

**COLLEGE OF HUMANITIES
UNIVERSITY OF GHANA BUSINESS SCHOOL**

**IMPACTS OF CORPORATE GOVERNANCE ON
SHAREHOLDER'S WEALTH**



BY

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**THIS LONG ESSAY IS SUBMITTED TO THE UNIVERSITY
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DECLARATION

I, LORETTA ARYEE do hereby declare that, this research is done by me and the results are of my own work and has not been presented by anyone in part or whole for any academic award in this or any other academic institution. All references used in this work have been accordingly acknowledged.

I bear sole responsibility for any shortcomings of this work.

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.....

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CERTIFICATION

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

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Dr. Edward Asiedu

Date

(Supervisor)

DEDICATION

I dedicate this work to the Almighty God and my lovely family, especially my parents,
Brig. Gen M.M. Aryee and Mrs. Kate Aryee for their immense contribution and support

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My profound gratitude goes to the Almighty God who by His mercies and grace has brought me this far.

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LIST OF ABBREVIATIONS

AUDIT_COMM-	Audit Committee
BOD_SIZE-	Board Size
CEO-	Chief Executive Officer
EBIT-	Earnings Before Interest And Tax
EPS-	Earnings Per Share
GSE-	Ghana Stock Exchange
PMOS-	Profit Margin On Sales
ROA-	Return On Assets
ROE-	Return On Equity
SEC-	Securities And Exchange Commission
Std Dev-	Standard Deviation
Std-Error-	Standard Error

ABSTRACT

The objective of the study was to examine the relationship between corporate governance and firm performance measures, the dynamics of these relationship by imploring selected statistical tools and techniques and identify the differences in impacts on financial firms as opposed to non-financial firms. Guided by literature reviewed on agency and stakeholder theories, study used annual data to estimate the responsiveness of the various firm's performance to patterns of corporate governance variables from the period of 2011-2016 and was restricted to twenty seven (27) listed firms on the Ghana Stock Exchange, based on data availability. Data collected was analyzed using panel regression. The findings from the study suggest that the performance of the selected firms on the Ghana stock exchange is affected by CEO Duality and the presence of internal Audit committee. The duality of a CEO being both the CEO and the board chair had a negative correlation with ROE, PMOS and leverage but had a positive relationship with ROA. The study found that both board size and firm age have positive influence on creating shareholders wealth.

In reference to the findings from the study, a recommendation was suggested for the structure of the board size, availability and improvement of the internal audit unit in the respective firms.

TABLE OF CONTENTS

DECLARATION.....	i
CERTIFICATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
LIST OF ABBREVIATIONS.....	v
ABSTRACT.....	vi
TABLE OF CONTENTS.....	vii
LIST OF TABLES.....	x
LIST OF FIGURE(S).....	xi
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background of study.....	1
1.2 Problem Statement.....	2
1.3 Objectives of the Study.....	3
1.4 Research Questions.....	4
1.5 Significance of Study.....	4
1.6 Limitations.....	4
1.7 Scope of Study.....	5
1.8 Chapter Organization.....	5
CHAPTER TWO.....	6
LITERATURE REVIEW.....	6
2.1 Introduction.....	6
2.2 Corporate Governance.....	6
2.3 Review of Theories.....	9
2.3.1 Agency Theory.....	9
2.3.2 Stakeholder Theory.....	10
2.3.3 Board Size and Independence.....	11
2.3.4 CEO Duality.....	12
2.3.5 Performance Measures.....	13
2.3.6 Profit Margin of Sales.....	13

2.3.7 Leverage	13
CHAPTER THREE	15
RESEARCH METHODOLOGY	15
3.1 Introduction.....	15
3.2 Data Collection	15
3.3 Proxies for Performance	15
3.3.1 Profit margin on Sales.....	16
3.3.2 Leverage	16
3.3.3 Return on Asset (ROA).....	16
3.3.4 Return on Equity (ROE)	17
3.4 Empirical Model	17
3.5 Corporate Governance Variables.....	19
3.5.1 Board Size (BOD_SIZE)	19
3.5.2 AUDIT COMMITTEE (AUDIT_COMM).....	19
3.5.3 CEO Duality (CEO_DUALITY).....	20
3.6 Control Variables	20
3.6.1 Firm's Age (Firm_Age).	20
3.6.2 Firm's Size (Firm_Size).....	21
3.6.3 Overhead cost (Overhead_Cost).....	22
3.6.4 Industry Specific (Industry)	22
CHAPTER FOUR	23
RESULTS AND DISCUSSIONS	23
4.1 Introduction.....	23
4.2 Descriptive Statistics	23
4.2.1 Firm Performance variables	25
4.2.2 Corporate Governance	25
4.2.3 Control Variables.....	26
4.2.1 Description of qualitative variables	26
4.3 Collinearity Test.....	28
4.4 Regression results	29

CHAPTER FIVE.....	36
SUMMARY, CONCLUSION AND RECOMMENDATION	36
5.1 Introduction.....	36
5.2 Summary.....	36
5.3 Conclusion	38
5.4 Policy Recommendation.....	39
5.5 Limitations	39
5.6 Suggestions for further studies	40
REFERENCES.....	41

LIST OF TABLES

Table 1: Descriptive Statistics.....	24
Table 2 Distribution of the CEO Duality Variable	26
Table 3: Distribution of the Audit Committee Variable	27
Table 4: Distribution of the Industry Variable.....	27
Table 5: Correlation Matrix	28
Table 6: Model one: Return on Asset (ROA) as a dependent variable	29
Table 7: Model Two: Return on Equity (ROE) as a dependent variable	31
Table 8: Model Three: Profit margin on Sales as a dependent variable	32
Table 9: Model Four: Leverage as a dependent variable.....	34

LIST OF FIGURE(S)

Figure 1: Graphical representation of variables 22

CHAPTER ONE

INTRODUCTION

This Chapter presents the background of the study, statement of the problem, and the research objectives as well as the questions. It also discusses the significance of the research, the scope, limitations and organization of the study.

1.1 Background of study

Corporate governance evolved in the 1700s during the South Sea bubble in England. During that period, stock prices on the London stock market rose to inexplicable heights before crashing. This was as a result of fraudulent activities and folly (Paul 2015). The south sea bubble had followed a similar crash on the Paris stock market (Mississippi bubble) around the same period (Colombo 2012). Due to this, developed countries and investors began paying particular attention to corporate governance structures of organizations and this attention has increased after the collapse of a number of large corporations during the recent global financial crisis in 2007- 2009. This has also influenced researchers, policy makers and investors to examine the impact of corporate governance on shareholder's wealth and financial distress.

According to Mayer (1997), corporate governance refers to “ways of bringing the interests of investors and managers into line and ensuring that firms are run for the benefit of investors.”

“Corporate governance is about supervising and holding to account those who direct and control the management” (Abor 2007).

The main aim and objective of shareholders investing their wealth in a company's shares is to see their investment appreciate in value. However, the interest in corporate governance is concerned with decreasing conflicts of interests between shareholders and management (Jensen & Meckling, 1976).

The principal-agent issue arises between upper-management (the agent) which may have very different interests and by definition considerably more information, than shareholders (the "principals"). The danger arises that, rather than overseeing management on behalf of shareholders, the board of directors may become insulated from shareholders and obliged to management.

Traditionally, accounting based performance measures have for a long time been a norm and have been used by many to address this measure. Its seemingly simple methods of calculation led to its popularity among many academic and policymakers (Altman, 1968). However, this measure is usually one-dimensional in nature, which does not show a holistic picture of the financial health of a business but only returned a single figure which was used to define a firm's financial status as good or bad.

In order not to only know if a firm appears profitable under the traditional accounting measures, when in reality they may not, leverage as well as profit margin on sales will be employed as a metric to assess the value created on shareholders wealth over time.

1.2 Problem Statement

Effective corporate governance is critical to every functioning firm and the economy at large. The primary objective of corporate governance should be safeguarding stakeholders'

interest in conformity with public interest on a sustainable basis. That is, corporate governance should be based on the principles of integrity, fairness, transparency and accountability. However, the recent crisis in the Ghanaian banking institution is not merely a case of financial misappropriation but it is a case of a breakdown in the corporate governance structures that has led to a major ripple effect in the industry. The Bank of Ghana as a regulatory body has realized the need for a more effective corporate governance structure and this is highlighted in its new directive “The Banking Business- Corporate Governance Directive 2018”.

In times like this, it becomes relevant to understand the structure of corporate governance in institutions and how management affects the overall performance of institutions.

Also in previous years, financial health of firms has commonly been measured by accounting based performance measures (return on equity ROE, return on assets ROA and earnings per share EPS). Although these metrics are considered widely as good ones, there is the need to find out the value maximized by shareholder’s which is an important objective of every firm and also, to be able to explain the changes in a corporation’s market value.

This study will use both the accounting-based performance measures (ROE and ROA) as well as leverage and profit margin on sales as tools to measure firm performance. This will help in estimating the well-being of firms from two different perspective; the accounting oriented measures and general or direct measures of firms.

1.3 Objectives of the Study

The study seeks to achieve the following objectives:

1. To examine the relationship between corporate governance and firm performance measures.

2. To examine the dynamics of these relationship by imploring selected statistical tools and techniques.
3. To identify the differences in impacts on financial firms as opposed to non-financial firms.

1.4 Research Questions

The study seeks to answer:

1. What is relationship between corporate governance and measures of firm value?
2. To what extent is the performance of firm influenced by corporate practices?
3. What is the differences in impacts on financial firms as opposed to non-financial firms?

1.5 Significance of Study

The results from this research will not only be beneficial to corporate governance and firm performance but as well contribute significantly to the pool of findings on this research topic globally. It will also add to the existing body of knowledge and throw more insight on the findings of previous empirical works in Ghana. Again, it will deepen the understanding of corporate governance impact for policy modifications and or extensions.

1.6 Limitations

The study is limited to Ghanaian market and it is further limited to a selected list of companies listed on the Ghana Stock Exchange due to availability of published financial statements. There is also a limited time frame which captures information for only a specified period of time.

1.7 Scope of Study

The study will focus on the Ghanaian listed firms covering the periods 2010- 2016. It will also examine corporate governance practices and shareholders wealth to assess whether any change in corporate governance (positive/negative) will increase or decrease shareholder values (metric of measuring performance), using leverage, profit margin on sales, Return on Assets and Return on economic value as proxies for shareholder valuation. The study covers in all twenty seven (27) listed companies from different industries.

1.8 Chapter Organization

The first section of the research gives an introduction to the study. The chapter includes the background, problem statement, objectives, research question, limitations, significance and scope. The second chapter takes care of all related literatures on corporate governance and performance measurement metrics. The third chapter presents a detailed explanation of the research methodology that will be used in the study. It consists of research design and data collection procedures, data preparation and analysis. Chapter four highlights the findings and results of the study. Chapter five present conclusions drawn from the findings and recommendations made to various stake holders such as investors and governments and also leaves room for future works.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents evidence from reviewed articles, publications and books that are relevant or related to this topic. It begins with an overview of corporate governance and its associated components. Furthermore, the chapter will explain leverage and profit margin of sales as means of firm performance measures.

2.2 Corporate Governance

Corporate governance refers to a system of rules, practices and processes by which an organization, institution or a firm is directed and controlled. The Ghana SEC in 2002 defined corporate governance as “the manner in which corporate bodies are managed and operated”. Shleifer & Vishny (1997) propounded that “corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment”

Abor (2007) came into conclusion that “corporate governance is about supervising and holding to account those who direct and control the management”. Thus, it goes beyond the relationships that govern the members of a corporation to include various sets of processes, laws and traditions that are used to administer and control firms.

Abor (2007); World Bank Report (2005) looked at the concept from a broader perspective and conclude that it tests the manner firms are directed, administered and controlled through different sets of processes, traditions and laws.

From the above definitions, we realize that corporate governance takes different forms but the basic and fundamental objective which is also very significant is to ensure the accountability of the managers in a firm by reducing the Principal-Agency problem.

Corporate governance evolved in the 1700s during the South Sea bubble in England. During that period, stock prices on the London stock market rose to inexplicable heights before crashing. This was as a result of fraudulent activities and folly. The south sea bubble had followed a similar crash on the Paris stock market (Mississippi bubble) so, it caused most of the developed countries to set up corporate governance polices.

However, in the late 90's and early 2000s, businesses such as Enron, WorldCom, Parmalat and others collapsed as a result of poor corporate governance controls and policies, a lot more developed countries and investors began paying particular attention to corporate governance structures of organizations. This scrutiny of corporate governance structures was intensified following the global financial crisis of 2007 – 2008 as it became imperative to not only have a well-defined corporate governance structure but one that is also adhered to.

Increasingly over the last ten years development has caught up with most developing economies (Oman, 2001: Goswami, 2001: Lin, 2001: Malherbe and Segal, 2001) mainly because the world has become a global village. Due to this corporate governance has taken an international dimension, especially because economies and financial markets have become globalized. Many multilateral agencies have joined in the campaign by encouraging the various stakeholders to take a close look at the subject so as to ensure the introduction and implementation of good corporate governance practices. The Commonwealth

Association for Corporate Governance and the Organization for Economic Co-operation and Development are the organizations that issued widely acclaimed codes and principles on the subject. Some examples of these codes include Indonesian code of good corporate governance, the stock exchange code of Republic of Korea, OECD principles of corporate governance, code of corporate governance in Nigeria. These codes are commonly considered as guidelines aimed at promoting capital market evolution by ensuring transparency in corporate organizations and a level of equity holder protection (Cankar, Deakin, & Simoneti, 2010).

Issues of corporate governance in Ghana are guided by the companies' code and the Corporate Governance – Guidelines on Best Practices by the Securities and Exchange Commission (SEC) and these guidelines ensures that the principles of corporate governance protects these 5 areas:

1. The equitable treatment of shareholders
2. The right of shareholders
3. The role of stakeholders
4. The responsibilities of the board
5. Disclosure and transparency

This guideline ultimately seeks to protect the interest of shareholders who are the owners of the firm and also to ensure that the interests of other stakeholders are provided for. Having said that, shareholders can benefit from this guideline only if they deliberately monitor the operations of the managers (the agents).

2.3 Review of Theories

2.3.1 Agency Theory

Agency theory was introduced by Berle & Means (1932) and Jensen & Meckling (1976). Jensen & Meckling (1976) defined agency relationship as a contract between a principal and agent under which the principal engages the agent to perform some service on his/her behalf which involves delegating some decision making authority to the agent.

This theory explains that shareholders (principals) are usually disseminated and therefore cannot manage the firm at the same time so they leave the firm in the hands of the managers (agents) to handle the day to day activities.

Conflicts of interest between managers (agent) and shareholders (principal) can be a major problem in an organization. These problems usually involve management prioritizing its own benefits rather than shareholders value. Also, shareholders are the financiers of the firm and therefore they encounter difficulty in ensuring that their invested capital is not expropriated or wasted on negative NPV projects or less profitable projects (Kandel, Massa, & Simonov, 2011; Lillihook & Margolin, 2008; Shleifer & Vishny, 1997).

For instance a manager may be more partial to taking on projects which will benefit his/her short term goal. If a manager has plans to advance in the corporation or to move on to another firm, they may take on projects with large cash flows rather than a project with a comparatively low cash flows during the first few years, so that in subsequent years, go for projects with very large cash flows, even if the latter project will favor the shareholders. This is because all cash flows due after he/she leaves will receive less emphasis during the decision making process.

The conflict of interest between managers (agents) and shareholders (principals) may reduce the value of the corporation due to the agency costs associated with managers actions. Corporations also incur extra costs of monitoring manager's actions.

These conflicts could be avoided by giving top management stock options (option to buy stocks under favorable conditions within the firm) as part of manager's compensation.

2.3.2 Stakeholder Theory

A stakeholder is "any individual or group who can affect or is affected by the achievement of the organization's objectives" (Freeman 1984, p.299). As opposed to the Agency theory where the manager is supposed to pursue only the shareholders interest, the manager under the stakeholder theory seeks the interest of all the stakeholders including the shareholder. These stakeholders include shareholders, creditors, employees, suppliers, customers, local communities and the general public. Each and every stakeholders have an approved claim on the firm because there exist an exchange relationship between the firm and each of these stakeholders. It is said that shareholders provide the firm with capital and in exchange they expect the firm to maximize the risk-adjusted returns on their investment. Creditors on the other hand provides the firm with finance and in exchange they expect their loans to be repaid on time. Managers provide the firm with their time, skills and human capital and in exchange they expect fair income and good working conditions. Customers supply the firm with revenue and in exchange they expect value for their money. Suppliers provide the firm with inputs and in exchange they expect fair prices for their inputs and reliable buyers. The local communities provide the firm with locations, a local infrastructure and perhaps favorable tax treatment and in exchange they expect good corporate citizens who do not damage their environment. And finally the general public as tax payers provide the firm

with national infrastructure and in exchange they expect good corporate citizens who will enhance the quality of life and do not violate their laws (Hill & Jones, 1992).

Donaldson & Preston (1995) argued that the critical success factor for the business is to address the motivation of all the interest groups.

2.3.3 Board Size and Independence

There has been a number of empirical studies conducted worldwide on whether there is any link between independent directors and firm performance. Some researchers looked for a direct evidence of a link between board composition in terms of independence and firm performance. They studied the correlation between the independent directors and the firms' performance as reflected by the accounting numbers. Baysinger and Butler (1985) and Hambrick and Jackson (2000) found in their research an evidence for the percentage of independent non-executive directors to be positively correlated with the accounting measure of performance. Another study by Klein (1998), Bhagat and Black (1997), and Hermalin and Weisbach (1991) found that a greater percentage of independent directors does not predict a better future accounting performance. Using accounting measures Agrawal and Knoeber (1999) found a negative relationship between board independence and firm's performance. The study by Lawrence and Stapledon (1999) brought about no homogenous evidence that the independent directors either add or take away value using accounting and share-price measures to assess the firm's performance.

The value of every firm depends on the quality of decision-making, control and monitoring by the board of directors, and the board size represents a significant determinant of its performance. The Securities and Exchange Commission (SEC) - Ghana guidelines do not

give a specific order or limitation as to the number of people to serve on the board of a firm in Ghana however, they recommend that the board should have about eight to sixteen members.

Jensen (1993) proposed that large boards can be ineffective than small boards. He said that when the size of boards get beyond seven or eight people, they are unlikely to operate effectively and are easier for the CEO to control. A similar view was championed by Lipton and Lorsch (1992) who stated that the standards of behaviour in most boardrooms are unbalanced because directors rarely criticize the policies of the top managers or hold open discussions about firm performance. They recommended that the ultimate board size should be between seven and ten. Kyereboah-Coleman (2007) opines that large board size increases shareholders value and that holding the positions of CEO and board chair simultaneously has a negative effect on firm performance.

2.3.4 CEO Duality

CEO duality can be referred to as a situation where the positions of both the CEO and the board chairperson is held by the same person. The Securities and Exchange Commission - corporate governance guideline recommends that the positions of CEO and the board chair should not be vested in the same person. This is because when the roles are separated, there is an appropriate balance of power, accountability is increased and also, the capacity with which decisions are taken independently by the board is enhanced. They however discourage board members from serving on several other boards as it distorts or interferes with their performance.

The dual role of the CEO makes the work of the board of directors tough as it creates an excessively powerful person and as a result, making it difficult for the board as a whole to be effective in their supervisory and monitoring responsibilities (Gul and Leung, 2004).

2.3.5 Performance Measures

2.3.6 Profit Margin of Sales

The relationship between sales and net profit is an indicator of managements' efficiency ensuring goods and services are effectively and efficiently utilized by the consumers (Pandey, 2000, P.134). The higher the margin of profit on sales, the better the profitability of a firm because of effective corporate governance. Caylor. (2008), Caylor and Brown (2014) and Phillis el (2005) measured performance of firm in their respective papers by computing the ration of profit on sales. This is traditionally calculated by dividing total earnings before tax and interest by total proceeds from net sales. This proxy as an indicator for firm performance is a self-explanatory and a direct indicator of firm performance. Since every firm operates with the aim of making profit, it is a good measure to estimate the performance of firm.

It can be calculated as; $\text{Net Profit Margin on Sales} = \text{EBIT} / \text{Net Sales} * 100$

2.3.7 Leverage

Leverage is borrowing from external entities to add up to shareholders contribution to invest in securities. In 2004 Weill measured extensively the relationship between corporate governance and firm performance of selected firms across Europe. His findings were mixed as leverage was an important determinant of firm performance considering corporate governance. He found out that leverage was positively significant for firms in Germany and

France whereas the opposite findings was for the firms in Italy. Majumdar and Chhibber (2001) estimated the relationship between corporate governance and leverage on selected companies of Pakistan. A negative relationship was observed in their studies between corporate performance and the ratio of leverage. In the year 2005, Weil again made used of leverage to measure the performance of a sample of US firms where a mixed finding was also reported. Leverage is directly connected to a firm's profitability (Chen 2005). Leverage is said to be favorable when the cost of debt for a firm is less then return on assets allowing for an increase in return on equity which leads to profit realization. On the other hand, when the cost of debt is higher than return on assets, then leverage is said to be unfavorable resulting in a decrease in shareholders returns.

Measured as = $\text{Total Debt} / \text{Total Assets} * 100$

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides information on the source of the data and the variables of interest for the study and the panel regression model and strategy adopted for the study.

The study will use annual data to estimate the responsiveness of the various firm's performance to patterns of corporate governance variables from the period of 2011-2016 and will be restricted to listed firms on the Ghana Stock Exchange, based on data availability.

3.2 Data Collection

The Data for this research was collected from audited and non-audited financial statements and analysis of twenty-seven Ghana stock exchange listed companies. The Study covers industries including sectors like, Insurance companies, banking, investment banking and manufacturing.

3.3 Proxies for Performance

There has been several interpretations of firm performance over time. Bevan et al (1999) established that, higher efficiency, increase in profitability and output are commonly associated with improvement in a firm's performance. The researcher determines which measure he/she is going to apply as well as the availability of data. Selecting multiple performance measures instead of one only may be convenient.

Many researchers believe that all financial performance indicators, whether value based or accounting based, all have different interpretations and as a result, their responsiveness to the various corporate governance measures will be different. This study adopts the following listed variables as proxies for performance: Profit margin on sales, Return on Assets (ROA), Return on Equity (ROE) and leverage ratio.

3.3.1 Profit margin on Sales

The ratio measures how much profit is realized from sales revenue. The bigger the ration, the better a firm is likely to be doing well financially.

$$PMOS = \frac{EBIT}{Net\ Sales} \times 100 \dots\dots\dots (1)$$

Where;

- PMOS (Profit Margin on Sale) = the margin or ratio of profit realized or obtained from sales revenue.
- EBIT = Earnings before interests and taxes.
- Net Sales = Total Sales – trade expenses.

3.3.2 Leverage

The total amount of invested capital from borrowing.

It can be calculated as:

$$Leverage = Total\ Debts - Total\ Assets \dots\dots\dots (2)$$

3.3.3 Return on Asset (ROA)

$$ROA = \left(\frac{Net\ Income}{Total\ Assets} \right) \dots\dots\dots (3)$$

It reflects a firm’s efficiency in utilizing its total assets.

3.3.4 Return on Equity (ROE)

It is computed as:

$$ROE = \left(\frac{\text{Net profit}}{\text{Total equity}} \right) \dots\dots\dots (4)$$

3.4 Empirical Model

This study seeks to empirically find whether corporate governance has any effect on shareholders wealth. A panel regression model will be used since the data is across different companies at different times. Using panel data estimation is known to produce good results when the objective is to find relationship over time and across firms because it has the dimensions of both time series and cross-sections (Brooks, 2008).

Therefore following the general form of the panel data model according to Brooks (2008), the impact of the variables on each performance measure will be computed as:

$$Y_{jt} = \alpha + \beta X_{jt} + \varepsilon_{jt}$$

Where:

- j defines the cross-sectional dimension for the selected number of firms (27 firms)
- j = 1 for firm 1, j = 2 for firm 2 through to j= 27 for the 27th firm of the sample.
- t captures the time series dimension (time) t = 1, t+1.....T;
- Y_{jt} is the dependent variable.
- α is the intercept term for all periods (t) and specific to a firm specific effect (i),
- β is the tuning parameter to be estimated on the independent.
- X_{jt} is a vector of observations on the independent variables in the model which include the controlled variables.
- ε_{jt} is the error term.

The following models were used for the least square estimation;

$$PMOS_{jt} = \alpha_1 CEO_Duality_{jt} + \alpha_2 Audit_Comm_{jt} + \alpha_3 Board_Size_{jt} + \alpha_4 Overhead_cost_{jt} + \alpha_5 Firm_Size_{jt} + \alpha_6 Firm_Age_{jt} + \alpha_7 Industry_{jt} + \varepsilon_{jt} \dots (1)$$

$$LEVERAGE_{jt} = \beta_1 CEO_Duality_{jt} + \beta_2 Audit_comm_{jt} + \beta_3 Board_Size_{jt} + \beta_4 Overhead_Cost_{jt} + \beta_5 Firm_Size_{jt} + \beta_6 Firm_Age_{jt} + \beta_7 Industry_{jt} + \varepsilon_{jt} \dots (2)$$

$$ROA_{it} = \varphi_1 CEO_Duality_{jt} + \varphi_2 Audit_Comm_{jt} + \varphi_3 Board_Size_{jt} + \varphi_4 Overhead_{jt} + \varphi_5 Firm_Size_{jt} + \varphi_6 Firm_Age_{jt} + \varphi_7 Industry_{jt} + \varepsilon_{jt} \dots (3)$$

$$ROE_{it} = \gamma_1 CEO_Duality_{jt} + \gamma_2 Audit_Comm_{jt} + \gamma_3 Board_Size_{jt} + \gamma_4 Overhead_{jt} + \gamma_5 Firm_Size_{jt} + \gamma_6 Firm_Age_{jt} + \gamma_7 Industry_{jt} + \varepsilon_{jt} \dots (4)$$

Where the subscripts $_{jt}$ are for firm j at time t and ε_{jt} is the respective error term.

$$\varepsilon_{jt} = \lambda_t + \mu_j$$

λ_t is a proxy for control for time specific effect,

j is a proxy for cross sectional heterogeneity.

$\alpha_0, \beta_0, \gamma_0, \varphi_0$ are the constant terms and

$\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7$ represent coefficient estimators in model..... (1)

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ represent coefficient estimators in model..... (2)

$\varphi_1, \varphi_2, \varphi_3, \varphi_4, \varphi_5, \varphi_6, \varphi_7$ represent coefficient estimators in model..... (3)

$\gamma_1, \gamma_2, \gamma_3, \gamma_4, \gamma_5, \gamma_6, \gamma_7$ represent coefficient estimators in model..... (4)

3.5 Corporate Governance Variables

The corporate governance variables that will be used in the study are: board size, audit committee and CEO duality.

3.5.1 Board Size (BOD_SIZE)

Board_Size_{jt} is the proxy for board size, specified in the model and defines the count of all directors on an organization's board. It is measured as the log of the total number of board members *i* at time *t* (Abor, 2007; He & Sommer, 2006).

Adams and Mehran, (2010), among many others found that there is a positive relationship between board size and firm performance. Therefore, it is expected that the board size will be positively related to performance.

3.5.2 AUDIT COMMITTEE (AUDIT_COMM)

Audit_Comm_{jt} is the proxy for Audit committee; it defines the presence of a separate audit committee in a firm. It is a dummy variable (1:0) where 1 means there is an audit committee set up by an entity while 0 means there is no internal audit committee. This variable is obtained from the annual reports of the individual firms submitted to and made available by the Ghana stock Exchange. Wu et al., (2005) argued that the establishment of independent internal audit committee has an impact on the corporate structure of an organization. He argued from his findings that, firms with internal audit turns to perform better on average than those without internal audit structures.

3.5.3 CEO Duality (CEO_DUALITY)

$CEO_Duality_{jt}$ is a proxy for CEO duality, it specifies that the role of the CEO and the Board Chairperson should be separate. It is stipulated that whenever an individual is responsible for the decisions of management and control there is a conflict of interest and a higher agency cost which hinders the board to effectively monitor top management. Meanwhile, other schools of thought argue that when the CEO doubles up as the board chairperson, decisions are carried out without influence of bureaucratic structures, hence they believe that CEO duality and performance should be positively related. The SEC recommend that the position of CEO and the board chair should not be vested in the same person because the separation of the roles serves a mechanism for ensuring that there is balance of power, increasing accountability and enhancing the capacity of the board for independent decision making. CEO duality is measured as a dummy variable, equal to 1 if the CEO is also the chairperson /vice chairperson of the board, otherwise 0. A negative relationship between CEO duality and performance is expected.

3.6 Control Variables

The control variables are going to be the size of the organization, the firm's age and overhead cost. They are not of interest to the study but are relevant to the dependent variable and the purpose of adding them is to remove their effects from the equation.

3.6.1 Firm's Age (Firm_Age).

$Firm_Age_{jt}$ is the proxy for how long a firm has been in operation. It represents the number of years a firm has been in business since its incorporation and it is measured as the log of years a firm has been in existence. Its outcome is expected to be either positive or negative. New firms tend to deal in products that are at their introduction stage, while older firm's

products are usually in their maturity stage. It can have a positive relationship with performance if it is able to generate wide acceptance of its products, and also because it is supposed to have acquired experience, specialized in its area of operation and also benefit from economies of scale by having a wider market share. It has a negative relationship with performance when its products are at its maturity stage of the product life cycle, and has started declining.

3.6.2 Firm's Size (Firm_Size)

Firm_Size_{it} is a proxy which defines the size of a firm by considering the total value of a firm's assets quantified in a log form. This standardized method has been used by many authors to define a firm's size rather than a count of the number of employees employed which in reality is a challenge due to limited availability of data for which this research is not an exception. The size of a firm was defined by taking the log of the total assets of a firm. This is in line with previous authors of this topic which includes Paul and Nick (2014). It represents the total assets owned by the business and it is expected to have either a positive or negative relationship. He & Sommer (2006); Abor (2007) measured it as the log of total assets. This variable is obtained from the annual company report filed with GSE. Some studies found a positive relationship between firms' size and profitability, the rationale behind it is that the larger the firm, the larger the profit rate (Punnore, 2012). Also, it can have a positive relationship with performance if there is a good corporate governance system in place and or firms are investing in projects with a positive NPV's and operating effectively and efficiently. It can have a negative relationship if management pursue empire building objectives rather than investing in positive NPV projects. This variable was computed by taking the log of total asset as a proxy. This follows conventional methods used by many authors (Seaborne, 2011).

3.6.3 Overhead cost (Overhead_Cost)

Overhead_COST_{it} is another proxy used to estimate total overhead cost. It represents a firm's indirect or fixed expenses of operating a business. It is measured as the ratio of overhead expenses to total asset. There is an inverse relationship between cost and performance (profit), this is because, if firms incur more costs, it leads to a reduction of their profitability unless the firm can transfer the cost to its customers to have a positive relation with profitability. The expectation of the impact of overhead cost on a firm's performance can be either positive or negative.

3.6.4 Industry Specific (Industry)

This represents a control for large board size, it is measured as the square of the number of directors on the board and this is because, we expect to find evidence of the relationship between firm value and board size not to be proportional or nonlinear. An increasing larger board size may cause diversity in terms of ideas and decision making and may also extend the duration of decision making among board of directors. Hence, the study expects either positive or negative relationship between larger board size and firm value.

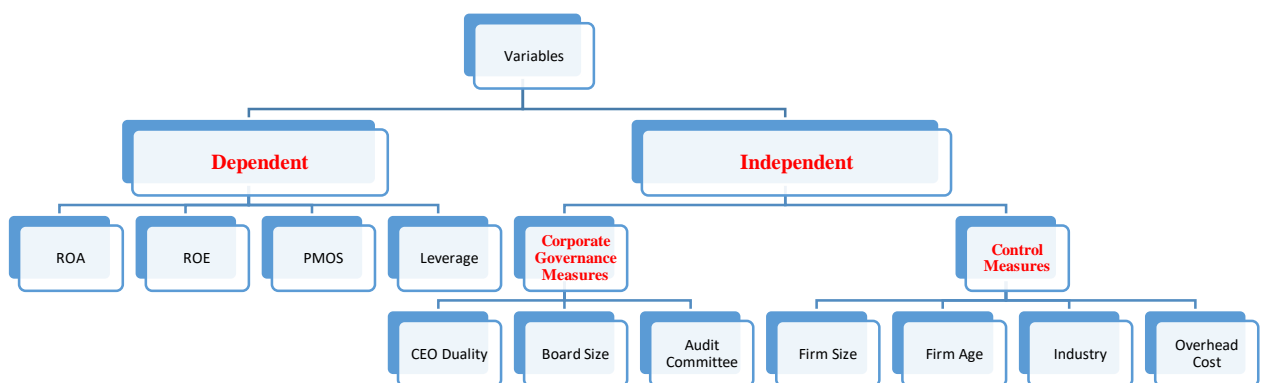


Figure 1: Graphical representation of variables

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter is dedicated to italicizing some descriptive statistics of the variables of interest, test for variables correlation effect, and test for normality. It also covers the building and estimation of the respective regression models and a discussion of results/findings from these respective models.

4.2 Descriptive Statistics

This section is dedicated to explaining the characteristics of corporate governance measures that have possible impacts on the performance of the selected firms in Ghana (listed on Ghana stock exchange). As with any other research work, analysis of the variables of interest is performed by making use of some statistical tools (via SAS programming) to measure the mean, standard deviation and other descriptive statistics to study the dynamics of the research data.

Table 1: Descriptive Statistics

Variable	N	Mean	Std Dev	Minimum	Maximum
Board_Size	189	8.4338624	2.5789897	4.0000000	16.0000000
CEO_Duality	189	0.3333333	0.4726566	0	1.0000000
Audit_comm	189	0.3703704	0.4841865	0	1.0000000
Firm_Age	189	49.2962963	24.7574841	10.0000000	123.0000000
Firm_size	189	8.4656085	1.2653871	5.0000000	11.0000000
Overhead_cost	189	7.2993651	21.6704620	0	152.5700000
Industry	189	2.6666667	1.7258979	1.0000000	7.0000000
ROA	189	5.1526455	20.6628384	0.0100000	144.5800000
ROE	189	0.8041799	3.0926827	0	25.3200000
leverage	189	0.8508995	0.6653057	0.0100000	5.9800000
PMOS	189	15.8948148	56.6188505	0.0100000	353.7300000

Source: Research Work

Note: **Board_Size** = the number of people that constitutes a board of a company. **CEO_Duality** = is a binary variable where 1 is when the CEO of a firm doubles also as the chairman/vice chairman of the Board and 0 means otherwise. **Audit_comm** = this is a dummy variable where 1 means the firm has an internal audit committee and 0 means the firm has no internal audit committee. **Firm_Age** = quantitative variable representing the number of years a firm has been in operation. **Firm_size** = a continuous variable representing the size of a firm quantified by the log of its total assets. **Overhead_Cost** = represents the total value of a firms operating cost. **ROA** = the value of Returns on a firm's total Asset. **ROE** = the value of returns on a firm's total Equity. Leverage = total amount of borrowed operating capital. **PMOS** = the amount of net profit margin on total sales

4.2.1 Firm Performance variables

The performance variables consist of four variables namely; Return on Equity (ROE), Return on Assets, Profit margin on sales (PMOS) and Leverage. The mean of ROA is 5.2, a standard deviation of 20.66, 0.01 and 144.58 minimum and maximum values respectively. ROE recorded a mean value of 0.80, a standard deviation of 3.09 and a minimum value of 0 and a maximum value of 25.32. PMOS also recorded a mean value of 15.89 with a 56.62 standard deviation and a maximum and minimum values of 0.01 and 353.73 respectively. The mean for the Leverage variable is 0.85 and a standard deviation of 0.67 with 0.01 minimum and 5.98 maximum. The data analysis suggests that there is a higher variability in the PMOS data followed by ROA and ROA with leverage having the least variability. PMOS again recorded the highest mean value. Interestingly, ROA recorded a maximum value of 144.58 and a minimum value of 0.01 but with a mean value of 5.15 which suggest that majority of the data was concentrated around the minimum value forcing the mean to vary significantly less from the minimum value.

4.2.2 Corporate Governance

Three variables were used as proxies for corporate governance: Board size, CEO Duality and Audit committee which are were all computed as dummy variables with the exception of Board Size which is a count of board members of the firm. From the descriptive statistics table, board size recorded a mean of 8.0, a minimum of 4 and a maximum of 16. This means that, for the selected number of firms for this study, an average number of 8 board members was recorded for these firms respectively. A mean value of 0.33 was recorded for CEO Duality with a standard deviation of 0.47. Audit committee recorded also a mean 0.37 and a standard deviation of 0.48. The variations between both the CEO Duality and the Audit committee both seem not to vary so much from their respective means.

4.2.3 Control Variables

The average value of the Firm age variable was 25 years and a minimum value of 10 years and a maximum value of 123 years. For a minimum value of 10 years of operation for the selected number of firms for this study, it is expected for the study to do well with controlling how long a firm has been in operation for corporate governance to have a positive or negative on its performance. Firm size, which takes the form of a natural log of total assets has a mean value of 8.47 and minimum and maximum values of 5 and 11 respectively. Since this is a log of total assets for a relatively competitive companies, the low variation in the data suggest that these companies recorded similar assets valuations resulting the less variability of this data.

4.2.1 Description of qualitative variables

The count and frequencies of the qualitative variables is statistically described to determine the distribution of the data. This is performed to determine if the distribution of the dummy variables is equally distributed or bias towards one category.

The CEO Duality, Audit committee and Industry specific are the three categorical variables where CEO Duality and Audit committee are the two dummies.

Table 2 Distribution of the CEO Duality Variable

CEO_Duality	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	126	66.67	126	66.67
1	63	33.33	189	100.00

Source: Research work

Note: CEO_Duality = is a binary variable where 1 is when the CEO of a firm doubles also as the chairman/vice chairman of the Board and 0 means otherwise.

Table 3: Distribution of the Audit Committee Variable

Audit_comm	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	119	62.96	119	62.96
1	70	37.04	189	100.00

Source: Research Work

Note: **Audit_comm** = this is a dummy variable where 1 means the firm has an internal audit committee and 0 means the firm has no internal audit committee

Table 4: Distribution of the Industry Variable

Industry	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Banking	70	37.04	70	37.04
oil and gas	21	11.11	91	48.15
manufacturing	56	29.63	147	77.78
pharmaceuticals	14	7.41	161	85.19
mining	7	3.70	168	88.89
insurance	14	7.41	182	96.30
automobile	7	3.70	189	100.00

Source: Research work

A further analysis was performed on the categorical variables which consists the two dummy variables (CEO Duality and Audit committee) and industry. The CEO Duality table suggest 67% of the selected firms do not have a CEO who doubles as the Chairman or vice chairman of the Board. The Audit committee table also suggest that 63% of the selected firms do not have an internal audit committee/board. This is not surprising as most companies turns to outsource their financial and audit responsibilities with third party companies.

4.3 Collinearity Test

The Pearson correlation coefficient was used to analyze the relationship between the independent variables. This was measured to check for correlation between two or more of these variables as this can have a significant impact on the results. Coefficients 0.6 and above suggest a multicollinearity problem. From the data analysis, the coefficients for these variables were all below the multicollinearity benchmark of 0.6 and above.

Table 5: Correlation Matrix

Pearson Correlation Coefficients, N = 189 Prob > r under H0: Rho=0							
	Board_Size	CEO Duality	Audit comm	Firm_Age	Firm_size	Overhead cost	Industry
Board_Size	1.00000	-0.07127 0.3298	-0.13789 0.0585	-0.04851 0.5074	0.27028 0.0002	-0.12325 0.0911	-0.27685 0.0001
CEO_Duality	-0.07127 0.3298	1.00000	-0.21693 0.0027	-0.16122 0.0267	-0.41207 <.0001	0.04987 0.4955	0.13693 0.0603
Audit_comm	-0.13789 0.0585	-0.21693 0.0027	1.00000	-0.14277 0.0500	0.45499 <.0001	0.07380 0.3129	-0.51983 <.0001
Firm_Age	-0.04851 0.5074	-0.16122 0.0267	-0.14277 0.0500	1.00000	0.07402 0.3114	-0.00003 0.9997	0.13913 0.0562
Firm_size	0.27028 0.0002	-0.41207 <.0001	0.45499 <.0001	0.07402 0.3114	1.00000	-0.06725 0.3578	-0.56424 <.0001
Overhead_cost	-0.12325 0.0911	0.04987 0.4955	0.07380 0.3129	-0.00003 0.9997	-0.06725 0.3578	1.00000	-0.08200 0.2620
Industry	-0.27685 0.0001	0.13693 0.0603	-0.51983 <.0001	0.13913 0.0562	-0.56424 <.0001	-0.08200 0.2620	1.00000

Note: Board_Size = the number of people that constitutes a board of a company. CEO_Duality = is a binary variable where 1 is when the CEO of a firm doubles also as the chairman/vice chairman of the Board and 0 means otherwise. Audit_comm = this is a dummy variable where 1 means the firm has an internal audit committee and 0 means the firm has no internal audit committee. Firm_Age = quantitative variable representing the number of years a firm has been in operation. Firm_size = a continuous variable representing the size of a firm quantified by the log of its total assets. Overhead_Cost = represents the total value of a firms operating cost.

4.4 Regression results

Table 6: Model one: Return on Asset (ROA) as a dependent variable

Variables	Coefficient	Std. Error	t-value	p-value
Intercept	43.025	16.083	2.68	0.0082
Board_Size	0.173	0.654	0.26	0.7916
CEO_Duality	5.777	3.465	2.67	0.0372
Audit_comm	0.902	4.016	0.22	0.8226
Firm_Age	0.091	0.062	1.47	0.1438
Firm_Size	-4.684	1.630	-2.87	0.0045
Overhead_Cost	0.027	1.181	0.40	0.6920
Industry	-2.484	1.148	-2.10	0.0368

$\alpha = 0.05$; $R^2 = 0.541$; *Adjusted R² = 0.521*; *F-Value = 2.73*; *P-Value = 0.0103*

An adjusted R square is a measure of the level or extent of variation between the dependent variable and the independent/control variables. That is, how much the dependent variable is likely to change because of changes in the explanatory variables. From the first mode (where ROA is the dependent variable) the results shows an adjusted R square value of 52% and an R square value of 54%. This indicates that there was a 52% variation of firm performance (ROA) of the firms under the study due to changes in Board size, CEO duality, Audit committee, firm age, firm size, overhead cost and industry specific.

The results from the model shows that the overall model performed well with a significant p-value of 0.0103. The null hypothesis which states that there is no such significant level between the independent and dependent variables was therefore rejected at a 95% confidence interval. Individually, CEO Duality, firm size and industry where are significant

with probability values of 0.0372, 0.0045 and 0.0368 respectively. Firm size has an interestingly negative correlation with return on Asset as a measure of firm performance. This means a unit increase in the size of the firm's board leads to a 4.6% decrease on the firm's return on assets. This finding can be attributed to the marginal return's characteristics. As the size of the firm grows to a certain limit, return on asset which is expected to increase turns to reduce after reaching its maximum returns. CEO Duality has a positive and significant relationship with return on Asset. This implies that firms where the CEO doubles as the president/vice president records may record 17% increment on asset returns due to the structure of the board of the company. Board size is positively correlated to return on assets but for a 95% confidence interval, this variable was not significant. Just like the board size, having internal audit in a firm had a positive correlation also to the return on assets as a performance measure but this variable was not significant enough to explain for the increase in the asset returns. Also, the number of years a firm has been in operation has no significant impact on the performance of the firm considering return on asset as the measure of a firm's performance for these selected lists of companies but has a positive correlation with the performance index. Overhead cost was also not significant to explain the dynamics of measuring the performance of firms by their value of return on assets. Overhead even though is positively correlated at a coefficient of 0.027, it turns out that at a 95% confidence interval, this variable could not explain the dynamics of measuring the returns on asset.

Table 7: Model Two: Return on Equity (ROE) as a dependent variable

Variables	Coefficient	Std. Error	t-value	p-value
Intercept	-3.796	2.319	-1.64	0.1034
Board_Size	0.152	0.094	1.61	0.1081
CEO_Duality	-0.647	0.499	-1.30	0.1964
Audit_comm	1.919	0.579	3.32	0.0011
Firm_Age	-0.022	0.009	-2.56	0.0114
Firm_Size	0.639	0.234	2.72	0.0072
Overhead_Cost	-0.001	0.009	-0.11	0.9104
Industry	-0.011	0.170	-0.07	0.9457

$\alpha = 0.05$; $R^2 = 0.598$; *Adjusted R*² = 0.503; *F-Value* = 4.96; *P-Value* = 0.0001

Model two maintains the same explanatory variables (Board size, CEO Duality, Audit committee, firm Age, Firm Size, Overhead cost and Industry) but uses return on Equity as the new dependent variable to measure the performance of a firm. Results from model two (ROE) shows that the model was generally significant with an overall probability value of 0.0001 where F statistics is 4.96. The model recorded a negative correlation for its intercept at 3.796 where the intercept was not significant when alpha was set to 0.05. The results from the table shows that Audit committee, Firm Age and Firm Size were significant variables that explained the measure of firm's performance by considering its return on equity. With a p-value of 0.0011 and a coefficient of 1.919 the audit committee was significant in measuring firm's performance at a 95% confidence interval. This means having an internal audit structure in the respective companies is capable of increasing the company's return on equity by improving the performance of the firm by almost 2%. This result is not surprising as having internal audit in a company is likely to improve corporate responsibilities due to

financial checks and balances controlled internally. This finding confirms to results from similar studies (Willie & Mark, 2006; Yung, 2013) where they also confirmed in their respective papers that having internal audit was significant to improving the performance of the firms under the studies. Firm age is significant (p-value =0.0114) but it is negatively (-0.023) correlated with the firm performance measure. A unit increase in a firm's age will result a 2% decrease in the firms return on equity. Firm size takes an opposite direction compared to model one. The size of the firm is significant to explaining the model at a 95% significant level. It has a positive correlation with return of equity as a unit increase in the size of the firm will lead to a 63% increase in return on equity for the list of companies of interest. Surprisingly, overhead cost, industry, and CEO duality have all negative relationship with return on equity but were all not significant at a 95% significant level. Nonetheless, board size has a positive correlation with the explained variable but also happened to be insignificant at 0.05 alpha level.

Table 8: Model Three: Profit margin on Sales as a dependent variable

Variables	Coefficient	Std. Error	t-value	p-value
Intercept	2.594	42.232	0.06	0.9511
Board_Size	5.580	1.718	3.25	0.0014
CEO_Duality	-5.763	9.099	-0.63	0.5273
Audit_comm	25.590	10.547	2.43	0.0162
Firm_Age	0.097	0.163	2.31	0.0120
Firm_Size	-5.921	4.280	-1.38	0.1682
Overhead_Cost	0.812	0.181	4.49	0.0001
Industry	-0.722	3.102	-0.23	0.8162

$\alpha = 0.05$; $R^2 = 0.693$; *Adjusted R² = 0.621*; *F-Value = 15.27*; *P-Value = <0.0001*

In model three, the measurement of firm performance was estimated using profit margin on sales. Profit margin on sales (PMOS) is one of the oldest tools used to measure performance of firms. The model maintains all other variables (independent and control variables) while taking PMOS as the dependent variable. The model recorded an F statistics value of 5.27 with probability value of 0.001. Considering the selected alpha value of 0.05 as the margin for measuring the confidence interval, the model is said to be significant. The size of a company's board (Board_Size), the availability of an internal audit (Audit_comm) in a company, the number of years a firm has been operating and the amount of overhead (overhead_cost) were variables that happened to have significant effects on the model. Board size was estimated with a parameter of 5.580, a standard error of 3.25 and a t and p values of 3.25 and 0.0014 respectively. This can be interpreted as having the profit margin on sales increase by approximately 6% when the board size is increased by a unit. This dynamic could simply be attributed to increased specialization and efficiency because of increased board members as a company grows causing productivity to also significantly increase. Audit committee turns to be significant again the third mode with a coefficient of 25.590, and a p-value at 0.0162. This implies that having internal audit in the selected firms does increase the productivity of the firm (PMOS) at an approximately 26%. Another variable that happened to be significant in this model is the count of years a firm has been operating. This variable recorded a positive correlation with a coefficient of 0.097 and a p-value of 0.0120. This implies that, an increment in the number of years a firm operates is likely to cause the firm's margin of profit on sales to also increase by approximately 10%. CEO Duality had a negative correlation to the dependent variable but was not significant to explain this dynamic. The size of a firm was also not significant (0.1682) but had a negative correlation coefficient (-5.921). Industry specific or the industry advantage a firm may enjoy also was not significant to the model and had a negative correlation effect to the model.

Table 9: Model Four: Leverage as a dependent variable

Variables	Coefficient	Std. Error	t-value	p-value
Intercept	1.467	0.516	2.85	0.0050
Board_Size	-0.034	0.021	-1.66	0.0977
CEO_Duality	-0.339	0.111	-3.05	0.0026
Audit_comm	0.125	0.128	0.98	0.3308
Firm_Age	0.020	0.002	1.05	0.2959
Firm_Size	-0.046	0.052	-0.89	0.3736
Overhead_Cost	-0.257	0.002	-1.16	0.2463
Industry	0.021	0.038	0.54	0.5868

$\alpha = 0.10$; $R^2 = 0.467$; *Adjusted R*² = 0.398; *F-Value* = 2.94; *P-Value* = 0.0061

The last model keeps all the independent/control variables but takes leverage as its dependent variable. From the above table, the results show an overall significant level of the model with a p-value of 0.0061. The model also recorded an R square value of 0.467 and adjusted R square value of 0.398. The results show that only CEO Duality was significant (0.0026) in estimating the performance of the firms by considering total leverage value of individual firms. The duality has a negative (-0.339) response to measuring leverage and a standard error term of 0.111. The inverse relationship is explained by having the CEO as president or vice president will cause the leverage value of the firm to reduce by approximately 33%. This means CEO duality was an important factor in estimating the impact of corporate governance on the performance of companies.

Board size recorded a negative effect in explaining leverage as a dependent variable but was not significant (0.0977) in the model's estimation.

Audit committee and Industry specific were both not significant when alpha was set to 0.05 with significance level (P-values) of 0.3308 and 0.5868 respectively. The results from the model shows that these two variables are positively correlated with the model's explained variable.

Firm size and overhead cost were both not significant but had an inverse relationship with leverage as a means of measuring performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter is devoted to providing a summary of findings from the previous chapter, conclusion of the study results and recommendations extracted from this study. The purpose of this study was to analyze the impact of corporate governance on shareholders wealth of selected number of firms listed on the Ghana stock exchange.

5.2 Summary

The study made use of four separate measures of firm performance to establish the impact of corporate governance on shareholders wealth. The following independent variables were used to build the model;

- Board size
- CEO duality
- Audit Committee
- Firm Age
- Firm Size
- Overhead Cost
- Industry specific.

In all, four respective models were established by maintaining the same independent variables with four different dependent variables for the estimation. These are;

- Return on Asset (ROA).
- Return on Equity (ROE).

- Profit Margin on Sales (PMOS).
- Leverage.

Among these four models (ROA, ROE, PMOS and Leverage), the study found out that in analyzing the effects of corporate governance on performance of firms, the PMOS model was the best model in explaining the relationship between the dependent and independent variables. The model recorded the largest adjusted R square and was also the only model that recorded the highest number of significant variables with findings that are consistent to similar studies. Profit margin on sales therefore was the most significant measure of the performance of firms and should receive the most attention for measuring corporate governance impact on these selected firms.

Among the corporate governance indicators, Audit committee was the most consistent variable among the four estimated models. The existence of an internal audit committee in a firm was positively correlated to productivity at various p values across the models used. Having internal audit was a way to increase transparency and accountability internally which goes a long way in ensuring positive firm performance.

Among the control variables, firm size unarguably recorded the most significant level across the models and was also the most consistent among the control variables.

From the statistical description of the data, the distribution of the firm age with a mean of 24.75 and a minimum value of 10 and maximum value of 123. This shows that majority of the data was clustered around the mean resulting in less variability between the mean and the minimum value.

Return on Asset, profit margin on sales and leverage recorded the same values for their respective minimum value but different maximum values forcing a variation among their respective means. The distribution of the dummy variables was averagely balance. In respect to CEO Duality, around 33 percent of the selected firms had their CEO as the president or vice present of the board while the 67 of the CEO did not report as having the CEO as president or vice president.

5.3 Conclusion

The findings from the study suggest that the performance of the selected firms on the Ghana stock exchange is affected by CEO Duality and Audit committee. The duality of a CEO being both the CEO and the board chair recorded a negative correlation among three out of the four models used for this analysis. This suggest that the separation of a CEO and board president was necessary to have a positive influence on the performance of the firms. On the other hand, CEO Duality is expected to speed management decisions, but this do not transform into increased productivity. The study also concludes that both board size and firm age have positive influence on creating shareholders wealth. For a maximum board size of 16, it can also be concluded that the size of a board have a positive correlation but this correlation is expected to run negative once the maximum number of required board members is achieved, this is expected to run into a negative effect. It can also be concluded that among all the models, the model with profit margin on sales performed better relatively to the other models. Board size, audit committee, firm age and overhead cost were the most important variables which helped in estimating the effect of corporate governance on shareholders wealth considering profit margin on sales as a measure of firm's performance. CEO Duality happened to be the only significant variable to explain the impact of corporate governance on performance or creation of wealth of firms. Also, Audit committee, firm age

and firm size were the independent variables which significantly was correlated to the return on equity model.

The size of a firm and industry specific were also the two variables that were significant in estimating shareholder's wealth by considering the structure of corporate governance in these selected firms.

5.4 Policy Recommendation

In reference to the findings from the study, a recommendation is suggested for the structure of the board size and availability and improvement of the internal audit unit in the respective firms, especially those that do not have internal audit. Since board size is positively correlated to performance, efforts should be made to maintain a minimal but effective board size to make the most from this positive correlation. Also, firms without internal audit could establish one as results from this study shows a very strong positive (refer to results) correlation between the firm's performance and the availability of internal audit. Also, this does not necessarily mean creation of physical structures as internal audit but could take any form but with a transparency and accountability at heart.

5.5 Limitations

Several limitations were accounted for during this study, but some relevant limitations are discussed below.

The firm performance measures could be improved as the proxies used are not a true measure of firm performance. Firm performance measures such as market competition, risk

management, technological level, and firm ratings could improve the study by increasing its reliability.

The method and number of variables used in measuring corporate governance was extremely limited to the data structure. This could be relaxed by including more data to cover this shortfall.

The poor quality of data used also limited the scope of the study to only a few numbers of companies listed on the Ghana stock exchange.

There were also personal limitations due to the limited amount of time and also access to some important information that could positively expand the research knowledge and used for this research work. The research could have received a broader contribution.

5.6 Suggestions for further studies

This study was conducted using data from the financial statements of listed companies on the Ghana stock exchange. Instead of gathering the data from the financial statements, I suggest gathering data via interviews and other means to test the quality of the already prepared data.

Also, a study can be carried on the corporate governance laws and reforms that has the tendency in affecting firm's productivity.

Finally, it will be laudable if a future study could be conducted on impact of corporate governance on shareholders wealth by also taking into account challenges facing the listed number of firms under the study and also comparing the results with unlisted number of firms, small and medium grouped firms.

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