</td>
</tr>
<tr>
<td>GSD</td>
<td>GSE Securities Depository</td>
</tr>
<tr>
<td>GSE</td>
<td>Ghana Stock Exchange</td>
</tr>
<tr>
<td>SEC</td>
<td>Securities and Exchange Commission</td>
</tr>
<tr>
<td>SIL</td>
<td>Securities Industry Law</td>
</tr>
<tr>
<td>SRC</td>
<td>Securities Regulation Commission</td>
</tr>
<tr>
<td>UGBS</td>
<td>University of Ghana Business School</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

1.1 Background to the study

Corporate governance is the mechanism use in directing and controlling the activities of a firm. The activities of the firm include sourcing for funds and using these funds in a way that generates returns to the owners of the company. In this sense corporate governance informs the kind of activities (financing type) firms engage in their operations. Financing type is the combination of debt and equity used by firms to finance operations. Empirical evidence shows that corporate governance has influence on the type of financing use by firms. Most of these empirical studies were focused on the developed economies. But recent studies have focused on emerging economies of which Ghana is no exception.

In Ghana, the linkage between corporate governance and financing decision has been found to be related (Abor, 2007; Bokpin & Arko, 2009). Abor investigated the impact of board size, board composition, CEO duality and CEO tenure on total debt ratio, for the periods 1998 to 2003. While Bokpin & Arko in addition to some of the variables used in Abor’s study, examined the influence of insider and foreign ownership on short term debt to equity; long term debt to equity and total debt to equity from 2002 to 2007. These studies only examined subsets of governance variables, to fill a study gap, this study therefore investigates other variables that were not considered in prior studies.

Though this study is similar to earlier studies on the Ghana Stock Exchange, the point of departure is the investigation of the impact of Board Committee and Institutional Ownership on the financing pattern of firms which to the best of the researcher’s
knowledge has not been done. Abor (2007) recommended that the area of corporate
governance and capital structure decisions needs further research in order to further
develop some of the insights delivered in his study. The study expects to confirm
prior findings or otherwise given the time difference (2004-2011) and also find the
impact of board committee and institutional ownership on capital structure of
Ghanaian listed firms.

1.2 Problem Statement

The establishment of the stock exchange as part of Ghana’s reform towards the
development of efficient financial system has exposed firms to more financing
options. The need for additional funding is compelling firms to exhibit good corporate
governance practices. Corporate governance is based on the principles of integrity,
fairness, transparency and accountability. The people tasked to enforce these
principles are the board of directors. The Securities and Exchange Commission (SEC)
in executing its mandate of protecting the integrity of the securities market has
consequently issued guidelines on best practices in corporate governance and
“Guidance Notes” to foster increasing level of investor confidence. These guidelines
among other things are in connection with the board of directors. The size of the
board, its composition and the dual leadership style of the CEO have been studied as
governance mechanisms but other aspects of the board which are board committees
and board meetings have not been considered on the Ghana stock exchange, even
though section 138 of the Companies Acts (Act 179) 1963, section 61 of SEC
Regulations L.I 1728 (2003) and guidelines on corporate governance recommends
firm to constitute audit and remuneration committees, and any such committees the
firms deem appropriate.
The operations of all board committees are supervised by SEC. Because much emphasis has been put on the role of the board as a governance mechanism in achieving sustainable growth and value, the intensity of the board activities which can be related to the number of board committees is worth investigating in relation to capital structure. This study therefore introduces new governance variable (board committee) that is associated with the board into the corporate governance and capital structure literature in Ghana.

Again the researcher does not know of any existing work on the influence of institutional ownership on financing decision of listed firms in Ghana. Therefore this study also examines the relation between institutional ownership and capital structure. Institutional investors are noted elsewhere for being strong governance mechanism in dealing with agency problem involving owners, debt financiers and managements of the firm. Jensen (1986) argued that institutional investors can help minimize agency cost and effectively monitor management activities. The institutional share ownership is large such that they are able to influence decisions due to their substantial voting right. Where higher managerial opportunism is suspected institutional investors are able to influence financing decision to employ high debt. Debt is used as a control mechanism to ensure that management does not waste resources and to enhance performance. In a country where institutional ownership is substantial in almost all listed firms, the influence of such governance variable on financing decisions is worth examining.

Studies done by Abor (2007) and Bokpin & Arko (2009) on the Ghana stock exchange on the association among corporate governance, ownership and capital
structure failed to consider the influence of board committee and institutional share holdings despite the important roles attached to these variables.

This current study therefore fills a study gap by examining the influence of board committee and institutional ownership in Ghana. The investigation of these variables makes this study unique from prior studies in Ghana. Aside, the study uses a more recent data from 2004 - 2011. It also examines the nature of corporate board and the financing pattern of the firms.

1.3 Objectives of the Research

The objectives of this study are:

i. to examine the nature of corporate board of listed firms

ii. to examine the financing pattern of listed firms

iii. to examine the influence of corporate board characteristics and corporate ownership on the capital structure decisions of listed firms in Ghana

1.4 Research questions

The following questions are relevant

i. What is the nature of corporate board of listed firms?

ii. What is the financing pattern of listed firms?

iii. What is the effect of board Characteristics and ownership structure on capital structure decisions of listed firms?
1.5 Significance of the study

This study seeks to explore the linkage among board committee, institutional ownership and financing decisions of the Ghanaian listed firms. Being the first study to examine institutional ownership and board committee in relation to capital structure of the Ghanaian listed firms, adds to the existing body of knowledge. It also throws more insight on the findings of previous empirical works in Ghana.

1.6 Scope of the study

The study focuses on the Ghanaian listed firms covering the periods 2004 - 2011. It also examines corporate governance practices, corporate financing and ownership structure of the firms as well as investigates the extent of compliance to regulation by the listed firms.

1.7 Limitations

The study limitation was on non availability of data. Though the study uses secondary data, the annual reports for some periods were not available. The selection of firms was therefore based on the availability of data.

1.8 Chapter disposition

This study is organized into six chapters.

Chapter 1 is the introduction of the study. It includes the background of the study, problem statement, objectives of the study, research questions, significance, scope, limitation and the organization of the study.

Chapter two describes the corporate governance and the financial system in Ghana.
Chapter three reviews the relevant literature on corporate governance, capital structure, the theoretical and conceptual framework for the research.

Chapter four discusses the methodology of the study; data design and data collection.

Chapter five is data analysis, presentation and the discussion of findings.

Chapter six deliberates on summary of findings, conclusion and recommendations.

1.9 Chapter Summary

Financing choice is the decision on what types of financing firms use to finance operations. The choice can be debt, equity or combination of the two in varying proportions. Empirical evidence shows that corporate governance has influence on the type of financing use by firms. Corporate governance is the mechanisms use in directing and controlling the activities of firms. Though the relationship between corporate governance and financing decision has been studied on the Ghana stock exchange, those studies ignored the influence of board committee and institutional ownership.

This study therefore fills the research gap by investigating the influence of board committees and institutional ownership together with other governance variables on capital structure decisions of Ghanaian listed firms. Covering the periods from 2004 to 2011 the study also examines the nature of corporate board and the financing pattern of the firm for the periods under investigation. Being the first study in Ghana to investigate institutional ownership and board committee on financing structure of publicly traded firms contribute significantly to the existing literature on corporate governance and capital structure.
CHAPTER TWO

OVERVIEW OF CORPORATE GOVERNANCE AND THE GHANAIAN

FINANCIAL SYSTEM

2.1 Introduction

A study on the linkage between corporate governance and capital structure of firms’ needs an overview of the financial system in which firms’ source for funding and the legal frameworks that ensure that both providers of capital and the integrity of the capital market are protected. A financial system is made up of financial institutions, markets and arrangements for transferring financial assets. The system is effective when there is; an efficient medium of exchange for exchanging goods and services, possibility for the creation of capital on a scale large enough to satisfy the needs of the economy and a system that provides markets for the transfer of financial assets (Mensah, 2007).

The Ghanaian financial system evolved from the colonial era where it played a passive and limited role in promoting economic development. Since then it has undergone and is still going through transformation to meet its full potential for supporting strong and sustained economic growth and development. According to Quansah (2012), Ghana’s vision is to have a stable and efficient financial sector that mobilizes and allocates funds, in a fully integrated global financial system, supported by a regulatory and supervisory system that promotes a high degree of confidence.

On this note, the chapter briefly describes the evolution of the Ghanaian financial system, identifies the players and the activities within the system, it concludes with the frameworks that have been structured to ensure transparency there in.
2.2 The Financial System

Financial system comprises the various mechanisms for information storage, payment and transfer of funds within financial markets by the help of financial institutions. It consist of five basic components namely money, financial instruments, financial markets, financial institutions and the Central Banks. According to Mensah (2007), an effective financial system must have three attributes; monetary system, possibility of capital creation on a large scale and a market for transferring financial assets. Towards independent, Ghana begun to encompass all the three attributes of efficient financial system with the issuance of the first Treasury bill in 1954 by then Bank of Gold Coast which was chartered in 1952 to satisfy borrowing needs of the indigenous Ghanaian. After independence four development banks were established. These development banks were the National Investment Bank, 1963, (Industry); Agricultural Credit and Cooperative Bank 1965 (Agriculture); Bank for Housing and Construction, 1972 (Housing); the Merchant Bank (1972) to offer one-stop corporate banking services including dealing in stocks and providing venture capital. The state insurance company was established in 1962. In 1976 the first rural bank was set up with objective of extending banking services to the rural areas. The year also saw the birth of The National Trust Holding Company (NTHC), established by legislative instrument to operate as a national mutual fund, with the objective of supporting the government’s indigenization programme (Mensah, 2007).

As part of Ghana’s reform toward market economy several nonbank financial institutions were licensed as part of the Financial Sector Adjustment program (FINSAP). The Ghanaian financial system also witnessed the establishment of the Ghana Stock Exchange (GSE), under the Stock Exchange Act of 1979 (Act 384) in October 1990. Though the idea of its creation was long envisage in the Pearl Report
of 1968. It was incorporated in 1989 under the Companies Act (Act 179) 1963. In 1993, the Securities Industries Law (PNDCL 333) [SIL] was passed as amended by the Securities Industries (Amendment) Act, 2000 (Act 590). It provided for the creation of the Securities and Exchange Commission (SEC) then, the Securities Regulatory Commission (SRC) to oversee the activities of the securities industry. The SEC was inaugurated in September 1998. Before then, the functions of implementing the provisions of securities industry law were done by the Bank of Ghana. The SEC and GSE are the two most indispensable institutions in the Ghanaian securities industry (Mensah, 2007).

2.3 The Capital Market

Financial market anywhere comprises money market and capital market. The money market trades in securities with maturity of one year or less. These instruments are the government of Ghana treasury bills, with maturities of 92 and 182 days, certificate of deposit (CD), commercial paper, bankers draft and repurchase agreement (Repos). The capital market deals in medium to long term securities. The source of capital for larger corporations in Ghana is through the capital market. Securities traded in this market include bonds, shares, and other instrument with medium to long term maturities. Trading of these instruments can be done through the exchange or over the counter. In the capital market firms issue shares to raise additional capital, government and other entities with authority to borrow also issue bonds. Because of the long term nature of borrowing, there is the propensity of abuse of investors in this market and is highly regulated (Madura, 2001).
Shares are contributions to the capital of companies or part ownership of a business. They are of two types: the ordinary and the preference shares. The ordinary shares also called the common or equity shares are the most traded on the Ghana stock exchange. Unlike preference shares, owners of ordinary shares attract no fixed dividend. They earn dividend only when it is declared and after payments to preference shareholders. Unlike the ordinary shares, preference share dividend not paid in any year is carried over to be paid in subsequent years first, before payments to other classes of shares if it is cumulative. Preference shareholders receive a distribution of any residual assets of the firm in winding up before ordinary shareholders. But unlike preference shareholders, ordinary shareholders have unlimited voting right (GSE Student manual, 2006).

Bonds are long term financial securities which promise its holders some future payments under certain agreed terms. They are often referred to as fixed-income securities. This is because the issuer agrees to make a periodic interest payments (coupons) followed by the payment of the bond’s face value at maturity. It could also be a onetime payment where both the principal and interest are made at a future date. These are often referred to as zero coupon bonds. Bonds are usually issued by governments, corporations and municipalities (GSE Student manual, 2006).

In Ghana, most bonds are issued by the government. No agency or municipal bonds have been issued. An example of corporate bond issued in Ghana is the HFC dollar Housing Bond Series and Standard Chartered Bank’s three year Medium Term Notes (www.modernghana.com; www.hfcbank.com.gh).
There are several participants in the capital market and they include the issuers of the capital market instruments, the investors, the registrars, the licensed dealing members (LDM), the trading systems, clearing and settlement system, government securities dealers and the regulators. The issuers of securities can be termed as the deficit spending unit who needs additional capital to fund investment project. Investors on the other hand consist of individuals, large corporations, insurance companies, pension funds, mutual fund and unit trust. They invest in the capital market with the aim of earning higher return.

The development of an effective capital market depends on the willingness of investors to create demand for capital market instruments. Issuing of capital market instrument regularly and the subsequent transfers of these securities keeps the market active which develops the market and leads to economic growth. Another player in the financial system is the Registrar. Registrars are institutions that undertake the registration of the ownership and transfer of ownership of securities on behalf of the issuer and in favour of the investors. Currently there are 4 registrars within the securities industry; Ghana Commercial Bank’s share registry department, Merchant Bank Ghana limited, NTHC limited and Computershare Pan Africa Ghana ltd (GSE, student’s manual, 2006).

The trading system refers to the mechanism and the medium of selling and buying of financial securities. The trading system provides an opportunity for investor to sell existing securities to prospective buyers if they so desire. It is a system that creates liquidity for investors in the industry. The trading systems are of two types, the stock exchange trading and over the counter trading. The stock exchange trading is governed by procedure and regulations whereas the over the counter trading is not. In
Ghana the only formal securities trading avenue is the Ghana stock exchange, however plans are being made for the creation of an alternative market for businesses with growth potentials to raise capital and trade their shares. The Ghana Alternative Market (GAX) would give priority to start up businesses, existing companies and small to medium scale entrepreneurs which are productive and unable to meet the rigorous requirement for listing on the main board (www.ghanabusinessnews.com).

The clearing and settlement system does the electronic transfer of securities ownership from the seller to the buyer as well as payment from the buyer to the seller without the physical presence of the persons involved in accordance with rules. Until November 2008 the clearing and settlement function was done by different entities but now performed by the GSE Securities Depository Company Ltd (GSD) a wholly-owned subsidiary of the Ghana Stock Exchange. It was licensed by the Securities & Exchange Commission to operate a Securities Depository on November 5, 2008 and started operations on November 14, 2008, under the Central Securities Depository Act, 2007 (Act 733); the Securities Industry Law, (PNDC Law 333); and the SEC Regulations, 2007 (LI 1728). The GSD records, maintains and registers the transfer of securities. The GSE on its website describes the composition of the Board of Directors of the GSD as comprising; two members of the Council of the GSE, two members of the Executive Management of the GSE and the Executive Director of the GSD. The Executive Director together with the Depository Officers oversee the day-to-day interface with the Depository Participants (DPs), Registrars, Custodians and the Regulator. As a subsidiary of the GSE, it provides the depository with the following services; Information Technology, Legal/Company Secretary, Accounting and Finance, Marketing/Public Relations, Delivery/Messenger Services.
The Bank of Ghana also has a wholly owned subsidiary called the Central Securities Depository (Ghana) Limited (SDC) incorporated on June 10, 2010. It does the registry services for the Government of Ghana and Bank of Ghana Securities in addition to other secondary market transactions in those securities. It also manages the infrastructure for the issue of debt securities at the primary market. The primary objective of the CSD is to reduce risk and improve efficiency (www.csd.com.gh).

As part of making the financial system more effective and efficient, the Ghana Automated Clearing House (GACH) was introduced to replace the manual paper credit clearing system. The GACH enables the electronic transfer of funds between financial institutions on their own account and on account of their customers (www.ghipss.net). The good news this brings to the securities industry is the quick access to investors divided when paid. As at the end of May 2013, thirteen companies have made payments of dividend through the automated clearing system (tv3network.com).

2.4 Regulators

Given the nature of the securities industries anywhere, it is important that they are regulated to preserve their integrity. The protection of investors must be paramount to encourage their continual participation in the market. The regulation covers licensing market operators; standards of practice; laws that protect investors from abuse from insider trading; non disclosure and outright malfeasance and penalties for non compliance. The SEC is the apex regulator of the securities industry. Other regulators include the GSE, and the Bank of Ghana. SEC is the supervisory body of the securities industry and GSE is the only authorized securities exchange in Ghana that facilitates the purchase and sales of bonds, shares and other securities making external
financing available to firms as well as protecting investors. The creation of these institutions is to make efficient, the financial system of Ghana by creating, marketing and transferring financial assets. The quest to access external funding has compelled firms to adopt some corporate governance mechanisms set by the regulatory institutions. These regulations among others demand that, firms adopt disclosure practices, constitute board of directors and audit sub committees. Act 179 states the minimum number of directors a company should have and the listing rule of GSE also state the composition of the board.

2.4.1 The Securities and Exchange Commission

Being the apex regulatory body of the securities industry in Ghana, Its mission is to protect investors and maintain the integrity of the securities market. SEC regulates the activities of key institutions and participants in the market including the GSE, securities dealers and investment advisors who operate on the stock exchange and their representatives and agents. It is the responsibility of SEC to enforce and maintain disclosure requirement of companies wanting to list on the GSE and companies with publicly traded securities. It supervises mergers and acquisitions offers and regulates the fund management industries in Ghana and also administers securities law affecting collective investment schemes such as unit trust and mutual funds. One key function of SEC is to ensure the practice of good corporate governance, aiming at protecting the securities market against any abuses arising from the practice of insider trading.

SEC has 11 members appointed by government to serve for the term of three years, which is renewable. The Securities Industry Law (SIL), (1993) requires the commission include a high court judge, representatives of Bank of Ghana, The
2.4.2 The Ghana Stock Exchange

The GSE is an important player in the regulation of the equity market in Ghana. It derives its power from PNDC Law 333 as amended. It is a self-regulatory body with rules and regulations guiding the transactions of members both on and off the Exchange. The GSE seeks to protect investors, using its rules and regulations and the powers vested in it by the SEC. Two major legislations that guide the conduct of the Exchange include the Ghana Stock Exchange Listing Regulations, (1990) L.I. 1509 and the Ghana Stock Exchange Membership Regulations, (1991) L.I. 1510. The membership regulations specify the requirements that must be met by an individual or corporate entity that seeks to be a member of the exchange. The listing Regulations on the other hand stipulate the requirements that must be met by a company that wants its security to be listed on the Exchange. The GSE Listing rules issued in 2006 is also to guide the conduct of issuing firms both before and after listing on the exchange.

The exchange has two classes of members; associate and licensed dealing members. The associate members are individuals and body corporate who are contributing towards the achievements of the objectives of the exchange. The exchange currently has thirty three (33) associate members of which one is an individual.

The license dealing members are license to deal on the floor of the exchange in listed securities. It currently has twenty one (21) License Dealing Members (LDMs) and thirty six (36) securities trading on the floor. Apart from the dealing member there exist currently ten (10) custodians, seventeen (17) government security dealers and four (4) registrars participating in the securities market licensed by SEC. The
Exchange is currently governed by a Council of nine representing three independent members, two representatives of licensed dealing members, two listed companies’ representatives and two executives (www.gse.com.gh).

2.4.3 The Bank of Ghana

The Bank of Ghana though not the principal regulator of the securities industry have the supervisory role of licensing and regulating banks and non bank financial institutions which also forms parts of the financing system. The functions and responsibilities of the Central Bank as a Regulator are defined in Bank of Ghana Act 2002, (Act 612) and Banking Act, 2004 (Act 673). Among its responsibilities is to regulate, supervise and direct the banking and credit systems to ensure the smooth operation of a safe and sound banking system. Prior to the establishment of SEC the Bank of Ghana executed its functions (www.bog.gov.gh).

2.5 Financial Institutions

The five components that make up a Financial system includes financial institutions whose functions are to provide access to the financial markets, both to savers who wish to purchase financial instruments directly and to borrowers who want to issue them. The intermediation role performed by these institutions include advisory services, purchasing and selling financial instruments on clients behalf, investments of excess fund, and spearheading securities issuance of firms. Financial institutions are categorised in to two: depository financial institution consisting of commercial banks, savings and loans companies and credit unions; and non-depository financial institutions. These are the Insurance companies, Mutual funds, Pension funds, Securities companies, Finance companies and Security pools. The activities of these
institutions are supervised to maintain sanity in the system (Madura, 2001; Mensah, 2007).

2.6 The Structure of the Regulatory System in Ghana

The securities industry law (SIL) (1993) PNDL 333 is the umbrella legislation for the regulation of the securities industry in Ghana. Apart from the SIL there are other laws which govern the securities market in Ghana; these are:

- the Securities Industry Amendment Act (Act 590);
- the Security and Exchange Commission Regulation, 2003 (L.I 1728);
- the Companies Act, 1963 (Act 179);
- the Bank of Ghana Act, 1963 (Act 182);
- the Financial Institutions (Non - Banking) Law, 1993, (P.N.D.C.L 328);
- Foreign Exchange Act 2006, (Act 723);
- Banking Act, 2004 (Act 673);
- Non-Bank Financial Institutions Act, 2008 (Act 774);
- Bank of Ghana and SEC Notices /Directives / Circulars / Regulations

And other regulations legislated to regulate transactions on, and membership of the Ghana Stock Exchange (GSE). These are:

- the Stock Exchange (Ghana Stock Exchange) Listing Regulations, 1990 L.I. 1509
  and
- the Stock Exchange (Ghana Stock Exchange) Membership Regulations, 1991 L.I. 1510
The regulation of the securities industry is to eliminate investor abuse by insiders and to enhance the intermediation role of the financial institutions. The regulatory system is a complex web of institutions comprising the SEC, The Bank of Ghana, the Registrar General of Companies and the self regulatory activities of the GSE.

2.7 Financing Sources

With a regulated market where firms can raise capital and investors protected, the choice of financing for businesses are unlimited. Listed Firms have the option of borrowing from the banks or issue bonds and equities. They can also finance with derivatives as well as lease financing. They can even choose to finance internally through retained earnings. For non listed firms which are predominantly SMEs, their start-up capital includes; owners’ savings; gifts from relations; loans from relations; bank loans and suppliers’ credit (Aryeetey, 1995). They use combination of these sources in varying proportion. The rotating savings Susu scheme has become predominant within the SME sector. It involves a group of people contributing a regular value daily and at the end of a specified period the amount is given to one person and the process continues until all participants get their turn. The Susu is thought to have originated from Nigeria and spread into Ghana in the early twentieth century (Asiamah & Osei, 2007).

It is worth noting here that the informal rotating Susu scheme is still being practiced within the SMEs sector, despite the spring of microfinance institutions because of it non-collateral and interest free nature. A survey by Aryeetey (1995) for the Overseas Development Institute on Ghana’s financial reform, indicated that as many as 65% entrepreneurs use banks to accumulate savings while 5% use the Susu scheme. The use of suppliers credit is being embraced by SME sector even though, larger firms are
at greater advantage. The retained earnings is the principal source of working capital leading with 55%, advances from customers (30%), overdrafts (15%), and 15% was recorded for suppliers’ credit (Aryeeetey, 1995).

2.8 Corporate Governance in Ghana

The starting point for good corporate governance is the registration of the business. Business registration use to be the preserve of large corporations which are known to have adopted governance mechanisms. With increasing demand for external financing firms especially SMEs are embracing governance practices by formalizing their operations. Large firms wanting to raise capital on the stock exchange are also made to adopt or enhance some governance practices, specifically on disclosure and board structure as demanded by SEC and GSE rules. Though the country’s regulations demand some form of corporate governance, external financiers are also demanding proper corporate governance by businesses to ensure their wealth is protected. Because businesses are directed by corporate governance mechanisms and investors’ wealth is protected through those same mechanisms, Bank loans and micro finances are given upon thorough examination of the operations and governance structure of businesses.

It is worth noting that the practice of corporate governance started as far back in 1963 when the Companies Act (Act 179) was passed. The Act demands companies to be incorporated and have at least two directors. Corporate governance was subsequently strengthened by the establishment of SEC and the GSE. Though the Companies Act does not prescribe the composition and maximum number of the board, the GSE listing rules demand that at least half of the board should be non executive directors.
and at least approximately one-quarter of the total should be independent, while the SEC guidelines on best practices in corporate governance recommend a board size of between 8-16. Also as best practice, the SEC guidelines recommend the separation between the CEO and the chairman of the board. SEC requires listed firms and the participants in the securities industry to disclose timely and accurate information by filling their returns to the commission. Issuing firms are also required to file with the commission details on board committees and their membership as the strength and integrity of the board reflect the creditworthiness of the firm. To protect investors against the misuse of investors’ assets by securities companies, the SEC’s regulations on compliance requires, among others, that securities companies segregate their own assets and accounts from those of their clients and must not make profit out of client’s assets. The commission ensures the financial statements of market operators meet international Reporting Standards (SEC Regulations and Guidelines).

### 2.9 Framework for Corporate Governance in Ghana

As noted by Mensah, Aboagye, Addo, & Buatsi, (2003), several mechanisms have been adopted to enhance corporate governance in all sectors in Ghana. In the business sector, several frameworks have been put in place to enhance corporate governance. These are: the Companies Act 1963, (Act 179); the Securities Industry Law, 1993 (PNDCL 333) as amended by the Securities Industry (Amendment) Act 2000, (Act 590); The Ghana Stock Exchange’s Listing Regulations 1990, (L.I. 1509); The Securities And Exchange Regulations (2003), L.I 1728; The SEC guidelines on best practices in corporate governance (issued and published in 2003) and the “Guidance Notes” of 2004 which requires market operators to comply with corporate governance practices relating to the establishment of audit sub committees in pursuant to
regulation 61 of L.I. 1728 (2003). These frameworks have been developed to enhance corporate governance, within the financial system (Sarpong, 2011).

Other Regulators are also ensuring proper governance by insisting businesses conform to standards. The Food and Drugs Authority (FDA), the Ghana Standard Authority (GSA), The National Communications Authority (NCA), the Ghana Revenue Authority (GRA), the National Insurance Commission (NIC) and other regulatory bodies ensure compliance by businesses in the country. The financial system as a whole strives on corporate governance as investors’ unwillingness to participate in the financial market will make ineffective the system. To develop the system and to protect investors, the system requires participants to apply proper corporate governance mechanisms.

2.10 Chapter Summary

The development of the financial system of Ghana began in 1954 with the issuance of the first Treasury bill by the Bank of Gold Coast which was chartered in 1952 to satisfy borrowing needs of the indigenous Ghanaian. After independence four development banks, the state insurance company, a rural bank and a national mutual fund were established between 1962 and 1972. In 1990 the Ghana stock exchange was established under the Stock Exchange Act of 1979 (Act 384). In 1993, the Securities Industries Law (PNDCL 333) [SIL] was passed as amended by the Securities Industries (Amendment) Act, 2000 (Act 590). It provided for the creation of the Securities and Exchange Commission (SEC) then, the Securities Regulatory Commission (SRC) to oversee the activities of the securities industry. The SEC and GSE are the two most indispensable institutions in the Ghanaian securities industry.
The practice of corporate governance started with section 179 of the Companies Act 1963, (Act 179) which requires companies to have at least two directors. Corporate governance was subsequently strengthened by the establishment of SEC and the GSE. The framework for ensuring good corporate governance descends from the Companies Act to the various guidelines and directives of the regulatory authorities. Corporate government is still being promoted at the national level to boost investor confidence.
CHAPTER THREE
LITERATURE REVIEW

3.1 Introduction

Corporate governance was introduced by the Cadbury committee, following the high profile financial scandals of Enron, WorldCom and other companies (late 1990s and early 2000s). These scandals were due to lack of proper disclosure, accounting irregularities and conflict of interest between the firms and the board of directors. In response to the scandals, countries and their regulatory bodies have strengthened rules to avoid such misfortune. In Ghana the Securities and Exchange Commission (SEC) in fostering increasing level of investor confidence introduced new Guidelines on Best Practices in Corporate Governance in 2003, which highlight the general mechanisms that firms are expected to comply with, and the “Guidance Notes” of 2004, which requires market operators to comply with corporate governance practices relating to the establishment of audit sub committees in pursuant to regulation 61 of L.I. 1728 (2003).

In the United States, the Sarbanes Oxley Act (SOX) of 2002 has been accepted as most indispensable benchmark for Corporate Governance following the world corporate scandals. The Act among other things is to ensure disclosure practices to protect shareholders and the general public. The Act is not a set of business practices but a set of rules for compliance by companies. Viewing compliance as a benchmark for corporate governance indicates that a country whose rules and regulations are fully complied with, is grounded in some form of corporate governance. In this direction, corporate governance in Ghana has gained grounds in both private and public institutions, as the Company’s Act, the Securities And Exchange Commission (SEC),
and Ghana Stock Exchange (GSE) rules and regulations compelled companies to adopt some corporate governance mechanisms (Okeahalam & Akinboade, 2003). For this reason examining the impact of corporate governance on the firms’ activities is in the right direction.

The regulator of the securities industry is leaving no stone unturned in ensuring the best practices in corporate governance. The SEC rules require adequate and timely disclosure of information to protect investors. Investors’ willingness to invest is boosted when they are certain of protection from the regulatory bodies and the firms themselves. The best protection the firms can give investors is to exhibit good corporate governance practices. In this view the SEC regards the board, which is a governance mechanism as the pivot around which firms’ success revolves and has put measures in place to monitor the board and its activities. The structure of the board includes; the size, its composition, the leadership style of the CEO, the committees and meetings of the board. But in examining the impact of corporate governance on financing decisions in Ghana, board committee and board meetings have not been discussed. The SEC also recognizes the collective responsibility of institutional investors in monitoring corporate governance practices among firms. Therefore this thesis examines the impacts of board committee and institutional ownership on financing decisions of firms.

Again competition and technological advancement have made survival necessary for businesses. The need to catch up with technology to be competitive and to increase sales revenue has seen firms adopt various growth strategies which require additional funding. The recent recapitalization of banks required by the Bank of Ghana has also
seen banks coming on to the stock exchange to source funding. The sources of funding available include the GSE which with the supervision of the SEC provide avenue for firms to raise funds through the sale of shares, bonds and other securities. External financiers demand the exhibition of good corporate governance from these firms. Firms in the quest for accessing external finance have embraced corporate governance practices, which are enhancing their bottom line. Therefore reexamining corporate governance on the financing choices of firms is necessary.

In view of the governance practices of listed firms, this study examines the impact of board committee and institutional share ownership in relation to capital structure decisions. Prior studies have identified corporate governance variables to include board size, board composition, CEO duality (Abor 2007; Magdalena 2012), board committee, (Kajananthan, 2012), and ownership structure (Bokpin and & Arko, 2009). These variables were investigated to assess their impacts on the capital structure decisions of firms. Associations were found between the corporate governance and capital structure decisions of firms. The reason for these associations is due partly to firms’ commitment to good governance and partly also to regulation as noted earlier, which has compelled firms to adopt governance mechanisms in order to access external financing.

3.2 Corporate Governance

Corporate governance as defined by the Cadbury Committee is “the system by which companies are directed and controlled” (Cadbury, 1992). It is a system through which the interests of all stakeholders are satisfied. The classical concept of corporate governance was to mitigate agency problem. But the financial fraud of the early 1990s
and the late 2000s, involving Enron, WorldCom and other large companies have emphasized disclosure, transparency and accountability. The concept of corporate governance has now evolved to entail broader issues from the ownership structure through to the processes and procedures of the firm. Thus corporate governance should be seen to involve the relationship among the firm, its staff, its creditors and the environment in which it operates. It must go beyond financial disclosure and agency problem mitigation to encompass employee compensation, resolving grievances, proper records, conformance to standards and compliance to regulatory requirements.

Al-Najjar (2010), describes corporate governance as a set of relationships between a company’s management, its board, its shareholders, and other stakeholders. Al-Najjar identifies two sets of governance factors that affect management activities. Internal corporate governance, that relate to the interaction among the management, board, shareholders and other stakeholders. And the other has to do with the support and encouragement of good corporate governance. These factors include laws, regulations, and appropriate oversight by government or other regulatory bodies such as central banks or security exchanges. Abor (2007) argued that corporate governance can be thought of as compliance with regulations and the mechanisms for establishing the nature of ownership and control of organizations within an economy. According to La Porta, Lopez-de-Silanes, Shleifer, & Vishny, (2000), corporate governance can be thought of as a system through which outside investors protect themselves against expropriations by insiders (managers and controlling shareholders). Again The high level finance committee Report on Corporate Governance (1999, p.10), defined corporate governance as, “...the process and structure used to direct and manage the business and affairs of the company towards enhancing business prosperity and
corporate accountability with the ultimate objective of realizing long-term shareholder value, …” Saad, (2010). In Kyereboah-Coleman & Biekpe (2006), corporate governance has to do with the supervision and accountability of those who direct and control the management of the firms. La Rocca (2007) defined corporate governance as how decision making power is distributed within the firm as well as how investors are protected from entrepreneurial opportunism.

Corporate governance is important to all businesses whether small or big, family owned or not, listed or not. For small and non listed firms, the infusion of corporate governance at an early stage will instill discipline in the managerial team and assist in obtaining external financing (Abor & Adjasi, 2007) and as the business grows, and owners and managers become separate, corporate governance mechanisms can effectively deal with the agency problem (Boubakari, 2010) while increasing the firms’ value. In family businesses corporate governance avoids mismanagement problems and ensures transferability and continuation of the business. It also mitigates the agency problem between shareholders and managers as well as between controlling shareholders and external financiers.

Good governance facilitates resource acquisition necessary for firms’ growth. More so it attempts to integrate the expectations of stakeholders in the quest to maximize returns thereby earning the confidence of all stakeholders. The high cost of external financing is due to investors’ uncertainty about the returns on their investment materializing. A system with good corporate governance structures where investors are protected against expropriations will have investors willing to provide financing without much fear (La Porta et al, 2000). Firms with poor governance structure with
high propensity of expropriating external financiers have difficulties sourcing external finance and hence restricted in terms of their capital structure choice. Good corporate governance promotes sustainable development and growth in an economy as it can determine the inflow of foreign direct investment and cost of doing business (Sheikh, & Wang, 2012).

Several theories have been propounded in explaining corporate governance. Among the corporate governance theories are: the agency theory, the resources dependence theory, the stewardship theory, and the stakeholder theory.

3.2.1 The Agency Theory

The agency debate traces its roots from the publication of Berle & Means (1932) “The Modern Corporation and Private Property” in which they noted that the separation of ownership and control gives managers the opportunity to pursue their interest against owners interest. In 1976, Jensen & Meckling proposed that to align the interest of the managers (agents) with that of owners (principal), the owner have to incur agency cost by monitoring manager’s behaviour. The agency theory therefore recognizes that the separation of ownership and control in firms creates conflicts of interest between the managers and shareholders (Abor, 2008).

These conflicts also arise between controlling shareholders and minority shareholders. In either case, the former may expropriate wealth and perquisites out of the firms’ resources to the disadvantage of the latter. Expropriation includes stealing profits and outputs, diversion of corporate opportunities from the firm, installing possibly unqualified family members in managerial positions, or overpaying executives and using firm’s profit to benefit insiders rather than distributing it to the outside investors (La Porta et al, 2000). Again information asymmetry creates some form of agency
problem between firms’ and their external financiers (Lappalainen & Niskanen, 2012; Chen et al, 2009) making the cost of external financing high and difficult to acquire.

The agency theory emphasizes the use of governance mechanisms such as the board of directors, to curtail managerial opportunism and minority shareholder exploitation as well as eliminating information asymmetry. Based on the agency theoretical framework of Jensen and Meckling (1976) just like most empirical studies, this study examines corporate governance and its relationship with financing decisions among listed firms in Ghana.

3.2.2 The Resource Dependency Theory

The resource dependency theory advocates the presence of non-executive directors among other things to maximize the provision of needed resources. The presence of external directors is able to break information barrier between firms and their financiers. Acting independently of both managers and shareholders, through their experience and expertise have the ability to reduce uncertainty that financiers have about the firm and facilitate access to resources necessary for the firms’ growth and protect it against external forces (Abor & Biekpe, 2007). Non executive directors are to bring to bear their skills and expertise on the firms’ strategic decisions. They are also to counsel the board. Outside directors have different statuses within the business environment and their presence on the board can influence the acquisition of some needed resources. Notwithstanding this, Turnbull (1997) noted that Boards can become redundant when there is a dominant active shareholder, especially when the major shareholder is a family or government. In the same direction, Pfeffer (1972)
reports the presence of an outside director is influenced by how much the firm is regulated and not dependant on how they influence managers.

3.2.3 The Stakeholder Theory

Firms have multiple stakeholders whose needs must be satisfied by its existence. Clarkson (1994) defined ‘the firm’ as a system of stakeholders operating within the larger system of the host society that provides the necessary legal and market framework for the firm’s activities and that, the firm is to create value for its stakeholders. Accordingly organizational researchers are of the view that all stakeholders must have representative on the board of every company and have identified customers, employees, creditors, distributors and the community as the other stakeholders of the firm. The needs of customers and that of the employees are at top of the hierarchy.

The proponent of the stakeholder theory advocates that the representatives of the various stakeholders on the board of firms will successfully satisfy their claims (Ping, Cheng & Wing, 2011). Aside the inclusion of all representatives, there is the ease of resource acquisition through their participation on the board since each one of them has different skills, expertise and influence that can be tapped by the firm to acquire resources needed for sustainable success. Representatives are to serve their groups and for that matter corporate governance is enhanced as the board is converging to serving the interest of all including the maximization of the shareholders wealth.

3.2.4 The Stewardship Theory

The stewardship theory debunks the agency problem between owners and managers as proposed by the agency theory. The proponents of this theory claim managerial
opportunism is irrelevant and that managers and board members have the same interest as shareholders. Managers see themselves as part of the firm and seek to maximize the firms’ value. According to Donaldson & Davis (1994), managers are good stewards of the firms and work diligently to attain high levels of corporate profit and value. They do not seek financial interest because they believe they are stewards of the firm and take their motivation and success from the success of the firm. Managers are also motivated by the need to do good job to earn recognition from peers and superiors. Donaldson & Davis maintain that Managers are principally motivated by their achievements and given the needs of managers for responsible, self-directed work; organizations may be better served to free managers from subservience to non-executive director dominated boards.

3.3 Capital Structure

The determinants of capital structure of firms still remain an issue receiving researchers’ attention in the field of finance. Capital structure tries to explain the financing pattern of firms or the combination of the various forms of finance. Shapiro and Balbirer (cited in Magdalena, 2012) defined Capital structure as the mix of debt and equity financing used by company to finance operations. Financing may be in the form of debt securities, bank loans, retained earnings and equities. It can also include lease financing, warrants, convertible bonds, forward contracts or trade bond swaps (Abor, 2007). Firms can choose any or combination of more than one form depending on specific objective of the firm.
3.3.1 Why Capital Structure

Financing decision is crucial to firms because optimal capital structure maximizes firms’ returns and impacts on the firms’ relationship with the competitive environment (Abor & Biekpe, 2007). The discussion of optimal capital structure cannot be advanced without the leverage-irrelevance theory of Modigliani & Miller (1958). Modigliani & Miller assert that in a perfect market condition, the average cost of capital for all firms in a class is constant and that capital structure does not affect firms’ value. However Myers (2001) indicated that the capital structure influence the cost and availability of funds, citing taxation, information asymmetry and agency cost as the main factors. Firms enjoy tax shield when they Borrow up to the point where the marginal value of tax shields on additional debt is just offset by the increase in the present value of possible costs of financial distress. Myers argued that information asymmetry between firms and financiers translate to high cost of capital which tends to have negative impact on firms profitability. Thus the more information asymmetry persist the higher the cost of funds. In markets where external investors believe that inside owners of firms have the tendency to expropriate them, they seem more reluctant investing and thereby making fund not available for investment. Lack of access to external financing when needed leads to abandoning profitable project which consequently affects firms’ value. Since the availability and cost of capital affect profitability, optimal capital is therefore crucial in increasing firms’ value.

Since the leverage-irrelevance theory of Modigliani and Miller (1958), several theories have been propounded to explain the capital structure of firms. These include the trade-off theory, the pecking order theory, the free cash flow theories, market timing theories, the capital signaling and the agency cost theory. The dominant of the
theories are the trade-off and the pecking order theories which have been empirically tested.

3.3.2 Trade off Theory

By the trade off theory, companies seek debt levels that balance the tax advantages of additional debt against the costs of possible cost of debt (Myers, 2001; Faulkender & Petersen, 2006). The theory predicts firms have optimal capital structure that they need to adjust to overtime by balancing costs and benefits of debt. The costs include cost of financial distress, mispricing and cost associated with underinvestment. The benefits are the tax shield and the reduction of the free cash flow problems and the potential conflict between managers and shareholders (Ahmadinia, Afrasiabishani & Hesami, 2012). Financial distress is the cost of bankruptcy or reorganization and also the agency cost that arises when firms’ creditworthiness is in doubt (Myers 2001). The trade off theory has been put in the spot light for the evidence that matured firms with good credit ratings do not take advantage of the tax shield even when the probability of financial distress is remotely low (Myers 2001).

3.3.3 Pecking Order Theory

The pecking order theory states that firms will borrow rather than issue equity, when internally generated fund flows are not sufficient to fund capital expenditures (Myers 2001). This is because; information asymmetry between managers and investors about firms investment opportunities may lead to under pricing of new equity issues relative to the value that would be assessed if information about the firm’s prosperity is equally available to the market. Rather than transferring value from old to new investors’, managers will prefer financing first from internal sources (retained
earnings), second from debt and last from equity. This means that the pecking order theory suggests profitable firms with high earnings should use less debt in their capital structure than those with low earnings (Myers 1984; Myers & Majluf 1984).

According to Myers & Majluf (1984), information asymmetry affects capital structure by limiting access to external finance. Baskin (1989) asserts that information asymmetry do not only restrict firms ability of equity financing but also restrict access to retained earnings as alternative finance because firms must pay dividends to send signal to both current and prospective shareholders and cannot be adjusted for financing needs. Another motivator of the pecking order theory according to Baskin (1989) is direct cost. The cost of internal financing is absolutely less as there is no dividend payment on the use of retained earnings which subsequently result in reduced taxes and commissions on dividends, in addition to obvious savings in bankers fees.

Furthermore Transaction cost on debt financing is less, than in equity financing with the escape of tax at the corporate level. For these reasons when internal funds are not sufficient firms will always prefer financing with debt rather than with equity. New issues of equity will dilute existing shareholders voting control which may jeopardize management position (Baskin, 1987). Baskin tested the pecking order hypothesis and documented that firms borrow because they need funds and that bankruptcy cost do not restrict borrowing. Once information asymmetry places restrictions on equity financing debt tends to become the primary incremental source of funding.
3.3.4 Free Cash Flow Theory

Free cash flow is the amount of cash that a company has left over after it has paid all of its expenses, including investments (Ahmadinia et al, 2012). When firm has excess cash flows, managers would want to invest all available cash even in negative NPV project. The free cash flow theory states that, higher debt levels increases firms’ value despite the threat of financial distress, when a firm’s operating cash flow significantly exceeds its profitable investment opportunities (Myers 2001). Thus because managers reward is tied to the size of the firm, they would always want to grow the firm even above the level that maximizes shareholders wealth. And if there is excess cash flow they may invest in project with negative NPV.

The free cash flow theory advocates the use of debt so that managers will not have free cash flow to invest in value wasting projects. Payment to debt holders and shareholder by way of interest and dividend reduce free cash flow available for Managers to expropriate (Jensen, 1986). Leaving cash idle with managers have the tendency of being wasted and that can lead to the value of the firm deteriorating. When firms go in for higher level of debt, management are put on their toes to make good the loaned cash for fear of bankruptcy which will put their jobs and competencies at stake. By aiming to avoid financial distress firms strive to enhance their performance which intend increases firms value. This is against Modigliani and Miller (1958) assertion that firms’ performance is not dependant on its capital structure. The free cash flow removes the agency problem existing between managers and owners and according to Karpavicius and Yu (2011) this passive monitoring is not without cost. Immediate investment in a competitive project will not be possible for lack of internal funds and where external funding is too expensive the project is left for competitors. Thus the lack of flexibility of funds under the free cash flow
theory hurts firms’ value despite the fact that it checks inefficiency by managers (Ahmadinia et al, 2012). Karpavicius & Yu (2011) argued that debt and payout policies are insufficient to discourage the managers not to engage into low-return projects. But rather effective monitoring by institutional investors reduces the agency problem of free cash flow.

3.3.5 The Signaling and Market Timing Theories

Financial decisions are signals sent to investors by managers in order to compensate information asymmetry. These signals are regarded as the main core of financial relationships. Firms’ equity issues may send signal to the public that it has some profitable project to undertake. And this may lead to higher demand for its shares as many investors will want high value for their investment. Likewise higher debt to a certain level will deter debt holders and creditors from further loan and credit. Thus the signaling theory states that firms will issue equity when it wants to send information to the public about its profitability.

The market timing theory argues that, firms time their equity issues. They issue new stock when the stock price is perceived to be overvalued, and when there is undervaluation, buy back own shares. Again, Managers issue equity when they believe its cost is irrationally low and repurchase equity when they believe its cost is irrationally high. Ahmadinia et al, (2012) noted that market timing does not require that the market actually be inefficient. It does not ask managers to successfully predict stock returns. Thus firms tend to use more equity in capital structure when stock prices are overvalued. Furthermore firms turn to equity issuance only when they are sure that investors are interested in future profit of the company.
3.3.6 Agency Cost Theory

This theory applies in agency relationship where shareholders demand that managers use more debt in order to prevent them from mismanagement or managers should own firms share to align their interest with owners of the firm (Jensen & Meckling, 1976). This theory submits that capital structure is determined by the agency cost incurred by trying to mitigate the agency problem between shareholders and managers and between controlling shareholders and external financiers. Because managers do not get 100% of the residual claim and the entire profits when they put up their best to enhance profitability but bear the full cost of these activities, they tend to consume perquisites relative to the level that maximizes firms’ value. This inefficiency according to Harris & Raviv (1991) can be reduced if managers own a larger fraction of the firms’ equity. They submit that holding constant manager’ absolute investments in the firm, increase in the proportion of debt financing increases managers’ share of equity and thus mitigates the conflict between managers and shareholders. Again, debt financing reduces free cash flow available for managers for the consumption of perquisites.

3.4 Empirical literature

Studies on capital structure of firms have pointed out some firm specific variable that determines the capital structure of both large and small businesses. The specific variables are the age of the firm, the size, asset structure, profitability, growth and risk of the firm (Abor & Biekpe, 2009). Non-debts tax shield, earnings volatility, uniqueness and industry classification, have also been documented as attribute of capital structure (Titman & Wessels, 1988). Titman and Wessels assert that the nature of a countries financial market and transaction cost can determine the capital structure.

Recent studies also have reported corporate governance mechanisms, to influence capital structure of firms (Magdalena, 2012; AlNodel & Hussainey, 2010; Bokpin & Arko, 2009; Abor & Biekpe, 2009; Abor, 2007; Abor, 2005). From the many empirically tested determinants of capital structure, this study investigates the influence of institutional ownership and board committee on the capital structure of publicly traded firms in Ghana. The examination of these variables makes this study different from the likes that have been done on the Ghana stock exchange.

3.4.1 Board Committee

Board of directors is a governance variable with highest authority in the decision making of a company. The board of directors is in charge of managing the company and its operations (Magdalena 2012). They are appointed by shareholders to check managerial opportunism and to use their professional expertise to give strategic guidance to the firm. They are also responsible for the enforcement of good corporate governance in the firm. One of the key responsibilities of the board is to monitor and manage potential conflict of interest among managements, board members and shareholders. The execution of the board functions can be improved by the establishment of oversight board committees to make board decisions effective. In Ghana the audit committee is a legal requirement for listed firms. While the SEC guidelines on best practices in corporate governance recommends the establishment of
the remuneration committee and any other committee the firm deem necessary. The majority of the committee members should consist of non executive directors.

Though the presence of board committee has been found to have impact on the firm and its capital structure (Lam & Lee, 2012; Kajananthan, 2012), there is no evidence in the case of Ghana. On the Ghana stock exchange not all firms have the remuneration committee as recommended by SEC, but some of the firms have other oversight committees with the maximum observation of 9 committees. In a study by Kajananthan (2012) on the Colombo exchange in Sri Lanka, board committee was found to have a significant positive relationship with capital structure.

3.4.2 Institutional Ownership

Ownership structure of a firm refers to the percentage of shares or interest held by an individual, a group or institution in a firm. Ownership structure is the capital contributions from various shareholders of the company (Jensen & Meckling, 1976). Bopkin & Arko (2009) identified ownership structure to comprise of inside equity (managers), outside equity and debt. While Zheka (2005) describes ownership structure as including foreign share ownership, managerial ownership percentage, largest institutional shareholder ownership, largest individual ownership, and government share ownership. The capital contribution of managers is referred to as managerial ownership while institutional ownership is the contributions from institutions. Institutions are normally the majority contributors to the firms’ capital. Ownership can also be grouped as concentrated/block holder or dispersed ownership.
Institutional investors due to their huge investments have the incentive to monitor firms’ activities, to protect and increase their investments. They sometimes have seats on the board and that make their monitoring role more intensive. According to Chen & Chen (2008) such monitoring makes management to be more responsive to shareholders concern. Managers are entrusted with the care of corporations by their owners. They are expected to act in the best interest of the shareholders. But this is not always so, as managers try to satisfy their personal goals against that of the shareholders. This brings about conflict of interest between the owners and managers of the firm. This conflict of interest known as the agency problem according to theory can be mitigated by the use of debt. According to AlNodel & Hussainey (2010); Sheikh & Wang (2012), in addition to the low cost of debt and the tax shield as discussed earlier, the use of debt reduces management’s discretionary control over the firm’s cash flows, and stops them from engaging resources in inefficient activities. When the firm has block ownership structure, it is able to influence decision on the use of high debt in the capital structure. The use of debt would reduce the excess cash available for expropriation through payment of interest and principal. Again because of the possibility of bankruptcy, managers are forced to enhance performance to save them from possible cost associated with financial distress. Though there is the threat of bankruptcy in using high debt, institutional investors are not threatened because they normally have well-diversified investment portfolio. All things being equal, the use of higher debts increases net profit per share and the cash flow per share available for share holders (Firth, 1995). Hence it is expected to find a positive relationship between institutional ownership and total debt ratio.
Magdalena (2012) reports an insignificant positive relationship between institutional ownership and capital structure, Whereas Firth (1995) documents a positive relationship between institutional ownership and debt. Again Brailsford, Oliver & Pua (2002) shown a positive and statistically significant relationship between shares owned by external block holders and leverage. Fosberg (2004) found that the amount of debt in a firm’s capital structure is directly related to the proportion of shares held by the block holders and inversely related to the number of block holders a firm has. Bathala, Moon & Rao (1994) found institutional ownership to be negatively related to debt levels indicating that they are effective monitoring agent in mitigating agency cost as claim by Kapavicius & Yu (2011).

3.4.3 Managerial ownership

Since the work of Berle & Means (1932), there has been the acknowledgement that there is a potential conflict between shareholders and managers which has been the basis for the agency theory. Jensen & Meckling (1976) indicate that to avoid the possibility of expropriations by managements, they must be made to own shares in the firm. They further explained that the extent to which Managerial share ownership aligns with external shareholders is dependent on their personal wealth and portfolio diversifications. Though managerial share ownership may serve as control mechanism, Lappalainen & Niskanen (2012) indicated that ownership concentration among management brings about risk aversion and lack of strategic changes. Moreover, Bathala et al, (1994) argued that excessive debt will result in risk shifting which subjects the firm to agency cost of debt. They explained risk shifting as the tendency of shareholders preferring riskier project when debt is increased. By
accepting such projects debt holders are paid at the contracted rate and capture the
residual gain if the project is successful if not, debt holders bear cost of high risk.

According to the agency theory the use of debt may limit managerial consumption of
perquisite and other opportunistic behaviours. Because of principal and interest
payments to debt holders, firm managers will have no excess cash flow to engage in
non-optimal activities (Bathala et al., 1994). Managerial shareholders stand the
chance of losing the human capital investment, salaries and reputation if the use of
high debt in the capital structure leads to bankruptcy (Myers, 1984; Firth, 1995).
Because managers will find difficulty finding new employment due to their
association with failed companies and the firm specific skills acquired from the firm
which is not transferrable, management are expected to prefer lower level of debt.
What is more, if managers have shares in the firms they managed and considering the
possibility that their personal wealth is tied to that, without any other investments,
coupled with fact that the use of debt reduces management’s discretionary actions
(Firth, 1995), managers will be conservative in the use of debt in the capital structure.
While managers could tolerate lower debt institutional shareholders will tolerate high
debt levels (Firth, 1995) due to different attitude to risk.

The impact of ownership structure on the capital structure of firms has been
considered by prior researchers. Magdalena, (2012) found an insignificant positive
relationship between managerial ownership and capital structure. Bokpin and Arko
(2009) reveal that managerial shareholding significantly positively influences the
choice of long-term debt over equity. AlNodel & Hussainey (2010) found the
coefficients of managerial ownership to be negatively related to total debt ratio and
the long-term debt ratio; however, the relationship is significant only with the long-term debt ratio. In Berger et al. (1997) CEO’s direct stock ownership has a positive and significant relationship with Leverage. This suggests that managers whose financial incentives are more closely aligned with outside shareholders will pursue more leveraged capital structure to increase the value of the firms. Mehran (1992) reported a positive and statistically significant relationship between managerial ownership and leverage. Wiwattanakantang (1999) found no significant relationship between CEOs and directors’ ownership and debt-equity choice. Alternatively, Fosberg (2004) found a negative association between capital structure and shares held by the CEO suggesting that CEO will put their personal interests ahead than those of shareholders. Bathala et al. (1994) reported a negative association between debt ratio and managerial ownership suggesting that firms trade-off managerial ownership and debt in order to control the agency costs of the firms.

3.4.4 Board Composition
The board is the highest authority of the firm in charge of formulating strategic decisions for implementation by managements. The composition of the board is the number of inside directors versus outside directors. Outside director is a director who has no responsibility with the daily operations of the company but involve with making strategic decisions for the firms implementation. Thus outside directors do not hold other office in the firm apart from directorship. The GSE listing rules require at least half of the board to be non executive directors and at least approximately one-quarter the total, independent. According to AlNodel & Hussainey (2010), outside directors on the boards are enviable because of their knowledge, broad vision, and independence from management. The high degree of independence enables them to
monitor the actions of the management more closely and take appropriate governance actions. The existence of external board member could lead to better management decision and help boost the bottom line (Abor & Adjasi, 2007). The presence of independent director has been found to enhance good corporate governance (Neville, 2011) and thus impact on financing choices of the firm. Board of directors is generally seen to possess some control mechanisms which on behalf of shareholders can monitor managerial opportunism (Lam & Lee, 2012). Managerial opportunism is basically the use of firms’ resources for the benefit of management at the expense of the shareholders. Board composition is useful in small businesses where managerial ownership is predominant, to mitigate agency problems that may arise as a result of information asymmetry between owner managers and external financiers. And in situations where concentrated managerial ownership leads to lack of strategic changes, board composition enhances strategic initiatives (Lappalainen & Niskanen, 2012).

It has been argued that inside directors are more familiar with the firms operations and therefore can act in position of top management in instances where they perceive managerial incompetency (Abor & Biekpe, 2007). On the other hand, the presence of independent directors put insiders on their guard as they act as professional referees to ensure that actions are consistent with maximizing firms value (Fama, 1980). Independent directors are able to act more objectively without having to please any member of shareholders and management, with their experience and expertise can act appropriately.
Literature on board composition and its impact on capital structure has been associated with mixed result. In family business Boubakari et al (2010) found that family businesses avoid debts and opening of firms’ capital when the board is dominated by inside director (members of the shareholders’ family). They also report a positive relationship between the presence of independent directors in the board and debt level in the family firms. They indicated that family firms are willing to source for equity capital when an independent director is present Abor (2007) reports a significantly positive relationship between board composition and capital structure. Also Bokpin & Arko (2009) report a positive but statistically insignificant relationship between board independence and the debt ratio. More so, AlNodel & Hussainey (2010) report that outside director is statistically significant and positively related to the total debt ratio and the long-term debt ratio. Berger et al. (1997) document significantly positive relation between leverage and outside directors. Again Kyereboah-Coleman and Biekpe (2006), on the Nairobi stock exchange find that long-term leverage and total leverage are positively related with the proportion of outside directors in the board, but the relationship is statistically insignificant.

Alternatively, Anderson, Mansi, & Reeb, (2004) found a negative association between board independence and costs of debt. Magdalena (2012) documented a significantly negative relationship between Board composition and capital structure decisions. Likewise Wen, Rwegasira & Bilderbeek (2002). However, Vakilifard, Gerayli, Yanesari, & Ma’atoofi (2011) found no significant relationship between proportion of outside directors and capital structure.

### 3.4.5 Board Size

Board size refers to the numerical strength of the board of directors of a firm at the reporting date (Bokpin & Arko 2009). They are charged with taking strategic
decisions to ensure that the firms achieve sustainable growth as well as maximize the wealth of its shareholders. As per the compliance governance enshrined in Act 179, (1963) gives the minimum number of directors on the board as two (2), while the SEC recommends a size of 8 to 16 members. The size of the board and its effect on the firm has received divergent opinions from researchers. Lipton & Lorsch (1992) are of the view that smaller boards are able to effectively and consensually take strategic decisions than larger board which may always have problems reaching consensus. Conversely Adams & Mehran (2003) claim bigger boards are effective monitors of managerial actions. On the relationship between the board size and leverage Abor (2007) suggest that larger boards are entrenched and therefore may adopt high debt policy to increase firms’ performance.

The relationship between board size and capital structure decisions has been reported by prior empirical studies with mixed findings. Abor (2007) reports significantly positive relationships between board size and capital structure. Likewise, Bokpin & Arko (2009) report a positive and statistically significant relationship between board size and the choice of long-term debt over equity whilst the relationship is also positive in the choice of short-term debt over equity but negative in the case of debt ratio. AlNodel & Hussainey (2010) report that board size is statistically significant and positively related to the total debt ratio and the long-term debt ratio among Saudi Arabian listed firms. Similarly, Kajananthan, (2012) found positive relationship between Board size and capital structure in Sri Lankan manufacturing firms. Kyereboah-Coleman and Biekpe (2006) again report a significantly and positive association between board size and the total debt ratio and the short-term debt ratio among firms on the Nairobi stock exchange. Wen et al (2002) found a positive
relationship between board size and leverage though the relationship is statistically insignificant.

These are in contrast with Vakilifard et al (2011) and Magdalena (2012) who document negative relationships between board size and capital structure among Iranian and Indonesian listed firms respectively. Also Anderson et al (2004) found a negative relationship between board size and the cost of debt financing and indicated that an additional board member is associated with about a 10 basis point lower cost of debt financing. Berger, Ofek, & Yermack (1997) found a significantly and negative correlation between board size and capital structure. Statistically insignificant relation between leverage and board size is reported in Wiwattanakantang (1999).

Positive relationship between larger boards and capital structure suggest larger boards, specifically the entrenched ones will adopt high debt policy to increase the value of the company. The negative findings between board size and capital structure could be as a result of weaker corporate governance system which results in large boards not able to come to a consensus on high debt issues. Larger board may also put pressure on management and as a result, the latter will employ low debt to increase performance. The mixed result of prior studies could be attributed to the differences in business environment hinging from political, economical, legal and social systems on corporate decisions (AlNodel & Hussainey, 2010). Intuitively larger boards are expected to bring together their expertise to take effective and efficient decisions for the betterment of the company. Though larger boards may have problem reaching consensus a firm in which governance mechanism are stronger should not be confronted with such setback.
3.4.6 CEO Duality

CEO has the executive responsibility to manage the firm’s business; whereas, the chairman has the responsibility to handle the affairs of the board (Sheikh, & Wang, 2012). When the CEO doubles as the chairman of the board, s/he is said to have dual role hence CEO duality. In a two-tier leadership structure the position of the CEO and the Chairman positions are held by two separate individuals (Abor, 2007). CEO who has dual responsibility can influence certain decisions to his/her advantage. For this reason CEO duality will influence capital structure decision if the end result of the decision will benefit the CEO. It has been argued that when the CEO doubles as the chairman, performance is enhanced as the CEO exercises complete authority over the corporation and that their role is unambiguous and unchallenged. According to Sheik & Wang (2012), CEO is primarily responsible for initiating and implementing the strategic decisions (decision management) whereas the board has the responsibility for endorsing and monitoring the decisions of CEO (decision control). They suggest one person executing these two duties might weaken the board control. However, Brickley, Coles & Jarrell (1997) claim that there is no single optimal leadership structure because both duality and two tier style have costs and benefits associated with them.

significantly association between CEO duality and the short-term leverage and the
total leverage suggesting that when CEO also serves as chairperson of the board,
agency cost rise and this factor discourage the lenders to invest in such entities. They
again reported a positive statistically insignificant association between CEO duality
and long-term leverage.

3.5 Conceptual Framework

The main objective of the study is to find the influence of institutional ownership and
board committee on the Capital structure of listed firms which has been ignored in
earlier studies. Capital structure is influence by other variables beyond governance
and ownership structure. The other influence includes; financial system
developments, microeconomic factors and firm specific variables. For the purposes of
this study, governance, ownership structure and firm specific factors are hypothesized
to impact on capital structure. Therefore this study conceptualizes that capital
structure decision is a function of board committee, institutional ownership, board
size, board composition, CEO duality, profitability, growth firm size, and firm type.
The following model therefore depicts the relationship between capital structure,
corporate governance and some other variables.
3.6 Chapter Summary

Corporate governance as the mechanism by which firms are managed has been found in literature to have impact on financing decision. Though a study on the linkage between corporate governance and capital structure is not new in Ghana, this study introduces new variables that have been ignored in earlier studies. The new variables (board committee and institutional ownership) together with other governance variables (board composition, CEO duality, board size and managerial ownership) have been reviewed to examine their effects on the financing decisions of listed firms on the Ghana stock exchange. All the governance variables except CEO duality and managerial ownership are expected to have positive relationship with debt ratio.

The effect of some corporate governance variables according to empirical evidence have reported mixed findings. This may be due to time differences and level of
corporate governance awareness and practices among publicly traded firms. The choice of financing may be affected by other factors beyond the corporate governance variables. An example may be the availability of debt financing, increase in profitability and availability of profitable projects. Changes or the improvement in regulation can also cause the differences reported in earlier studies in Ghana.
CHAPTER FOUR

METHODOLOGY

4.1 Introduction

The methodology of every research work includes the sources and methods of collecting and analyzing data. It is the heart of the study. The generality of the findings depends on methodology used. Therefore the choice of methods must be thoroughly chosen to minimize any chances of bias. This study is similar to the works of Abor (2007) and Bokpin and Arko (2009) in that it also examines the effect of corporate governance on capital structure, but different in the sense that this study examines board committee and institutional ownership which were ignored in the earlier studies. Using more recent data (2004-2011), the study employs the methodology of Abor (2007) with some modifications.

The variables used in earlier studies in examining the association among debt financing corporate governance and ownership structure include; board side, board composition, CEO duality, CEO tenure, inside ownership, and foreign ownership. The current study makes use of some of the variables above and introduces board committee and institutional ownership. Hence the corporate governance variables examined in this study are: board committee, institutional ownership, board size, board composition, CEO duality, and managerial ownership. Profitability, growth, firm size and the firm type are used as control variables.

4.2 Study population

The population of a study is all possible cases or units from which data can be collected and analyzed. A situation in which data is obtained from all units is
called a census. In studying listed firms, the study population therefore is all firms listed on the Ghana Stock Exchanged. There are currently thirty four (34) firms listed on the GSE with thirty six (36) securities.

4.3 Study Sample

In every research work, questions and objectives need data to answer them. Collecting and analyzing data from every possible case or group is sometimes not possible due to time limitation, cost or non availability of data. In instances like these, a sampling technique is employed to select cases to represent the whole. Sampling techniques provide a range of methods that allows a researcher to reduce the amount of data needed to collect, by only selecting from the population some cases to represent the whole (Saunders, Lewis & Thornhill, 1997). The size and the method of sampling can affect the generality of the findings and therefore samples must be carefully selected to minimize bias.

The sample for this study is drawn from the Ghana Stock Exchange for the periods 2004 to 2011. Twenty nine (29) firms on the Stock Exchange out of the thirty four (34) firms were used based on data availability. The maximum observation period was 8 years (2004-2011) with the minimum being 3 years. Nine (9) firms in the sample are financial institutions.

4.4 Data sources

The study employs only secondary data sources. Secondary data were obtained from the annual reports of listed firms and GSE annual reports and facts books. Data on capital structure, board size, board composition, CEO duality, board
committee ownership structure, firm size, profitability, growth and firm type were collected. Information on best practices on corporate governance was also obtained from the SEC’s annual reports, legislative instruments and directives.

4.5 Model Specification

The study employs a panel data regression analysis. This is because the data set consists of observations of multiple variables over multiple time periods. Thus panel data combines time series and cross sectional data. It allows the researcher the flexibility in modeling differences in behavior across individuals firm. It is also appropriate for this study because of its ability to take into account heterogeneity problem or individual effects in cross sectional data and give more informative data. The panel regression equation is different from a regular time-series or cross section regression by the double subscript attached to each variable. The general form of the panel data model is specified as:

\[ y_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it} \]  

The subscript \(i\) denotes the cross-sectional dimension and \(t\) represents the time-series dimension. The left-hand variable \(y\) represents the dependent variable in the model, which is the firm’s debt ratio. \(\beta x\) contains the set of explanatory variables in the estimation model, \(\alpha\) is taken to be constant overtime \(t\) and specific to the individual cross-sectional unit \(i\).
4.6 **Empirical model**

It is hypothesized that corporate governance and ownership structure influence capital structure. Aside corporate governance and ownership structure other firm specific variables affect the type of financing firms employ. The other firm specific variables included in this study are: firm size, profitability, growth and firm type. Therefore the empirical model to examine such influence is specified as:

\[ DR_{i,t} = \beta_0 + \beta_1 BCM_{i,t} + \beta_2 IO_{i,t} + \beta_3 BS_{i,t} + \beta_4 SQBS + \beta_5 BC_{i,t} + \beta_6 CD_{i,t} + \beta_7 MO_{i,t} + \beta_8 ROA_{i,t} + \beta_9 FS_{i,t} + \beta_{10} GRO_{i,t} + \beta_{11} FTY_{i,t} + \varepsilon_{i,t} \]

(2)
<table>
<thead>
<tr>
<th>Variables</th>
<th>Measures</th>
<th>Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Committee</td>
<td>Number of board committees for firm (i) at time (t)</td>
<td>(BCM_{i,t})</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>Proportion of top 5 institutional shareholdings with respect to the total equity for firm (i) at time (t)</td>
<td>(IO_{i,t})</td>
</tr>
<tr>
<td>Board size</td>
<td>log of number of board members for firm (i) at time (t)</td>
<td>(BS_{i,t})</td>
</tr>
<tr>
<td>Square of Board Size</td>
<td>Square of board size for firm (i) at time (t)</td>
<td>(SQBS_{i,t})</td>
</tr>
<tr>
<td>Board Composition</td>
<td>number of outside directors divided by total number of directors for firm (i) at time (t)</td>
<td>(BC_{i,t})</td>
</tr>
<tr>
<td>CEO Duality</td>
<td>1 if the CEO is the same as the board chairman, 0 otherwise for firm (i) at time (t)</td>
<td>(CD_{i,t})</td>
</tr>
<tr>
<td>Managerial Ownership</td>
<td>Proportion of managerial ownership with respect to the total equity for firm (i) at time (t)</td>
<td>(MO_{i,t})</td>
</tr>
<tr>
<td>Profitability</td>
<td>Earnings before interest and taxes divided by total assets for firm (i) at time</td>
<td>(ROA_{i,t})</td>
</tr>
<tr>
<td>Firm Size</td>
<td>Size of the firm (log of total assets) for firm (i) at time (t)</td>
<td>(FS_{i,t})</td>
</tr>
<tr>
<td>Growth</td>
<td>Growth in sales for firm (i) in time (t)</td>
<td>(GRO_{i,t})</td>
</tr>
<tr>
<td>Firm Type</td>
<td>1 for financial firms and 0 otherwise for firm (i) at time (t)</td>
<td>(FTY_{i,t})</td>
</tr>
<tr>
<td>Error Term</td>
<td></td>
<td>(\epsilon_{i,t})</td>
</tr>
<tr>
<td>Debt Ratio</td>
<td>Total debt / total asset (total equity + total debt) for firm (i) at time (t);</td>
<td>(DR_{i,t})</td>
</tr>
</tbody>
</table>
4.6.1 Dependent variable

DR is the dependent variable, it is the capital structure defined as the ratio of total debt divided by the firm’s capital (total debt plus total equity). Capital structure is the combination of debt and equity that firms use to finance operations or the purchase of assets. The choice of this variable follows Abor (2007). How much debt or equity is use by firms has been theoretically found to be influenced by firm specific variable, corporate governance and ownership variables.

4.6.2 Independent variables

The choice of the independent variables follows standard finance literature. They are board committee (Lam, and Lee, 2012; Kajananthan, 2012), institutional ownership (Zheka 2005; Shikh and Wang 2012), board size, board composition CEO duality: (Abor 2007; Bokpin And Arko 2009), and managerial ownership (Zheka 2005; Magdalena 2012;).They are considered direct proxies for corporate governance and the study examines the effect of these variables on the capital structure of firm.

Board committee

Board committee (BCM) is a corporate governance variable relating to the board of directors of the firm. It is a division or sub group of the board members who are charged with the execution of specific task of the board. As a subset of the board it is hypothesized to influence financing type of the firm.
Institutional ownership

This is the ownership of firms’ share by institutions. The shareholdings of institutions (IO) are mostly huge such that due to their voting rights are able to influence firms decisions in all aspect. Therefore it is hypothesized that institutional investors influence financing choice of the firms.

Board size

It is the number of persons on the board of a firm. Given the experience and expertise of the board members, the size of the board (BS) can affect the kind of decisions taken by the firm. Therefore the influence of such governance variable is examined on the firm’s capital structure. The square of the board size (SQBS) is also included in the regression to take account of the non-linearity assumption.

Board composition

Board composition (BC) has to do with the proportion of executive and non-executive directors on the board of the firm. The board is expected to execute its monitory and supervisory roles effectively when it is not influenced by insiders of the firm. Non executive directors are outsiders who do not hold any office in the firm except for the office of directorship. The proportion of the outside director to total directors is hypothesized to influence the kind of financing used.

CEO Duality

This refers to the situation where the position of the CEO and the board chairman is held by one person. Since the role of decision management which is the primary
responsibility of the CEO and decision control also the responsibility of the board, is played by one person, decision taken by the board will be influence by the fact that the CEO is the same as the board chairman.

*Managerial ownership*

Managers are sometimes made to hold shares in the firms they manage to align their interest with that of the firms. Again managers hold shares because they are the owners of the firm. The decision to employ more debt or equity is influenced by the risk tolerance of management and retention of control. As such capital structure is influence by the proportion of shares held by management (MO) with respect to total equity.

**4.6.3 Control variables**

The control variables are included because they also have some effect on the dependent variables, but they are not the subject of interest in the study. These are the Firm size (BS), profitability (ROA), growth (GRO) and firm type (FTY). The choice of the control variables are informed by the pecking order theory and (Abor & Biekpe 2009). According to the theory, firms will rather use debt rather than equity when internally generated funds are not enough to finance firms operations. Therefore Firm type is expected to have positive relationship with leverage; however profitability, growth and firm size are expected to have negative associations with leverage as the increase or expansion in these variables increase earnings which may be enough for firms operations.
4.7 Estimation Technique

The data is unbalanced as the individual unit observed different number of times. The hausman’s specification test was performed to choose between the fixed effect and random effect estimation technique. The test was significant under the null hypothesis that the error term is not correlated with the independent variables and therefore the fixed effect is appropriate. Based on this the study employed the fixed effect estimation technique based on the condition that the unobserved term is correlated with the regressors.
CHAPTER FIVE
ANALYSIS AND DISCUSSION OF RESULTS

5.1 Introduction

This chapter focuses on the analysis and discussion of findings. The descriptive statistics of the variables is presented first, followed by the model diagnostics and the correlation matrix. Then the discussion of the regression results of the study.

5.2 Descriptive statistics

Table 5.1 descriptive summary statistics

<table>
<thead>
<tr>
<th></th>
<th>DR</th>
<th>BCM</th>
<th>IO</th>
<th>BS</th>
<th>BC</th>
<th>CD</th>
<th>MO</th>
<th>ROA</th>
<th>FS</th>
<th>GRO</th>
<th>FTY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEAN</strong></td>
<td>0.5874</td>
<td>2.4745</td>
<td>0.6310</td>
<td>0.7662</td>
<td>0.1106</td>
<td>0.0737</td>
<td>0.0732</td>
<td>7.8689</td>
<td>0.1804</td>
<td>0.351</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>MEDIAN</strong></td>
<td>0.5800</td>
<td>2.0000</td>
<td>0.7063</td>
<td>0.9031</td>
<td>0.0000</td>
<td>0.0010</td>
<td>0.0529</td>
<td>7.8385</td>
<td>0.1911</td>
<td>0.000</td>
<td>0.478</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>0.2655</td>
<td>1.7844</td>
<td>0.2605</td>
<td>0.1131</td>
<td>0.1454</td>
<td>0.3144</td>
<td>0.1728</td>
<td>0.1268</td>
<td>7.8385</td>
<td>0.3857</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>MIN</strong></td>
<td>0.0251</td>
<td>1.0000</td>
<td>0.0000</td>
<td>0.4771</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>-0.4266</td>
<td>5.5944</td>
<td>-0.9892</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>MAX</strong></td>
<td>0.9992</td>
<td>9.0000</td>
<td>0.9415</td>
<td>1.2553</td>
<td>0.9091</td>
<td>1.0000</td>
<td>0.6838</td>
<td>0.6576</td>
<td>11.5751</td>
<td>2.0135</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>195</td>
<td>196</td>
<td>198</td>
<td>202</td>
<td>200</td>
<td>199</td>
<td>193</td>
<td>200</td>
<td>202</td>
<td>198</td>
<td>202</td>
</tr>
</tbody>
</table>

DR= Debt Ratio, BCM= Board Committee, IO= Institutional Ownership, BS= Board Size, CD= CEO Duality, MO = Managerial Ownership, ROA= Profitability, FS= Firm Size, GRO= growth and FTY = Firm Type

Table 5.1 shows the summary descriptive statistics for the mean, median, standard deviation, Minimum and Maximum values for the dependent and independent variables. The mean values show the average indicators for variables used. With a minimum of 0.0251 and a maximum of 0.9992, Debt ratio records overall mean value of 0.5874 exhibiting that listed firms finance their asset more with debt.
Board committee determined as number of committees of the board records a mean value of 2.4745 with minimum and maximum values of 1 and 9 respectively. The average of institutional ownership is about 63 percent. This means that listed firms are majorly owned by institutions. It also registers minimum value of 0.000 and maximum value of 94.1 percentage points.

Board size measured as a natural logarithm of number of directors has a mean value of 0.914. With regards to the board composition measured as the proportion of outside directors to total number of directors, the mean value is about 77 percent. This means listed firms have more outside directors than executive directors. Average value for CEO duality is 0.111, which means about 11 percent of listed firms have their CEOs having dual responsibilities as chairman of the board, while Average Managerial ownership is about 7.4 percent.

Firm size also measured as a natural logarithm of total assets has a mean value of 7.8689. Profitability as ratio of EBIT to total asset is 0.073 in average indicating return on asset of about 7 percent. Growth determined as the growth in annual sales also shows a mean of 0.180, suggesting an average increase in sales at 18 percent during the period under investigation.
5.3 Model Diagnostics

Table 5.2 Model Diagnostics

<table>
<thead>
<tr>
<th>DIAGNOSTICS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hausman Specification Test</strong></td>
<td></td>
</tr>
<tr>
<td>Hausman $\chi^2$ (1)</td>
<td>21.53</td>
</tr>
<tr>
<td>Prob &gt; $\chi^2$</td>
<td>0.0000</td>
</tr>
<tr>
<td><strong>Autocorrelation Test</strong></td>
<td></td>
</tr>
<tr>
<td>AR(1) : F (1, 25)</td>
<td>3.58</td>
</tr>
<tr>
<td>Prob &gt; F</td>
<td>0.0536</td>
</tr>
<tr>
<td><strong>Heteroskedasticity Test</strong></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$ (1)</td>
<td>2.98</td>
</tr>
<tr>
<td>Prob &gt; $\chi^2$</td>
<td>0.0845</td>
</tr>
</tbody>
</table>

The hausman’s specification test was performed to choose between random and fixed effect estimation techniques. The test is significant under the null hypothesis that the error term is not correlated with the independent variables and therefore the fixed effect estimation technique is appropriate. The model tested for heteroskedasticity which the result indicated absence of such problem. Heteroskedasticity is the problem that arises when the OLS assumption of constant variance (homoskedasticity) is violated. Homoskedasticity means the variance of each disturbance term conditional on the chosen values of the independent variables is the same constant. Again, the serial correlation test is not significant so the author fails to reject the null hypothesis of no first order serial/autocorrelation. Autocorrelation is referred to as the situation where the disturbance term relating to any observation is influenced by the disturbance term in any other observation. Thus where autocorrelation exist an OLS assumption is violated.
5.4 Correlation Matrix

Table 5.3 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>BS</th>
<th>BC</th>
<th>CD</th>
<th>MO</th>
<th>IO</th>
<th>BCM</th>
<th>FS</th>
<th>ROA</th>
<th>GRO</th>
<th>FTY</th>
<th>DR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>-0.094</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>-0.272</td>
<td>0.124</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>-0.467</td>
<td>-0.162</td>
<td>0.110</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IO</td>
<td>0.533</td>
<td>0.013</td>
<td>-0.187</td>
<td>-0.192</td>
<td>0.151</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCM</td>
<td>0.596</td>
<td>-0.124</td>
<td>-0.328</td>
<td>-0.422</td>
<td>0.321</td>
<td>0.613</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>-0.105</td>
<td>-0.174</td>
<td>-0.255</td>
<td>0.119</td>
<td>-0.144</td>
<td>-0.142</td>
<td>-0.019</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.079</td>
<td>-0.119</td>
<td>-0.083</td>
<td>-0.005</td>
<td>0.029</td>
<td>0.088</td>
<td>0.105</td>
<td>0.223</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRO</td>
<td>0.269</td>
<td>0.095</td>
<td>0.246</td>
<td>0.948</td>
<td>0.688</td>
<td>0.223</td>
<td>0.143</td>
<td>0.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTY</td>
<td>0.175</td>
<td>-0.098</td>
<td>-0.263</td>
<td>-0.116</td>
<td>0.095</td>
<td>0.095</td>
<td>0.395</td>
<td>-0.037</td>
<td>0.074</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>DR</td>
<td>0.320</td>
<td>0.015</td>
<td>-0.177</td>
<td>-0.150</td>
<td>0.250</td>
<td>0.157</td>
<td>0.357</td>
<td>-0.257</td>
<td>0.105</td>
<td>0.504</td>
<td>1.000</td>
</tr>
</tbody>
</table>

DR= Debt Ratio, BCM= Board Committee, IO= Institutional Ownership, BS= Board Size, CD= CEO Duality, MO = Managerial Ownership, ROA= Profitability, FS= Firm Size, GRO= growth and FTY = Firm Type

Table 5.3 shows a pair-wise correlation matrix at 10% level of significant. It shows the relationship among the individual variables. The lowest correlation is 0.013, between board committee and board composition and is not significant. However, the highest correlation is - 0.715 and significant between managerial (MO) and Institutional ownership (IO). Thus, the correlation among these two variables is too high and hence presents the issue of Multicollinearity. Multicollinearity is the case
where the variables are perfectly correlated or the independent variables are highly intercorrelated. When this happens one of the assumptions of OLS is violated and the regression result biased.

To correct or eliminate the multicollinearity issue, two separate estimations are made for those variables that are highly correlated. Thus two regressions are run without each of the highly correlated variables as shown in tables 5.4 and 5.5.

5.5 Regression Results

Regression analysis is used to investigate the relationship between corporate governance and capital structure. A fixed effect panel regression estimation technique is used for the analysis.

As indicted in 5.4 MO and IO are highly correlated and this presents the issue of multicollinearity. To address this problem separate estimations are made for each of the variables. Regression 1 shows the estimation without IO and regression 2 that without MO.
### Table 5.4 Regression 1

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>t</th>
<th>P&gt;t</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCM</td>
<td>-0.0255</td>
<td>0.0127</td>
<td>-2.01</td>
<td>0.0460</td>
</tr>
<tr>
<td>BS</td>
<td>4.6059</td>
<td>1.2065</td>
<td>3.82</td>
<td>0.0000</td>
</tr>
<tr>
<td>SQBS</td>
<td>-2.0973</td>
<td>0.6749</td>
<td>-3.11</td>
<td>0.0020</td>
</tr>
<tr>
<td>BC</td>
<td>0.1505</td>
<td>0.0996</td>
<td>1.51</td>
<td>0.1330</td>
</tr>
<tr>
<td>CD</td>
<td>-0.1084</td>
<td>0.0527</td>
<td>-2.06</td>
<td>0.0410</td>
</tr>
<tr>
<td>MO</td>
<td>-0.0919</td>
<td>0.1140</td>
<td>-0.81</td>
<td>0.4210</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.8287</td>
<td>0.1529</td>
<td>-5.42</td>
<td>0.0000</td>
</tr>
<tr>
<td>FS</td>
<td>0.0289</td>
<td>0.0271</td>
<td>1.07</td>
<td>0.2880</td>
</tr>
<tr>
<td>GRO</td>
<td>0.0324</td>
<td>0.0364</td>
<td>0.89</td>
<td>0.3750</td>
</tr>
<tr>
<td>FTY</td>
<td>0.2273</td>
<td>0.0364</td>
<td>6.24</td>
<td>0.0000</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.1314</td>
<td>0.5900</td>
<td>-3.61</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

F( 10, 164) 26.03
Prob > F 0.0000
Observation 175
R Square 0.6135
Adjusted R Square 0.5899

DR= Debt Ratio, BCM= Board Committee, BS= Board Size, SQBS= Square of board size, CD= CEO Duality, MO = Managerial Ownership, ROA= Profitability, FS= Firm Size, GRO= growth and FTY = Firm Type

### Table 5.5 Regression 2

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>t</th>
<th>P&gt;t</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCM</td>
<td>-0.0355</td>
<td>0.0107</td>
<td>-3.32</td>
<td>0.0010</td>
</tr>
<tr>
<td>IO</td>
<td>0.1478</td>
<td>0.0568</td>
<td>2.60</td>
<td>0.0100</td>
</tr>
<tr>
<td>BS</td>
<td>4.4378</td>
<td>1.0640</td>
<td>4.17</td>
<td>0.0000</td>
</tr>
<tr>
<td>SQBS</td>
<td>-2.0681</td>
<td>0.6015</td>
<td>-3.44</td>
<td>0.0010</td>
</tr>
<tr>
<td>BC</td>
<td>0.1640</td>
<td>0.0891</td>
<td>1.84</td>
<td>0.0680</td>
</tr>
<tr>
<td>CD</td>
<td>-0.1387</td>
<td>0.0445</td>
<td>-3.12</td>
<td>0.0020</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.9100</td>
<td>0.1357</td>
<td>-6.71</td>
<td>0.0000</td>
</tr>
<tr>
<td>FS</td>
<td>0.0484</td>
<td>0.0194</td>
<td>2.50</td>
<td>0.0130</td>
</tr>
<tr>
<td>GRO</td>
<td>0.0182</td>
<td>0.0326</td>
<td>0.56</td>
<td>0.5770</td>
</tr>
<tr>
<td>FTY</td>
<td>0.2108</td>
<td>0.0322</td>
<td>6.54</td>
<td>0.0000</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.2268</td>
<td>0.4819</td>
<td>-4.62</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

F( 10, 169) 34.61
Prob > F 0.0000
Observation 180
R Square 0.6719
Adjusted R Square 0.6525

DR= Debt Ratio, BCM= Board Committee, BS= Board Size, SQBS= Square of board size, CD= CEO Duality, MO = Managerial Ownership, ROA= Profitability, FS= Firm Size, GRO= growth and FTY = Firm Type
Regression 1 shows the independent variables explain about 59 percent of the capital structure decision as indicated by the adjusted R^2. While regression 2 reports an adjusted R^2 of 0.6525 meaning that about 65 percent of the decision to employ debt is influenced by the explanatory variables.

Board committee (BCM) records a negative and statistically significant relationship with debt ratio in the two regressions. The negative relationship indicates the smaller the number of board committees, the higher the debt ratio. Thus firms with small number of board committees will rather use more debts than equity in financing assets. Oversight board committees are supposed to make effective the monitoring and supervisory role of the board. And for this reason decisions that affect the value of the firm are taken with scrutiny. The negative relation between leverage and number of board committees could mean that, though debt is cheaper and also prevents management from wastage, board committees rather find other ways of managing these problems just to avoid the cost associated with debt.

The free cash flow theory of capital structure posits that principal and interest payments reduce the cash available for the consumption of perquisites by managers. The cost of debt includes the non-availability of cash to immediately invest in competitive and profitable projects. When external financing is too expensive or not available, competitive projects are abandoned. This obviously hurts firms’ value even more. So the oversight board committees may want to avoid this by contracting less debt and probably tend to other ways of managing managerial opportunism. This may explain why board committee shows a negative relationship with leverage. So if the number of boards committees increases the amount of debt in firms capital structure
will decrease. This position is in contrast with Kajananthan (2012), who found a significant positive relationship between board committee and capital structure on the Colombo exchange.

Interesting observation made is that though the SEC recommends all listed firms to have audit and remuneration committees as describe in chapter two, only 66 percent of the firms have disclosed the existence of the two committees in their annual reports while 34 percent of the firms disclosed only the existence of the audit committees. Out of the total number of firms, 45 percent have disclosed more than the committees recommended by the SEC during the period under investigation.

A statistically and significant positive relationship is found for institutional ownership (IO). This suggests the more proportion of institutional shareholding in a firm the more the debt ratio in the capital structure. The use of debt by institutional shareholders is a mechanism proposed by the agency theory to minimize wastage by management. The explanation to this finding therefore could mean that institutional investors are able to use debts to check managerial opportunism. Institutional investors normally have substantial fraction of firms’ ownership and as such are able to influence corporate behaviour and are regarded as the mechanism for checking managerial behaviour. The ownership structure among Ghanaian listed firm exhibited a larger percentage of institutional ownership (63%), therefore explains why debts register a greater percentage of 59 and equity 41 in the descriptive statistic shown in table 5.1. This positive relationship is consistent with the findings of Sheikh and Wang, (2012); Firth, (1995); Brailsford et al, (2002) and Fosberg, (2004).
Board size (BS) shows a statistically significant positive relationship with debt ratio in both regressions. This is consistent with Abor (2007), but in contrast with Bokpin and Arko (2009) which recorded a negative relation between debt ratio and board size. The positive relation suggests that larger board size employ high debt to enhance firms’ value (Abor, 2007). Thus board members have different expertise and influence and can use those to acquire resources including debt financing. The more the board members the more access to debt financing.

Again, another explanation is that debt financiers may have confidence in firms with larger board size and so easily grant debt offers. This result is consistent with the Arabian, Srilankan and Nairobian studies by AlNodel and Hussainey (2010); Kajananthan, (2012) and Kyereboah-Coleman and Biekpe (2006) respectively.

The square of the board size (SQBS) in both regressions is negatively significant. These means, there is a nonlinear relationship between board size and debt. With significantly positive outcome for board size, a negative SQBS means that increase in board size increases debt to a point where a further increase leads to a decrease in debt.

Before 2006 there was no requirement as to the composition of the board of listed firms, but the stock exchange listing rules issued in 2006 requires that the membership of a board should at least consist of fifty (50) percent non executive directors and twenty (25) percent of the board independent. In this study, a significantly positive relation is recorded for Board Composition and debt ratio in regression 2. Again, this is in consistence with Abor (2009). The result is in line with the resource dependency theory of corporate governance that posit that non executive directors use their skills,
experience and influence to acquire needed resources for the firm. They are able to eliminate information asymmetry that makes cost of financing high for Firms. It also supports the agency theory that external board members employ debt to check management.

The indication here is that a larger proportion of non executive directors tend to adopt more debt. Thus the presence of outside directors may send signals to debt suppliers that the firm is in the position to honour debt obligation because they are able to take strategic decisions that enhance profitability. This position is in line with the findings of AlNodel and Hussainey (2010) Kyereboah-Coleman and Biekpe (2006) but in contrast with Magdalena (2012).

The SEC guidelines for best practices in corporate governance recommend the separation of the position of the CEO and the board chairman. In the two regressions, CEO duality indicates statistically negative relationship against positive relationships documented in prior studies in Ghana. The possible explanation is that most of the firms with CEO duality are relatively small and the CEOs have substantial stakes in them. Given the threat of bankruptcy they tend to prefer less debt in the capital structure. It could also mean that because of the relatively small size of the firms they are not able to access debt financing. However, 33 percent of the firms that have one-tier leadership structure are relatively larger companies which should be able to access debt financing easily. This can be interpreted as debt financiers are just not comfortable with firms with one-tier board structure. When a CEO doubles as the chairman of the board, agency cost is high and that restrict access to debt.
negative association between CEO duality and leverage is consistent with Vakilifard et al (2011) and Kyereboah-Coleman and Biekpe (2006).

Managerial share ownership shows a positive but not significant relationship with leverage. For the control variables the relationship is positively significant for firm type, negatively significant for profitability and positively not significant for growth in all regressions. For firm type, it is positive and significant in regression 2 but not significant in regression 1. The result suggests that firm size and growth do not influence financing decisions. The negative relationship between profitability and leverage is in line with the pecking order theory which asserts that firms prefer to finance with internally generated funds to external financing. Therefore when firms are making profit they tend to employ less debt in the capital structure.

A positive result for firm type suggests that firms in the financial sector use more debts than their counterparts in other sectors. This is mainly because most of them rely on deposits to finance their operations. But for the non-bank financial institutions which do not take deposits, the high leverage may be explained by lower transaction cost of debt financing. The dilution of existing shareholders voting control, which may affect management position, could also be a motivating factor for the high leverage as suggested by Baskin (1987).
CHAPTER SIX
SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction
Earlier studies on the Ghana Stock Exchange have not considered the influence of institutional ownership and board committee on the financing decisions of the firms. Using a sample of twenty (29) firms on the Stock Exchange for the periods 2004 to 2011, this study examined the impacts of institutional shareholdings, board committee, board size, CEO duality, board composition, managerial ownership, profitability, growth, firm size and firm type on the financial decisions of listed firms. The objective of the study was to find the impact of board committee and institutional ownership on the choice of leverage by Ghanaian listed firms as well as examining the nature of corporate board and financing pattern of the firms. The key findings of the study and recommendations are presented below.

6.2 Summary of Key Findings
A positive and significant relationship was found in the case of board size, board composition, institutional ownership and firm type. CEO duality, board committee and Profitability register significant negative relationships with capital structure. Managerial ownership, growth and firm size recorded not significant relationships with financing decisions. The result suggests that firms on the Ghana stock exchange pursue high debt policy with higher proportion of outside directors, larger board size, and higher percentage of institutional shareholdings. Small number of oversight committees and lesser percentage of CEO duality are also associated with higher debt levels.
The analysis shows that, the board structure of firms on the Ghana Stock Exchange is dominated by non executive directors for the period under consideration as it records about 77 percent of outside directors to total directors. This is in line with the GSE listing requirement that at least half of the board must be non executive directors. Again the board structure of the board is characterized by larger board size as recommended by the SEC. The SEC recommends a board size of 8-16. The firms exhibit an average board size of 8 which is also in line with regulation. With CEO duality, the SEC recommends the separation of the CEO from the chairman of the board. The results indicate that 89 percent of the firms have the board chairman separated from the CEO thus exhibiting the two-tier board structure typology. In the case of board committee, per the SEC rules and guidelines firms under its supervision are required to have two oversight committees of the board; the audit committee and the remuneration committee. All firms have audit committee in compliance with section 61 of L.I.1728 (2003). 66 percent also disclosed the existence of the remuneration committees in their annual reports. This is evidenced in the descriptive statistics; an average of two is recorded for number of board committee. These observations show that listed firms are in greater compliance with regulations for the period under investigation.

Again the ownership structure of listed firms registers 63 and 7 percentage share ownership for institutional and managerial investors respectively. This indicates that the other 30 percent ownership belongs to individuals and other institutional investors with insignificant shareholdings. By the descriptive statistics it can be concluded that ownership structure on the Ghana stock exchange is dominated by institutional share ownership.
The financing pattern of listed firms is dominated by debt financing (59%). This is likely to follow the pecking order theory of capital structure. The theory states that firms will first finance operations with internal funds and if that is not enough then debt is employed before considering equity. During the periods under investigation the average profitability and growth for the firms were 7.8 and 18 percent respectively. This could mean that internal funds were just not enough to finance new investments and therefore firms sought for debt financing. This may explain the high debt ratio in the capital structure for the periods under consideration.

6.3 Conclusion

The high cost of external financing is due to investors’ uncertainty about the returns on their investment materializing and this is due to information asymmetry where insiders know much about firms’ prosperity than outsiders. Again possible fulfillment of debt obligation and the return on equity financing also determines financing cost. A system with good corporate governance structures where investors and debt financiers are protected against expropriations and assured of returns and paybacks will have investors/debt providers willing to provide financing at less cost. Moreover firms with poor governance structure with high propensity of expropriating external financiers will have difficulties sourcing external finance and hence restricted in terms of their capital structure choice.

Therefore to reduce cost of doing business, corporate governance must be of concern as it’s eliminate information asymmetry which is one characteristics of high cost of capital. This and other studies have shown that corporate governance has implication on financing in Ghana. If more debt is advantageous to the firms, they should increase
the board size with a higher proportion of outside directors. But increase in board size beyond a certain point will decrease debt. Larger institutional ownership also aid in the acquisition of debt financing. However CEO duality and higher number of board committees will reduce the amount of debt in the capital structure.

Studies on the Ghana stock exchange have reported mixed findings for some corporate governance variables in relation to capital structure of firms. This may be due to time differences and level of corporate governance awareness and practices among publicly traded firms. The choice of financing may be affected by other factors beyond the corporate governance variables. An example may be the availability of debt financing, increase in profitability and availability of profitable projects. Changes or improvement in regulation can also cause the differences reported in various studies in Ghana.

6.4 Recommendations

The issue of corporate governance has important implications on the financing decisions of Ghanaian firms (Abor 2007). To ensure effective monitoring and control that result in productivity as well as accessing debt financing, firms should open up for institutional investors. They are regarded as the mechanism of checking managerial opportunism and improved productivity. Because debt financiers are concern about firms’ performance as it guarantees payback, firms that are majorly owned by institutional investors would be able to access debt easily to embark on profitable projects that intend increase firms’ value.

Again the number of oversight board committees must be maintained at the desired minimum. Too many ineffective board committees may only increase firms’
expenditure and reduce access to debt financing required to enhance firms’ value as shown in this studies. Furthermore, firms that need external funding may have to increase the board size, with greater percentage of it being outside directors. However, Increase in board size beyond a certain point will reduce access to debt.

Generally, it was observed from the study that listed firms complied with rules and directives of the regulatory authorities and therefore to ensure best practices in corporate governance in the country as a whole, more firms have to be encouraged to list on the Stock Exchange, so that regulation will compel them to exhibit the best of conducts. Again, Good corporate governance must be of national concern, because foreign investors will among other things, invest in countries that have well governance structures in place. Good corporate governance will promotes sustainable development and growth in the economy as it can determine the inflow of foreign direct investment and the cost of doing business.

This study has examined the impact of institutional ownership which shows a significant positive relationship with capital structure. It is also observed that institutional shareholdings records 63 percent of total shareholdings on the GSE. This study therefore recommends further studies to examine the factors that inform institutional share ownership in Ghana. Also the impact of the various oversight board committees must be examined to access their influence on the capital structure decisions.
REFERENCES


APPENDICES

Appendix I

List of firm and years in which there was CEO Duality

<table>
<thead>
<tr>
<th>Firm</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pioneer Aluminium Ltd</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>PZ Cussons Ghana Ltd</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ayrton Drug Manufacturing Ltd</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Golden Web Company Limited</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Camelot Ghana Ltd</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sam Woode Ltd</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

NB 1 = CEO Duality, 0 = otherwise and NA = no data available.

Appendix II

Industry Classification

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking and Finance</td>
<td>9</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12</td>
</tr>
<tr>
<td>ICT</td>
<td>3</td>
</tr>
<tr>
<td>Distribution</td>
<td>4</td>
</tr>
<tr>
<td>Mining</td>
<td>1</td>
</tr>
</tbody>
</table>
## Appendix III

### List of Firms and Sector of Operations

<table>
<thead>
<tr>
<th>Firm</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluworks Ltd</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Anglogold Ashanti Ltd</td>
<td>Mining</td>
</tr>
<tr>
<td>Ayrton Drug Manufacturing Ltd</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Benso Oil Palm Plantation Ltd</td>
<td>Agro based processing</td>
</tr>
<tr>
<td>CAL Bank Ltd</td>
<td>Banking and Finance</td>
</tr>
<tr>
<td>Camelot Ghana Ltd</td>
<td>Printing</td>
</tr>
<tr>
<td>Clydestone Ltd</td>
<td>ICT</td>
</tr>
<tr>
<td>Cocoa Processing Company Ltd</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Ecobank Ghana Ltd</td>
<td>Banking and Finance</td>
</tr>
<tr>
<td>Enterprise Insurance Company Ltd</td>
<td>Insurance</td>
</tr>
<tr>
<td>Fan Milk Ltd</td>
<td>Food and Beverages</td>
</tr>
<tr>
<td>Ghana Commercial Bank</td>
<td>Banking and Finance</td>
</tr>
<tr>
<td>Ghana Oil Company</td>
<td>Distribution</td>
</tr>
<tr>
<td>Golden Web Company Limited</td>
<td>Agro based manufacturing</td>
</tr>
<tr>
<td>Guinness Ghana Breweries Ltd</td>
<td>Food and Beverages</td>
</tr>
<tr>
<td>HFC Bank Ghana Ltd</td>
<td>Banking and Finance</td>
</tr>
<tr>
<td>Mechanical Lloyd Company Ltd</td>
<td>Distribution</td>
</tr>
<tr>
<td>Pioneer Aluminium Ltd</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Produce Buying Company Ltd</td>
<td>Distribution</td>
</tr>
<tr>
<td>PZ Cussons Ghana Ltd</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Sam Woode Ltd</td>
<td>Publishing</td>
</tr>
<tr>
<td>SG-SSB Limited</td>
<td>Banking and Finance</td>
</tr>
<tr>
<td>Standard Chartered Bank Ghana Ltd</td>
<td>Banking and Finance</td>
</tr>
<tr>
<td>Starwins products limited</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>State Insurance Company</td>
<td>Insurance</td>
</tr>
<tr>
<td>The Trust Bank (Gambia)</td>
<td>Banking and Finance</td>
</tr>
<tr>
<td>Total Ghana Ltd</td>
<td>Distribution</td>
</tr>
<tr>
<td>Unilever Ghana Ltd</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>UTBank</td>
<td>Banking and Finance</td>
</tr>
</tbody>
</table>
Appendix IV

Average Top 5 Institutional Shareholdings for the Periods under Investigation

<table>
<thead>
<tr>
<th>Firms</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aluworks Ltd</td>
<td>0.61</td>
</tr>
<tr>
<td>2. Anglogold Ashanti Ltd</td>
<td>0.52</td>
</tr>
<tr>
<td>3. Ayrton Drug Manufacturing Ltd</td>
<td>0.45</td>
</tr>
<tr>
<td>4. Benso Oil Palm Plantation Ltd</td>
<td>0.70</td>
</tr>
<tr>
<td>5. CAL Bank Ltd</td>
<td>0.43</td>
</tr>
<tr>
<td>6. Camelot Ghana Ltd</td>
<td>0.35</td>
</tr>
<tr>
<td>7. Clydestone Ltd</td>
<td>0.07</td>
</tr>
<tr>
<td>8. Cocoa Processing Company Ltd</td>
<td>0.88</td>
</tr>
<tr>
<td>9. Ecobank Ghana Ltd</td>
<td>0.92</td>
</tr>
<tr>
<td>10. Enterprise Insurance Company Ltd</td>
<td>0.66</td>
</tr>
<tr>
<td>11. Fan Milk Ltd</td>
<td>0.77</td>
</tr>
<tr>
<td>12. Ghana Commercial Bank</td>
<td>0.64</td>
</tr>
<tr>
<td>13. Ghana Oil Company</td>
<td>0.72</td>
</tr>
<tr>
<td>14. Golden Web Company Limited</td>
<td>0.28</td>
</tr>
<tr>
<td>15. Guinness Ghana Breweries Ltd</td>
<td>0.90</td>
</tr>
<tr>
<td>16. HFC Bank Ghana Ltd</td>
<td>0.67</td>
</tr>
<tr>
<td>17. Mechanical Lloyd Company Ltd</td>
<td>0.29</td>
</tr>
<tr>
<td>18. Pioneer Aluminium Ltd</td>
<td>0.82</td>
</tr>
<tr>
<td>19. Produce Buying Company Ltd</td>
<td>0.88</td>
</tr>
<tr>
<td>20. PZ Cussons Ghana Ltd</td>
<td>0.94</td>
</tr>
<tr>
<td>21. Sam Woode Ltd</td>
<td>0.43</td>
</tr>
<tr>
<td>22. SG-SSB Limited</td>
<td>0.76</td>
</tr>
<tr>
<td>23. Standard Chartered Bank Ghana Ltd</td>
<td>0.88</td>
</tr>
<tr>
<td>24. Starwins Products Limited</td>
<td>0.34</td>
</tr>
<tr>
<td>25. State Insurance Company</td>
<td>0.61</td>
</tr>
<tr>
<td>26. The Trust Bank (Gambia)</td>
<td>0.77</td>
</tr>
<tr>
<td>27. Total Ghana Ltd</td>
<td>0.90</td>
</tr>
<tr>
<td>28. Unilever Ghana Ltd</td>
<td>0.77</td>
</tr>
<tr>
<td>29. UTBank*</td>
<td>0.15</td>
</tr>
</tbody>
</table>

*about fifty six (56) percent of the major institutional holding belongs to two members of the board on equal basis.
## Appendix V

### Board Committees as disclosed in annual reports

<table>
<thead>
<tr>
<th>Firm</th>
<th>Number of board committees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aluworks Ltd</td>
<td>2</td>
</tr>
<tr>
<td>2. Anglogold Ashanti Ltd</td>
<td>9</td>
</tr>
<tr>
<td>3. Ayrton Drug Manufacturing Ltd</td>
<td>2</td>
</tr>
<tr>
<td>4. Benso Oil Palm Plantation Ltd</td>
<td>2</td>
</tr>
<tr>
<td>5. Cal Bank Ltd</td>
<td>2</td>
</tr>
<tr>
<td>6. Camelot Ghana Ltd</td>
<td>1</td>
</tr>
<tr>
<td>7. Clydestone Ltd</td>
<td>1</td>
</tr>
<tr>
<td>8. Cocoa Processing Company Ltd</td>
<td>5</td>
</tr>
<tr>
<td>9. Ecobank Ghana Ltd</td>
<td>5</td>
</tr>
<tr>
<td>10. Enterprise Insurance Company Ltd</td>
<td>3</td>
</tr>
<tr>
<td>11. Fan Milk Ltd</td>
<td>1</td>
</tr>
<tr>
<td>12. Ghana Commercial Bank</td>
<td>3</td>
</tr>
<tr>
<td>13. Ghana Oil Company</td>
<td>3</td>
</tr>
<tr>
<td>14. Golden Web Company Ltd</td>
<td>1</td>
</tr>
<tr>
<td>15. Guiness Ghana Breweries Ltd</td>
<td>3</td>
</tr>
<tr>
<td>16. HFC Bank Ghana Ltd</td>
<td>3</td>
</tr>
<tr>
<td>17. Mechanical Lloyd Company Ltd</td>
<td>1</td>
</tr>
<tr>
<td>18. Pioneer Aluminium Factory</td>
<td>2</td>
</tr>
<tr>
<td>19. Produce Buying Company Ltd</td>
<td>4</td>
</tr>
<tr>
<td>20. PZ Cussons Ghana Ltd</td>
<td>1</td>
</tr>
<tr>
<td>21. Sam Woode Ltd</td>
<td>3</td>
</tr>
<tr>
<td>22. SG-SSB Limited</td>
<td>3</td>
</tr>
<tr>
<td>23. Standard Chartered Bank Ghana Ltd</td>
<td>1</td>
</tr>
<tr>
<td>24. Starwins Products Limited</td>
<td>1</td>
</tr>
<tr>
<td>25. State Insurance Company</td>
<td>1</td>
</tr>
<tr>
<td>26. The Trust Bank (Gambia)</td>
<td>5</td>
</tr>
<tr>
<td>27. Total Ghana Ltd</td>
<td>1</td>
</tr>
<tr>
<td>28. Unilever Ghana Ltd</td>
<td>2</td>
</tr>
<tr>
<td>29. UTBank</td>
<td>6</td>
</tr>
</tbody>
</table>